

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO E.P.A.
FEB -2 2011

ENTERED DIRECTOR'S JOURNAL

In the Matter of:

3M Company : Director's Final Findings
3M Corporate Headquarters : and Orders
3M Center :
St. Paul, MN 55144-1000 :

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to 3M Company ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§ 3704.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of the Respondent or of the facility (as hereinafter defined) shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in OAC Chapter 3704 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA makes the following findings:

1. Respondent owns and operates 3M Medina, which is located at 1030 Lake Road, Medina, Ohio. At the facility, Respondent operates five coating lines, identified by Ohio EPA as emissions units K001 through K005. These coating lines are used in the production of labels. The facility is part of the Respondent's Industrial, Adhesives and Tape Division.

This to be a true and accurate copy of the
official documents as filed in the records of the Ohio
Environmental Protection Agency.

By: Danica Lassiter Date: 2-2-11

2. The emissions units identified in Finding 1 emit, in part, volatile organic compounds ("VOCs") and hazardous air pollutants ("HAPs"), as defined in Ohio Administrative Code ("OAC") Rules 3745-21-01(B)(14) and 3745-77-01(W), respectively. The VOCs and HAPs are defined as "air pollutants" or "air contaminants" in OAC Rule 3745-15-01(C). Additionally, these emissions units are "air contaminant sources" as defined in OAC Rules 3745-31-01(I) and 3745-15-01(C) and (X).

3. VOC and HAP emissions from emissions units K001 and K005 are controlled by a single regenerative thermal oxidizer ("RTO"). Emissions units K002, K003 and K004 apply low VOC and HAP coatings, and the VOC and HAP emissions are uncontrolled.

4. All the coating lines are subject to the applicable requirements of the National Emission Standards for Hazardous Air Pollutants ("NESHAP") for Paper and Other Web Coating [40 CFR Part 63, Subpart JJJJ ("Subpart JJJJ")] and OAC Rule 3745-21-09. Emissions units K003, K004 and K005 also are subject to the applicable requirements of the New Source Performance Standards for Pressure Sensitive Tape and Label Surface Coating Operations [40 CFR Part 60, Subpart RR ("Subpart RR")]. The applicable requirements of these regulations are included or referenced in the emissions units' permit-to-install ("PTI") and/or in the Title V permit.

5. OAC Rule 3745-31-05(D) states, in part, that the Director of Ohio EPA may impose special terms and conditions in a PTI as are appropriate or necessary to ensure compliance with applicable laws and to ensure adequate protection of the environment. On March 9, 2006, Ohio EPA issued an administrative modification to PTI 16-02229 for emissions unit K004 that contained the requirements of Subpart RR and OAC Rule 3745-21-09. Similarly, PTI No. 16-02375 was last administratively modified on June 1, 2006, for emissions unit K003; and PTI No. 16-02263 was last administratively modified on January 29, 2008, for emissions unit K005. Both PTIs contained the requirements of Subparts JJJJ and RR and OAC Rule 3745-21-09.

6. The facility is a "major Title V source" as defined in OAC Rule 3745-77-01(X) for VOCs and HAPs and is required to apply for and obtain a Title V permit. OAC Rule 3745-77-07(A)(1) requires, in part, that a Title V permit include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements. OAC Rule 3745-77-07(A)(3) requires, in part, that a Title V permit contain emission monitoring and analysis procedures or test methods sufficient to yield reliable representative data to determine the source's compliance with the permit and applicable emission limitations. On June 12, 2008, Ohio EPA issued a Title V renewal permit to Respondent that contained, among other things, the applicable requirements of Subparts JJJJ and RR and OAC Rule 3745-21-09. Respondent's original Title V permit also contained the requirements of Subpart RR and OAC Rule 3745-21-09, and was issued on April 25, 2001.

7. ORC § 3704.05(C) prohibits any person from violating any terms or conditions of any permit issued by the Director of Ohio EPA.

8. ORC § 3704.05(J)(2) prohibits, in part, any person from violating any applicable requirement of a Title V permit or any permit condition, except for an emergency as defined in 40 CFR 70.6(g).

Failure to calibrate or replace the chart recorder, data logger or temperature indicator for the RTO

9. If an oxidizer is used to comply with the emission standards specified in Subpart JJJJ, Section 63.3350(e)(9), the owner or operator is required to:

- install, calibrate, maintain and operate temperature monitoring equipment according to the manufacturer's specifications;
- verify the calibration of the chart recorder, data logger, or the temperature indicator every three months; and
- replace the equipment if the calibration is not performed or if the equipment cannot be properly calibrated.

10. On August 27, 2008, Akron Regional Air Quality Management District ("Akron"), a contractual representative of Ohio EPA in Medina County, inspected Respondent's facility and discovered that Respondent was not calibrating or replacing the chart recorder, data logger, or the temperature indicator in accordance with the requirements of Section 63.3350(e)(9) of Subpart JJJJ and the terms and conditions of its Title V permit and PTI No. 16-02263, in violation of ORC § 3704.05(C) and (J)(2). The violations occurred from January 29, 2008 (the issuance date of PTI No. 16-02263) and continued until February 4, 2009 (the date the first calibration was conducted). Respondent provided information to Akron indicating that it had discussed the requirements of Subpart JJJJ, Section 63.3350(e)(9) with USEPA prior to the inspection. Respondent provided information to Akron that the U.S. Environmental Protection Agency ("USEPA") had indicated that the procedure that Respondent was using at the time of the inspection was appropriate to meet the requirements, and Respondent indicated that it had relied on this information from USEPA in the design of its compliance program.

Failure to retain required monitoring data for emissions unit K001's capture system for 5 years

11. Subpart JJJJ Section 63.3350(f) requires that a site-specific monitoring plan be developed if compliance is achieved through the use of a capture system and control device. The plan must identify operating parameters that ensure the capture efficiency determined during the initial compliance test is maintained and that compliance with the emission standard is being achieved. Subpart JJJJ Section 63.3410(a)(ii) requires that the control device and capture system's operating parameter

data be maintained on a monthly basis in accordance with the requirements of 40 CFR Section 63.10. 40 CFR Section 63.10 requires that the files be retained for at least five years following the date of the record. Similarly, Respondent's Title V permit requires any monitoring data required by the permit be retained for a period of five years.

12. In a letter dated April 28, 2006, Respondent told Ohio EPA that the negativity (i.e., pressure) of the oven zones for emissions units K001 and K005 would be monitored to ensure compliance with Section 63.3350(f) of Subpart JJJJ. Respondent also stated that if not over-ridden by an operator, the set-points of the programmable logic controller ("PLC") would lead to the shutdown of the coaters if the pressure (i.e., negativity) was not maintained.

13. On August 7, 2009, Respondent submitted the quarterly deviation report via Air Services that is required by its Title V permit. The report stated that emissions unit K001's oven pressure data from mid-September 2008 through June 2009 were lost when a backup data collector system was being configured and upgraded. Because the PLC did not shut down, it was unlikely that the capture system was not properly operating. Respondent failed to comply with the requirements of its Title V permit and 40 CFR Section 63.10 to retain the required monitoring data for emissions unit K001's capture system for at least five years, in violation of ORC § 3704.05(C) and (J)(2). The violations occurred from the date the records were lost (estimated to be June 1, 2009) and continued until the data collection system was corrected and started to properly record the data on July 7, 2009.

Failure to have required information on the temperature and pressure readings for the RTO for emissions units K001 and K005 in a form suitable for expeditious inspection and review

14. 40 CFR Section 63.10(b)(1) requires the owner and operator subject to a provision contained in a NESHAP, such as Subpart JJJJ, to maintain files of all information required by the provision in a form suitable and readily available for expeditious inspection and review. Subpart JJJJ, Section 63.3321 requires an owner or operator who uses a control device to comply with the specified emission limitation to meet the operating limits specified in Table 1 of the Subpart. Table 1 requires that the average combustion temperature in any 3-hour period not fall below the combustion temperature established during the required performance test for thermal oxidizers. Section 63.3350 requires the installation, operation, and maintenance of continuous parameter monitoring systems ("CPMS") to, among other things, monitor and determine the hourly average (i.e., rolling 3-hour average) of the combustion temperature of a control device. Section 63.3410 requires the owner or operator of an affected source to maintain records of the CPMS in accordance of 40 CFR Section 63.10(b)(1).

15. During the August 27, 2008, facility inspection, Akron discovered that the 3-hour average of the combustion temperature and the pressure reading (i.e., data required by Subpart JJJJ) for the capture system of the RTO controlling emissions units

K001 and K005 were not easily accessible. Respondent enhanced the display features of the data collection system so that reports now have the ability to show the needed data in easily accessible format. Respondent failed to have the information required by Subpart JJJJ and the Title V permit in a form suitable and readily available for expeditious inspection and review, in violation of ORC § 3704.05(C) and J(2). The violations occurred from the date of the inspection until September 3, 2008 (the date information was suitable for an expeditious inspection).

Failure to keep records of the VOC/HAP content of all coatings as applied

16. Subpart JJJJ requires that an affected source demonstrate compliance with the specified emission limitations each month. Section 63.3360(c) states that if an affected source complies with an emission standard by means other than determining the overall organic HAP control efficiency, the owner or operator must determine the organic HAP mass fraction of each coating material "as-purchased" and determine the organic HAP mass fraction of each coating material "as-applied." Section 63.3360(c)(4) requires the organic HAP mass fraction of any as-purchased coating material, that has any solvent or material added, to be calculated using equation 1a in Section 63.3370. Equation 1a requires the organic HAP content of any material added to the coating to be included in the calculation.

17. Subpart RR exempts any affected facility which inputs 50 tons or less of VOC per 12-month period into a coating process from the specified emission limitation. To demonstrate ongoing qualification for the exemption, Subpart RR requires the owner or operator to maintain a 12-month record of the amount of solvent applied in the coatings at the facility (i.e., each coating line).

18. OAC Rule 3745-21-09(B)(3)(f) requires any owner or operator of a coating line or printing line that complies with an applicable emission limitation specified in OAC Rule 3745-21-09 through the use of complying coatings to collect and record the following information each month:

- the name and identification number of each coating, as-applied; and
- the mass of the VOC per volume of each coating (excluding water and exempt solvents), as applied.

19. The August 27, 2008 inspection revealed that Respondent was not including the VOC/HAP content of the surfactant, thickener, defoamer and crosslinker ("coating additives") in determining ongoing compliance with the requirements of Subparts RR and JJJJ and OAC Rule 3745-21-09(F), in violation of ORC § 3704.05(C) and (J)(2). However, Respondent was able to demonstrate compliance with the applicable requirements based on other records it had maintained. Specifically, Respondent failed to comply with the following requirements:

- Subpart JJJJ Section 63.3360(c)(4) by not including the VOC or organic HAP content of the coating additives in calculating the HAP mass fraction of each coating material "as-applied." This violation involves emissions units K002, K003 and K004 and occurred from the applicable issuance date of the emissions unit's PTI and/or the Title V permit that required compliance with Subpart JJJJ (i.e., March 9, 2006, PTI 16-02229 issued for emissions unit K004; June 1, 2006, PTI 16-02375 issued for emissions unit K003; and June 12, 2008, Title V permit issued for emissions unit K002) to the date Respondent started to determine the "as-applied" HAP mass fraction in accordance with equation 1a of Section 63.3370 (i.e., April 1, 2009).
- Subpart RR by not including the VOC content of the coating additives in the 12-month record of the amount of solvent applied in the coatings. This violation involves emissions units K003 and K004. The exact starting dates are not known; however, Respondent's Title V permit requires that the records be maintained for a minimum of five years. Therefore, the starting date of the violations is estimated to have occurred five years prior to the August 27, 2008, inspection (i.e., August 27, 2003) and to have continued until Respondent started to include the VOC content in the 12-month records of solvent applied (i.e., April 1, 2009).
- OAC Rule 3745-21-09(B)(3)(f) by failing to monthly collect and record the mass of the VOC per volume of each coating (excluding water and exempt solvents), as applied. This violation involves emissions units K002, K003 and K004. The exact starting date of the violations is not known. However, the starting date has been estimated to be August 27, 2003 (five years prior to the discovery of the violation). The violations ended on April 1, 2009, the date Respondent started to properly maintain the records.

Failure to keep records that clearly demonstrate compliance with an emission limitation option specified in Subpart JJJJ

20. Although not specifically contained in the regulation, the preamble contained in the December 4, 2002 Federal Register states that before the initial compliance demonstration, the owner or operator of an affected source subject to Subpart JJJJ must choose one of the emission limitation options and specify the option in the initial compliance certification. Thereafter, monitoring would comply with the chosen option. It further states that if the owner or operator decides to change the compliance option, it is required to notify the Administrator [i.e., Ohio EPA] in the semiannual report. In the notification of compliance status report ("CSR") dated May 22, 2006, Respondent stated that emissions units K002, K003 and K004 apply low VOC/HAP content coatings and were in compliance by formulation, as specified in Sections 63.3320(b)(2) and (3) [i.e., complying by limiting the organic HAP emissions to no more than 4 percent of the mass of coating materials applied each month and/or no

more than 20 percent of the mass of coating solids applied each month, respectively].

21. Akron's review of Respondent's semiannual reports as well as the records being kept at the facility did not clearly indicate which compliance option was being used. Therefore, compliance with an emission option could not easily be confirmed. Similarly, the corresponding record-keeping requirements could not be verified. The records reviewed by Akron during the August 27, 2008, inspection implied that Respondent was maintaining records of the VOC content, as a substitute for organic HAP, for the coating "as purchased." However, the records did not contain a calculation of the "as-applied" VOC content that included other materials added to coatings.

22. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and the benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Respondent shall clearly specify in its semiannual reports which emission limitation option specified in Subpart JJJJ, Section 63.3320 it chose for each month covered by the report. Respondent shall perform sufficient monitoring to support the chosen option. The monitoring shall, at a minimum, comply with the requirements of Subpart JJJJ, Section 63.3410. Respondent shall maintain records of the monitoring in a form suitable and readily available for expeditious inspection and review that shows which emission limitation was chosen for any given month. Retention and location of the records shall comply with requirements specified in its Title V permit and 40 CFR 63.10. This Order shall not be construed to eliminate any requirement specified in Respondent's permits, including any future permits, and any law or regulation.

2. Respondent shall pay the amount of thirty thousand dollars (\$30,000) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Within fourteen (14) days after the effective date of these Orders, payment to Ohio EPA shall be made by an official check made payable to "Treasurer, State of Ohio" for twenty-four thousand dollars (\$24,000). The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying Respondent, to:

Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

3. In lieu of paying the remaining six thousand dollars (\$6,000) of the civil

penalty, Respondent shall, within fourteen (14) days of the effective date of these Orders, fund a Supplemental Environmental Project ("SEP") by making a contribution in the amount of \$6,000 to the Ohio EPA's Clean Diesel School Bus Program Fund (Fund 5CD0). Respondent shall tender an official check made payable to "Treasurer, State of Ohio" for \$6,000. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying the Respondent and Fund 5CD0, to the above-stated address.

4. A copy of each of the above checks shall be sent to James A. Orlemann, Assistant Chief, SIP Development and Enforcement, or his successor, at the following address:

Ohio EPA
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049

5. Should Respondent fail to fund the SEP within the required time frame set forth in Order 3, Respondent shall immediately pay to Ohio EPA \$6,000 of the civil penalty in accordance with the procedures in Order 2.

6. Within thirty (30) days of the effective date of these Orders, Respondent shall submit to USEPA a written request/application for approval of a procedure to operate the CPMS used for monitoring the temperature of the RTO serving emissions units K001 and K005 that will comply with the requirements specified in Subpart JJJJ, Section 63.3350(e)(9) [operate CPMS] or (10) [monitoring alternative parameters]. Respondent shall continue to implement its current operation of the CPMS as specified in its letter dated February 6, 2009, to Akron until it receives approval from USEPA of a procedure that will comply with the requirements of Subpart JJJJ, Section 63.3350(e)(9) or (10). Respondent shall implement the approved CPMS operational procedure within thirty (30) days of receipt of USEPA approval and shall continue to implement the approved method until Respondent receives approval from USEPA to use another monitoring method as allowed in Subpart JJJJ, Section 63.3350(e)(10), and 40 CFR 63.8(f).

7. Within sixty (60) days of receipt of USEPA's approval that Respondent's CPMS for temperature complies with the requirements of Subpart JJJJ, Section 63.3350(e)(9) or (10), Respondent shall submit to Akron a permit amendment application to modify its Title V permit to require the implementation of the approved CPMS operational procedure. Among the other requirements specified in OAC Chapter 3745-77, the application shall include a detailed description of the approved CPMS and its operation and a copy of USEPA's written approval.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate upon Ohio EPA's receipt of the official checks required by Section V of these Orders.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's facility.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, State and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

Except as otherwise provided in these Orders, all documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Akron Regional Air Quality Management District
Division of Akron Health Department
146 South High Street, Suite 904
Akron, Ohio 44308
Attention: Frank Markunas

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attention: Thomas Kalman, Manager, Enforcement Section

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for the Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

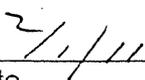
Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

ORDERED AND AGREED:

Ohio Environmental Protection Agency



Scott J. Nally
Director



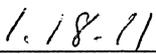
Date

AGREED:

3M Medina



Signature



Date

Patrick J. Grothaus

Printed or Typed Name

Plant Manager

Title