



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
Columbus, OH 43216-1049

10/8/2009

Certified Mail

Kevin Gearig  
DTR Industries Incorporated  
320 Snider Road  
Bluffton, OH 45817

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0302000166  
Permit Number: 03-17419  
Permit Type: Administrative Modification  
County: Allen

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
Yes	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final 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.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

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. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov>.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA DAPC, Northwest District Office

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install  
for  
DTR Industries Incorporated**

Facility ID: 0302000166  
Permit Number: 03-17419  
Permit Type: Administrative Modification  
Issued: 10/8/2009  
Effective: 10/8/2009





State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Air Pollution Permit-to-Install**  
 for  
 DTR Industries Incorporated

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 03-17419  
**Facility ID:** 0302000166  
**Effective Date:** 10/8/2009

# Authorization

Facility ID: 0302000166  
Facility Description: Anti-vibration rubber and automotive hose parts manufacturing facility.  
Application Number(s): A0003359  
Permit Number: 03-17419  
Permit Description: Admin Mod of PTI #03-13938, 03-16050, 03-16343 and 03-17069 to delete 10 gal/day coating use limit due to installation of regenerative thermal oxidizer.  
Permit Type: Administrative Modification  
Permit Fee: \$500.00  
Issue Date: 10/8/2009  
Effective Date: 10/8/2009

This document constitutes issuance to:

DTR Industries Incorporated  
320 Snider Road  
Bluffton, OH 45817

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

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

Chris Korleski  
Director



## Authorization (continued)

Permit Number: 03-17419  
 Permit Description: Admin Mod of PTI #03-13938, 03-16050, 03-16343 and 03-17069 to delete 10 gal/day coating use limit due to installation of regenerative thermal oxidizer.

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

<b>Emissions Unit ID:</b>	<b>K043</b>
Company Equipment ID:	Manual Adhesive Spray Machine (B540-1,2)
Superseded Permit Number:	03-13938
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>K046</b>
Company Equipment ID:	Adhesive Dipping Machine (B650-1,2)
Superseded Permit Number:	03-13938
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>K055</b>
Company Equipment ID:	Automatic Adhesive Spray Machine No. 10
Superseded Permit Number:	03-16050
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>K060</b>
Company Equipment ID:	Automatic Adhesive Spray Machine No. 12
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>K062</b>
Company Equipment ID:	Automatic Adhesive Spray Machine
Superseded Permit Number:	03-17069
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 03-17419  
**Facility ID:** 0302000166  
**Effective Date:** 10/8/2009

## **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 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) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



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

**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 Ohio EPA DAPC, Northwest District Office.



(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 Ohio EPA DAPC, Northwest District Office. 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 (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) 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.

c) 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.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office.
- 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 Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted



(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## **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).

## **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 party 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 through completion of the annual PER covering the last period of operation 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 PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, 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 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).

## **13. Construction Compliance Certification**

The applicant shall identify the following dates in the online 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 (i.e., postmarked), 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 Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

**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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 03-17419  
**Facility ID:** 0302000166  
**Effective Date:** 10/8/2009

## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 03-17419  
**Facility ID:** 0302000166  
**Effective Date:** 10/8/2009

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.
2. This facility is subject to 40 CFR, Part 63, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAPS): Surface Coating of Miscellaneous Metal Parts and Products. The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart M. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions) as identified in Table 2 of 40 CFR, Part 63, Subpart M. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart M and Subpart A.

The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.



State of Ohio Environmental Protection Agency  
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**Final Permit-to-Install**  
**Permit Number:** 03-17419  
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## **C. Emissions Unit Terms and Conditions**



**1. K043, Manual Adhesive Spray Machine (B540-1,2)**

**Operations, Property and/or Equipment Description:**

Manual Adhesive Spray Machine - Miscellaneous Metal Parts Coating Operation (B540-1,2) (Administrative modification of PTI #03-13938 issued on 8/28/03 to revise OC limitations for primer and topcoat coating operations, and eliminate 10 gallons per day coating usage restrictions due to installation of a regenerative thermal oxidizer that controls emissions for the purpose of complying with requirements in 40 CFR, Part 63, Subpart M) (M) (M) (M) (M)

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) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)	0.46 lb organic compounds (OC)/hr, 2.01 tons OC/yr from primer coating operations  0.48 lb OC/hr, 2.10 tons OC/yr from topcoat coating operations  0.07 ton OC/month, 0.87 ton OC/yr from cleanup materials  0.90 lb carbon monoxide (CO)/hr, 3.94 tons CO/yr for the stack exhaust from the regenerative thermal oxidizer (RTO) for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined  0.11 lb particulate emissions (PE)/hr, 0.48 ton PE/yr  Visible PE shall not exceed 0% as a six-minute average  See b)(2)a, b(2)f and b)(2)g



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D)	255 tons OC per rolling, 365-day period, from all the emission units identified in b)(2)b. [See b)(2)b.]
c.	OAC rule 3745-21-09(U)(1)(c)	6.7 lbs of volatile organic compounds (VOC) per gallon of solids for an extreme performance coating, where a control system is employed
d.	OAC rule 3745-17-11(B)	See b)(2)c and b)(2)e
e.	OAC rule 3745-17-07(A)	See b)(2)c and b)(2)e
f.	OAC rule 3745-17-11(C)	See b)(2)d
g.	ORC 3704.03(F)(4)(c) and OAC rule 3745-114	See g)(1)
h.	40 CFR, Part 63, Subpart M [40 CFR 63.3880-3981]  In accordance with 40 CFR 63.3890(b)(4), this emissions unit is a rubber-to-metal coating affected source at an existing surface coating facility subject to the emission limitations/control measures specified in this section.	Organic hazardous air pollutant (HAP) emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(4)]  See c)(4), d)(11) and e)(5)
i.	40 CFR 63.1-15	Table 2 to 40 CFR, Part 63, Subpart M – Applicability of General Provisions to Subpart M shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with OAC rule 3745-21-09(U)(1)(c) and OAC rule 3745-31-05(D).
- b. The permittee has requested a federally enforceable limitation of 255 tons OC per rolling, 365-day period from Anti-Vibration Adhesive Coating operations, emissions units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined for purposes of avoiding "Prevention of Significant Deterioration" (PSD) applicability.  
  
All of the above Anti-Vibration Adhesive Coating operations have existing records of emissions of OC, therefore it is not necessary to establish federally enforceable restrictions for the first 12 months of operation following the issuance of this permit. For purposes of federal enforceability OC limitations effectively restrict VOC emissions.
- c. The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).



- d. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C) pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan (SIP).
  - e. The requirements to comply with this rule shall terminate on the date the U.S. EPA approves the requirements based on OAC rule 3745-17-11(C) as a revision to the Ohio SIP for particulate emissions.
  - f. Best available technology (BAT) for carbon monoxide (CO) emissions is determined to be the use of a regenerative thermal oxidizer (RTO), a CO emission rate of 0.90 lb CO/hr and 3.94 tons CO/yr from products of combustion from firing natural gas for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined, with an associated RTO minimum operating temperature of 1,508 degrees Fahrenheit.
  - g. The RTO shall meet the following requirements for OC emissions from this emission unit:
    - i. minimum OC destruction efficiency of 95%.
- c) Operational Restrictions
- (1) The permittee shall operate the dry filtration system or water wash for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter or water wash in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
  - (2) The permittee shall expeditiously repair the dry particulate filter or water wash or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.
  - (3) The RTO serving this emissions unit shall be employed at all times when the emissions unit is in operation.
  - (4) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and maintain daily records of the following information for the clean-up operations:
    - a. the name and identification number of each clean-up material, employed;
    - b. the number of gallons of each clean-up material employed;
    - c. the OC content of each clean-up material, employed, in lbs/gal;



- d. the OC input rate for clean-up material,  $d)(1)b. \times d)(1)c.$ , in lbs per day;
  - e. the total monthly OC emission rate for all clean-up materials employed, in tons, summation of  $d)(1)d.$
- (2) In order to demonstrate compliance with the 255 tons per rolling 365-day period, the permittee shall collect and record the following each day for emission units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.
- a. the name and identification number of each coating and cleanup material;
  - b. the OC content of each coating and cleanup material, in lbs/gallon, as applied;
  - c. the number of gallons of each coating and cleanup material employed;
  - d. the OC emission rates from each coating and cleanup material employed  $d)(2)b. \times d)(2)c.$ ;
  - e. the total OC emission rate from all coatings and cleanup material employed, [summation of  $d)(2)d.$ ]; and
  - f. the rolling 365-day summation of the total OC emission rate.
- (3) The permittee, having chosen to demonstrate compliance with a limitation based on pounds of VOC per gallon of coating solids, shall collect and record the following information each day for the coating line and control equipment:
- a. the name and identification number of each coating applied;
  - b. for each coating, the calculation for the VOC content in pounds of VOC per gallon of coating solids and the record of each variable for each coating applied:
 
$$C_{VOC,3} = (D_C)(W_{VOC}) / V_S$$
 where:
    - $C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids
    - $D_C$  = density of coating, in pounds of coating per gallon of coating
    - $W_{VOC} = W_{VM} - W_W - W_{ES}$
    - $W_{VM}$  = weight fraction of VOC in coating, in pound of VOC per pound of coating
    - $W_W$  = weight fraction of water in coating, in pound of water per pound of coating
    - $W_{ES}$  = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating
    - $V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating;
  - c. the maximum VOC content per gallon of coating solids for all the coatings applied; **or**



d. the daily volume-weighted average VOC content in pounds of VOC per gallon of coating solids of all the coatings applied, calculated as follows:

e.  $n$   $n$

$$(C_{VOC,3})_A = \frac{\sum_{i=1}^n (C_{VOC,3i}) (L_{Ci}) (V_{Si})}{\sum_{i=1}^n (L_{Ci}) (V_{Si})}$$

where:

$(C_{VOC,3})_A$  = daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied)

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$L_C$  = liquid volume of each coating employed during the day

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating

$i$  = subscript denoting a specific coating employed during the day or averaging period

$A$  = subscript denoting that the indicated VOC content is a weighted average of the coatings employed during the day or during the averaging period.

f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the maximum VOC content of any coating applied or the daily volume-weighted average) using the overall control efficiency, as determined for the RTO during the most recent emission test that demonstrated that the emissions unit(s) was/were in compliance.

(4) The permittee shall collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:

- a. the number of gallons of coatings applied;
- b. the total volume of solids from all coatings applied, in gallons;
- c. the daily volume-weighted average VOC content **or** the maximum VOC content of the coatings applied, in pounds of VOC per gallon of coating solids, as calculated above;
- d. the uncontrolled VOC emissions from all coatings applied, i.e., “b” x “c”;
- e. the overall control efficiency determined for the thermal oxidizer during the most recent demonstration of compliance;
- f. the total controlled VOC emissions from all coatings applied, i.e., “d” x “e”;
- g. the name and identification of each cleanup material employed;
- h. the VOC content of each cleanup material, in pounds per gallon;



- i. the number of gallons of each cleanup material employed;
  - j. the total VOC emissions from all cleanup materials employed, i.e., the summation of the products of "h" x "i", in pounds; and
  - k. the total VOC emissions from all coatings and cleanup materials employed during the day, i.e., "f" + "j", in pounds.
- (5) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The acceptable operating temperature shall be 1,508 degrees Fahrenheit. The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit controlled by the RTO was in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the acceptable operating temperature of 1,508 degrees Fahrenheit; and
  - b. a log or record of the operating time for the capture (collection) system, RTO, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

Whenever the monitored combustion temperature within the RTO deviates from the operating temperature value specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- c. the date and time the deviation began;
- d. the magnitude of the deviation at that time;
- e. the date the investigation was conducted;
- f. the name(s) of the personnel who conducted the investigation; and
- g. 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 in conformance with the acceptable temperature value specified above, 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:

- h. a description of the corrective action;



- i. the date corrective action was completed;
- j. the date and time the deviation ended;
- k. the total period of time (in minutes) during which there was a deviation;
- l. the temperature readings immediately after the corrective action was implemented; and
- m. 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 operating temperature requirement is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted temperature value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the operating temperature value will not constitute a relaxation of the monitoring requirements and may be incorporated into this permit by means of an administrative modification.

- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter or water wash, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, Northwest District Office upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter or water wash to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter or water wash while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system or water wash and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.



These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Ohio EPA, Northwest District Office upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter or water wash was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter or water wash was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (11) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

e) Reporting Requirements

- (1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the dry particulate filter system or water wash was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;
- (2) In accordance with the Standard Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports for emissions unit K043 which identify exceedances of any of the following:
  - a. any exceedances of the 0.07 ton OC/month from cleanup material limitation; and
  - b. any exceedances of the 255 tons OC per rolling, 12-month period for Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.
- (3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the exceedance occurs.
- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
  - a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the operating temperature of 1,508 degrees Fahrenheit.
  - b. each period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the RTO;



- c. an identification of each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
- d. an identification of each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the RTO 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 “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (5) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:

0.46 lb OC/hr, 2.01 tons OC/yr from primer coating operations

Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit’s potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the primer coating operations for this emissions unit is based on a maximum hourly primer usage of 0.71 gallon per hour multiplied by the maximum solids content of 0.096 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual OC emission limitation was developed by multiplying the hourly OC emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be ensured.

- b. Emission Limitations:

0.48 lb OC/hr, 2.10 tons OC/yr from topcoat coating operations



Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the topcoat coating operations for this emissions unit is based on a maximum hourly primer usage of 0.78 gallon per hour multiplied by the maximum solids content of 0.092 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.

c. Emission Limitations:

0.07 ton OC/month, 0.87 ton OC/yr from cleanup materials

Applicable Compliance Method:

Compliance with this monthly limitation shall be determined by the recordkeeping in section d)(1) of this permit.

The annual limitation was established by multiplying the monthly OC cleanup limitation by a maximum operating schedule of 12 months per year. Therefore, provided compliance is demonstrated with the monthly OC cleanup limitation, compliance with the annual cleanup limitation will be assumed.

d. Emission Limitations:

0.90 lb CO/hr, 3.94 tons CO/yr for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate CO emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the RTO. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 10, 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.



e. Emission Limitations:

0.11 lb PE/hr, 0.48 ton PE/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined in accordance with the following:

The permittee may calculate the actual PE rates utilizing the following equation:

$$E = (\text{maximum coating solids usage rate in lbs/hr}) \times (1-TE) \times (1-CE)$$

where:

E = PE rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, assumed to be 25%

CE = control efficiency of the control equipment, assumed to be 90%

If required, compliance with the hourly PE limitation shall be based on stack testing in accordance with 40 CFR, Part 60, Appendix A - Test Methods 1-5.

The annual PE limitation was developed by multiplying the hourly PE limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly PE limitation is maintained, compliance with the annual PE limitation shall be ensured.

f. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with 40 CFR, Part 60, Appendix A, Method 9.

g. Emission Limitation:

255 tons OC per rolling 365-day period from all Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(2) of this permit.



h. Emission Limitation:

6.7 lbs of VOC per gallon of solids for an extreme performance coating; where a control system is employed

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(3) of this permit.

i. Emission Limitation:

Organic HAP emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period.

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(11) of this permit.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit is subject to 40 CFR, Part 63, Subpart M.



**2. K046, Adhesive Dipping Machine (B650-1,2)**

**Operations, Property and/or Equipment Description:**

Adhesive Dipping Machine - Miscellaneous Metal Parts Coating Operation (B650-1,2) (Administrative modification of PTI #03-13938 issued on 8/28/03 to revise OC limitations for primer and topcoat coating operations, and eliminate 10 gallons per day coating usage restrictions due to installation of a regenerative thermal oxidizer that controls emissions for the purpose of complying with requirements in 40 CFR, Part 63, Subpart M) (M) (M) (M) (M)

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) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)	0.80 lb organic compounds (OC)/hr, 3.50 tons OC/yr from primer coating operations  0.77 lb OC/hr, 3.37 tons OC/yr from topcoat coating operations  0.73 ton OC/month, 8.76 tons OC/yr from cleanup materials  0.90 lb carbon monoxide (CO)/hr, 3.94 tons CO/yr for the stack exhaust from the regenerative thermal oxidizer (RTO) for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined  See b)(2)a. and b)(2)c
b.	OAC rule 3745-31-05(D)	255 tons OC per rolling, 365-day period, from all the emission units identified in b)(2)b. [see b)(2)b.]
c.	OAC rule 3745-21-09(U)(1)(c)	6.7 lbs of volatile organic compounds (VOC) per gallon of solids for an extreme performance coating, where a control system is employed



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	ORC 3704.03(F)(4)(c) and OAC rule 3745-114	See g)(1)
e.	40 CFR, Part 63, Subpart M [40 CFR 63.3880-3981]  In accordance with 40 CFR 63.3890(b)(4), this emissions unit is a rubber-to-metal coating affected source at an existing surface coating facility subject to the emission limitations/control measures specified in this section.	Organic hazardous air pollutant (HAP) emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(4)]  See c)(2), d)(6) and e)(4)
f.	40 CFR 63.1-15	Table 2 to 40 CFR, Part 63, Subpart M – Applicability of General Provisions to Subpart M shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with OAC rule 3745-21-09(U)(1)(c) and OAC rule 3745-31-05(D).
- b. The permittee has requested a federally enforceable limitation of 255 tons OC per rolling, 365-day period from Anti-Vibration Adhesive Coating operations, emissions units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined for purposes of avoiding "Prevention of Significant Deterioration" (PSD) applicability.  
  
All of the above Anti-Vibration Adhesive Coating operations have existing records of emissions of OC, therefore it is not necessary to establish federally enforceable restrictions for the first 12 months of operation following the issuance of this permit. For purposes of federal enforceability OC limitations effectively restrict VOC emissions.
- c. Best available technology (BAT) for carbon monoxide (CO) emissions is determined to be the use of a regenerative thermal oxidizer (RTO), a CO emission rate of 0.90 lb CO/hr and 3.94 tons CO/yr from products of combustion from firing natural gas for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined, with an associated RTO minimum operating temperature of 1,508 degrees Fahrenheit.
- d. The RTO shall meet the following requirements for OC emissions from this emission unit:
  - i. minimum OC destruction efficiency of 95%.



c) Operational Restrictions

- (1) The RTO serving this emissions unit shall be employed at all times when the emissions unit is in operation.
- (2) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and maintain daily records of the following information for the clean-up operations:
  - a. the name and identification number of each clean-up material, employed;
  - b. the number of gallons of each clean-up material employed;
  - c. the OC content of each clean-up material, employed, in lbs/gal;
  - d. the OC input rate for clean-up material,  $d)(1)b. \times d)(1)c.$ , in lbs per day;
  - e. the total monthly OC emission rate for all clean-up materials employed, in tons, summation of  $d)(1)d.$
- (2) In order to demonstrate compliance with the 255 tons per rolling 365-day period, the permittee shall collect and record the following each day for emission units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.
  - a. the name and identification number of each coating and cleanup material;
  - b. the OC content of each coating and cleanup material, in lbs/gallon, as applied;
  - c. the number of gallons of each coating and cleanup material employed;
  - d. the OC emission rates from each coating and cleanup material employed  $d)(2)b. \times d)(2)c.$ ;
  - e. the total OC emission rate from all coatings and cleanup material employed, [summation of  $d)(2)d.$ ]; and
  - f. the rolling 365-day summation of the total OC emission rate.
- (3) The permittee, having chosen to demonstrate compliance with a limitation based on pounds of VOC per gallon of coating solids, shall collect and record the following information each day for the coating line and control equipment:
  - a. the name and identification number of each coating applied;
  - b. for each coating, the calculation for the VOC content in pounds of VOC per gallon of coating solids and the record of each variable for each coating applied:

$$C_{VOC,3} = (D_C)(W_{VOC}) / V_S$$

where:



$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$D_C$  = density of coating, in pounds of coating per gallon of coating

$W_{VOC} = W_{VM} - W_W - W_{ES}$

$W_{VM}$  = weight fraction of VOC in coating, in pound of VOC per pound of coating

$W_W$  = weight fraction of water in coating, in pound of water per pound of coating

$W_{ES}$  = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating;

- c. the maximum VOC content per gallon of coating solids for all the coatings applied; **or**
- d. the daily volume-weighted average VOC content in pounds of VOC per gallon of coating solids of all the coatings applied, calculated as follows:
- e.  $n \quad n$

$$(C_{VOC,3})_A = \frac{\sum_{i=1}^n (C_{VOC,3i}) (L_{Ci}) (V_{Si})}{\sum_{i=1}^n (L_{Ci}) (V_{Si})}$$

where:

$(C_{VOC,3})_A$  = daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied)

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$L_C$  = liquid volume of each coating employed during the day

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating

$i$  = subscript denoting a specific coating employed during the day or averaging period

$A$  = subscript denoting that the indicated VOC content is a weighted average of the coatings employed during the day or during the averaging period.

- f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the maximum VOC content of any coating applied or the daily volume-weighted average) using the overall control efficiency, as determined for the RTO during the most recent emission test that demonstrated that the emissions unit(s) was/were in compliance.

(4) The permittee shall collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:

- a. the number of gallons of coatings applied;



- b. the total volume of solids from all coatings applied, in gallons;
  - c. the daily volume-weighted average VOC content **or** the maximum VOC content of the coatings applied, in pounds of VOC per gallon of coating solids, as calculated above;
  - d. the uncontrolled VOC emissions from all coatings applied, i.e., “b” x “c”;
  - e. the overall control efficiency determined for the thermal oxidizer during the most recent demonstration of compliance;
  - f. the total controlled VOC emissions from all coatings applied, i.e., “d” x “e”;
  - g. the name and identification of each cleanup material employed;
  - h. the VOC content of each cleanup material, in pounds per gallon;
  - i. the number of gallons of each cleanup material employed;
  - j. the total VOC emissions from all cleanup materials employed, i.e., the summation of the products of “h” x “i”, in pounds; and
  - k. the total VOC emissions from all coatings and cleanup materials employed during the day, i.e., “f” + “j”, in pounds.
- (5) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The acceptable operating temperature shall be 1,508 degrees Fahrenheit. The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit controlled by the RTO was in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the acceptable operating temperature of 1,508 degrees Fahrenheit; and
  - b. a log or record of the operating time for the capture (collection) system, RTO, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

Whenever the monitored combustion temperature within the RTO deviates from the operating temperature value specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- c. the date and time the deviation began;



- d. the magnitude of the deviation at that time;
- e. the date the investigation was conducted;
- f. the name(s) of the personnel who conducted the investigation; and
- g. 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 in conformance with the acceptable temperature value specified above, 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:

- h. a description of the corrective action;
- i. the date corrective action was completed;
- j. the date and time the deviation ended;
- k. the total period of time (in minutes) during which there was a deviation;
- l. the temperature readings immediately after the corrective action was implemented; and
- m. 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 operating temperature requirement is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted temperature value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the operating temperature value will not constitute a relaxation of the monitoring requirements and may be incorporated into this permit by means of an administrative modification.

(6) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

e) Reporting Requirements

(1) In accordance with the Standard Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports for emissions unit K046 which identify exceedances of any of the following:

- a. any exceedances of the 0.73 ton OC/month from cleanup material limitation; and



- b. any exceedances of the 255 tons OC per rolling, 12-month period for Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.
- (2) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the exceedance occurs.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
- a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the operating temperature of 1,508 degrees Fahrenheit.
  - b. each period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the RTO;
  - c. an identification of each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the RTO 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 “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (4) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
- a. Emission Limitations:  
0.80 lb OC/hr, 3.50 tons OC/yr from primer coating operations



Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the primer coating operations for this emissions unit is based on a maximum hourly primer usage of 1.25 gallons per hour multiplied by the maximum solids content of 0.096 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual OC emission limitation was developed by multiplying the hourly OC emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be ensured.

b. Emission Limitations:

0.77 lb OC/hr, 3.37 tons OC/yr from topcoat coating operations

Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the topcoat coating operations for this emissions unit is based on a maximum hourly primer usage of 1.25 gallons per hour multiplied by the maximum solids content of 0.092 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.

c. Emission Limitations:

0.73 ton OC/month, 8.76 tons OC/yr from cleanup materials

Applicable Compliance Method:

Compliance with this monthly limitation shall be determined by the recordkeeping in section d)(1) of this permit. The annual limitation was established by multiplying the monthly OC cleanup limitation by a maximum operating schedule of 12 months per year. Therefore, provided compliance is demonstrated with the monthly OC cleanup limitation, compliance with the annual cleanup limitation will be assumed.



d. Emission Limitations:

0.90 lb CO/hr, 3.94 tons CO/yr for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate CO emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the RTO. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 10, 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

e. Emission Limitation:

255 tons OC per rolling 365-day period from all Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(2) of this permit.

f. Emission Limitation:

6.7 pounds of VOC per gallon of solids for an extreme performance coating; where a control system is employed

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(3) of this permit.

g. Emission Limitation:

Organic HAP emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period.

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(6) of this permit.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 03-17419  
**Facility ID:** 0302000166  
**Effective Date:** 10/8/2009

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit is subject to 40 CFR, Part 63, Subpart M.



**3. Emissions Unit Group - Automatic Adhesive Spray Machines: K055 and K060**

EU ID	Operations, Property and/or Equipment Description
K055	Automatic Adhesive Spray Machine No. 10 - Miscellaneous Metal Parts Coating Operation
K060	Automatic Adhesive Spray Machine No. 12 - Miscellaneous Metal Parts Coating Operation

(Administrative modification of PTI #03-16050 for emissions unit K055 issued on 6/9/05, and PTI #03-16343 for emissions unit K060 issued on 6/30/05 to revise OC limitations for primer and topcoat coating operations, and eliminate 10 gallons per day coating usage restrictions due to installation of a regenerative thermal oxidizer that controls emissions for the purpose of complying with requirements in 40 CFR, Part 63, Subpart M) )

- 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) g)(1)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(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. 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)	0.64 lb organic compounds (OC)/hr, 2.80 tons OC/yr from primer coating operations, from each emissions unit individually  0.64 lb OC/hr, 2.80 tons OC/yr from topcoat coating operations, from each emissions unit individually  139.50 lbs OC/month, 0.84 ton OC/yr from cleanup materials, from each emissions unit individually  0.90 lb carbon monoxide (CO)/hr, 3.94 tons CO/yr for the stack exhaust from the regenerative thermal oxidizer (RTO) for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.15 lb particulate emissions (PE)/hr, 0.66 ton PE/yr  Visible PE shall not exceed 0% as a six-minute average  See b)(2)a, b)(2)f and b)(2)g
b.	OAC rule 3745-31-05(D)	255 tons OC per rolling, 365-day period, from all the emission units identified in b)(2)b. [see b)(2)b]
c.	OAC rule 3745-21-09(U)(1)(c)	6.7 lbs of volatile organic compounds (VOC) per gallon of solids for an extreme performance coating; where a control system is employed
d.	OAC rule 3745-17-11(B)	See b)(2)c and b)(2)e
e.	OAC rule 3745-17-07(A)	See b)(2)c and b)(2)e
f.	OAC rule 3745-17-11(C)	See b)(2)d
g.	ORC 3704.03(F)(4)(c) and OAC rule 3745-114	See g)(1)
h.	40 CFR, Part 63, Subpart M [40 CFR 63.3880-3981]  In accordance with 40 CFR 63.3890(b)(4), this emissions unit is a rubber-to-metal coating affected source at an existing surface coating facility subject to the emission limitations/control measures specified in this section.	Organic hazardous air pollutant (HAP) emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(4)]  See c)(4), d)(11) and e)(5)
i.	40 CFR 63.1-15	Table 2 to 40 CFR, Part 63, Subpart M – Applicability of General Provisions to Subpart M shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with OAC rule 3745-21-09(U)(1)(c) and OAC rule 3745-31-05(D).
- b. The permittee has requested a federally enforceable limitation of 255 tons OC per rolling, 365-day period from Anti-Vibration Adhesive Coating operations, emissions units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined for purposes of avoiding "Prevention of Significant Deterioration" (PSD) applicability.



All of the above Anti-Vibration Adhesive Coating operations have existing records of emissions of OC, therefore it is not necessary to establish federally enforceable restrictions for the first 12 months of operation following the issuance of this permit. For purposes of federal enforceability OC limitations effectively restrict VOC emissions.

- c. The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
- d. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C) pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan (SIP).
- e. The requirements to comply with this rule shall terminate on the date the U.S. EPA approves the requirements based on OAC rule 3745-17-11(C) as a revision to the Ohio SIP for particulate emissions.
- f. Best available technology (BAT) for carbon monoxide (CO) emissions is determined to be the use of a regenerative thermal oxidizer (RTO), a CO emission rate of 0.90 lb CO/hr and 3.94 tons CO/yr from products of combustion from firing natural gas for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined, with an associated RTO minimum operating temperature of 1,508 degrees Fahrenheit.
- g. The RTO shall meet the following requirements for OC emissions from this emission unit:
  - i. minimum OC destruction efficiency of 95%.

c) Operational Restrictions

- (1) The permittee shall operate the dry filtration system or water wash for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter or water wash in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (2) The permittee shall expeditiously repair the dry particulate filter or water wash or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.
- (3) The RTO serving this emissions unit shall be employed at all times when the emissions unit is in operation.
- (4) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).



d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and maintain daily records of the following information for the clean-up operations:

- a. the name and identification number of each clean-up material, employed;
- b. the number of gallons of each clean-up material employed;
- c. the OC content of each clean-up material, employed, in lbs/gal;
- d. the OC input rate for clean-up material, d)(1)b. x d)(1)c., in lbs per day;
- e. the total monthly OC emission rate for all clean-up materials employed, in tons, summation of d)(1)d.

(2) In order to demonstrate compliance with the 255 tons per rolling 365-day period, the permittee shall collect and record the following each day for emission units: K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.

- a. the name and identification number of each coating and cleanup material;
- b. the OC content of each coating and cleanup material, in lbs/gallon, as applied;
- c. the number of gallons of each coating and cleanup material employed;
- d. the OC emission rates from each coating and cleanup material employed d)(2)b. x d)(2)c.;
- e. the total OC emission rate from all coatings and cleanup material employed, [summation of d)(2)d.]; and
- f. the rolling 365-day summation of the total OC emission rate.

(3) The permittee, having chosen to demonstrate compliance with a limitation based on pounds of VOC per gallon of coating solids, shall collect and record the following information each day for the coating line and control equipment:

- a. the name and identification number of each coating applied;
- b. for each coating, the calculation for the VOC content in pounds of VOC per gallon of coating solids and the record of each variable for each coating applied:

$$C_{VOC,3} = (D_C)(W_{VOC}) / V_S$$

where:

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$D_C$  = density of coating, in pounds of coating per gallon of coating

$$W_{VOC} = W_{VM} - W_W - W_{ES}$$



$W_{VM}$  = weight fraction of VOC in coating, in pound of VOC per pound of coating

$W_W$  = weight fraction of water in coating, in pound of water per pound of coating

$W_{ES}$  = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating;

- c. the maximum VOC content per gallon of coating solids for all the coatings applied; **or**
- d. the daily volume-weighted average VOC content in pounds of VOC per gallon of coating solids of all the coatings applied, calculated as follows:
- e.  $n$   $n$

$$(C_{VOC,3})_A = \frac{\sum_{i=1}^n (C_{VOC,3i}) (L_{Ci}) (V_{Si})}{\sum_{i=1}^n (L_{Ci}) (V_{Si})}$$

where:

$(C_{VOC,3})_A$  = daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied)

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$L_C$  = liquid volume of each coating employed during the day

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating

$i$  = subscript denoting a specific coating employed during the day or averaging period

$A$  = subscript denoting that the indicated VOC content is a weighted average of the coatings employed during the day or during the averaging period.

- f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the maximum VOC content of any coating applied or the daily volume-weighted average) using the overall control efficiency, as determined for the RTO during the most recent emission test that demonstrated that the emissions unit(s) was/were in compliance.

- (4) The permittee shall collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:
  - a. the number of gallons of coatings applied;
  - b. the total volume of solids from all coatings applied, in gallons;
  - c. the daily volume-weighted average VOC content **or** the maximum VOC content of the coatings applied, in pounds of VOC per gallon of coating solids, as calculated above;



- d. the uncontrolled VOC emissions from all coatings applied, i.e., “b” x “c”;
  - e. the overall control efficiency determined for the thermal oxidizer during the most recent demonstration of compliance;
  - f. the total controlled VOC emissions from all coatings applied, i.e., “d” x “e”;
  - g. the name and identification of each cleanup material employed;
  - h. the VOC content of each cleanup material, in pounds per gallon;
  - i. the number of gallons of each cleanup material employed;
  - j. the total VOC emissions from all cleanup materials employed, i.e., the summation of the products of “h” x “i”, in pounds; and
  - k. the total VOC emissions from all coatings and cleanup materials employed during the day, i.e., “f” + “j”, in pounds.
- (5) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The acceptable operating temperature shall be 1,508 degrees Fahrenheit. The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit controlled by the RTO was in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the acceptable operating temperature of 1,508 degrees Fahrenheit; and
  - b. a log or record of the operating time for the capture (collection) system, RTO, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

Whenever the monitored combustion temperature within the RTO deviates from the operating temperature value specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- c. the date and time the deviation began;
- d. the magnitude of the deviation at that time;
- e. the date the investigation was conducted;
- f. the name(s) of the personnel who conducted the investigation; and



- g. 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 in conformance with the acceptable temperature value specified above, 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:

- h. a description of the corrective action;
- i. the date corrective action was completed;
- j. the date and time the deviation ended;
- k. the total period of time (in minutes) during which there was a deviation;
- l. the temperature readings immediately after the corrective action was implemented; and
- m. 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 operating temperature requirement is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted temperature value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the operating temperature value will not constitute a relaxation of the monitoring requirements and may be incorporated into this permit by means of an administrative modification.

- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter or water wash, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, Northwest District Office upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter or water wash to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter



or water wash while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system or water wash and shall maintain the following information:
- the date of the inspection;
  - a description of each/any problem identified and the date it was corrected;
  - a description of any maintenance and repairs performed; and
  - the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Ohio EPA, Northwest District Office upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter or water wash was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter or water wash was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

- (11) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

e) Reporting Requirements

- (1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the dry particulate filter system or water wash was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;
- (2) In accordance with the Standard Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports for emissions units K055 and K060 which identify exceedances of any of the following:
- any exceedances of the 139.50 lbs OC/month, for each emissions unit individually, from cleanup material limitation; and
  - any exceedances of the 255 tons OC per rolling, 12-month period for Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined.
- (3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the exceedance occurs.



- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
  - a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the operating temperature of 1,508 degrees Fahrenheit.
  - b. each period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the RTO;
  - c. an identification of each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the RTO 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 “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (5) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:

0.64 lb OC/hr, 2.80 tons OC/yr from primer coating operations

Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit’s potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the primer coating operations for this emissions unit is based on a maximum hourly primer usage of 1.0 gallon per hour multiplied by the maximum solids content of 0.096 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual OC emission limitation was developed by multiplying the hourly OC emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as



compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be ensured.

b. Emission Limitations:

0.64 lb OC/hr, 2.80 tons OC/yr from topcoat coating operations

Applicable Compliance Method:

The hourly emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the topcoat coating operations for this emissions unit is based on a maximum hourly primer usage of 1.04 gallons per hour multiplied by the maximum solids content of 0.092 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

c. Emission Limitations:

139.50 lbs OC/month, 0.84 ton OC/yr from cleanup materials

Applicable Compliance Method:

Compliance with this monthly limitation shall be determined by the recordkeeping in section d)(1) of this permit.

The annual limitation was established by multiplying the monthly OC cleanup limitation by a maximum operating schedule of 12 months per year, then dividing by 2,000 lbs/ton. Therefore, provided compliance is demonstrated with the monthly OC cleanup limitation, compliance with the annual cleanup limitation will be assumed.

d. Emission Limitations:

0.90 lb CO/hr, 3.94 tons CO/yr for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate CO emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the RTO. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with



the requirements specified in Methods 1 through 4 and Method 10, 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.

e. Emission Limitation:

255 tons OC per rolling 365-day period from all Anti-Vibration Adhesive Coating operations, emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056 and K060 combined

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(2) of this permit.

f. Emission Limitation:

6.7 pounds of VOC per gallon of solids for an extreme performance coating; where a control system is employed

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(3) of this permit.

g. Emission Limitations:

0.15 lb PE/hr, 0.66 ton PE/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined in accordance with the following:

The permittee may calculate the actual PE rates utilizing the following equation:

$$E = (\text{maximum coating solids usage rate in lbs/hr}) \times (1-TE) \times (1-CE)$$

where:

E = PE rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, assumed to be 25%

CE = control efficiency of the control equipment, assumed to be 90%



If required, compliance with the hourly PE limitation shall be based on stack testing in accordance with 40 CFR, Part 60, Appendix A - Test Methods 1-5.

The annual PE limitation was developed by multiplying the hourly PE limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly PE limitation is maintained, compliance with the annual PE limitation shall be ensured.

h. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with 40 CFR, Part 60, Appendix A, Method 9.

i. Emission Limitation:

Organic HAP emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period.

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(11) of this permit.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit is subject to 40 CFR, Part 63, Subpart MMMM.



**4. K062, Automatic Adhesive Spray Machine**

**Operations, Property and/or Equipment Description:**

Automatic Adhesive Spray Machine (B1121) - Miscellaneous Metal Parts Coating Operation (Administrative modification of PTI #03-17069 issued on 3/30/06 to revise OC limitations for primer and topcoat coating operations, and eliminate 10 gallons per day coating usage restrictions due to installation of a regenerative thermal oxidizer that controls emissions for the purpose of complying with requirements in 40 CFR, Part 63, Subpart M)

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) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)	0.64 lb organic compounds (OC)/hr, 2.80 tons OC/yr from primer coating operations  0.64 lb OC/hr, 2.80 tons OC/yr from topcoat coating operations  139.50 lbs OC/month, 0.84 ton OC/yr from cleanup materials  0.90 lb carbon monoxide (CO)/hr, 3.94 tons CO/yr for the stack exhaust from the regenerative thermal oxidizer (RTO) for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined  0.15 lb particulate emissions (PE)/hr, 0.66 ton PE/yr  Visible PE shall not exceed 0% opacity as a six-minute average  See b)(2)a, b(2)e and b)(2)f



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-21-09(U)(1)(c)	6.7 lbs of volatile organic compounds (VOC) per gallon of solids for an extreme performance coating; where a control system is employed
c.	OAC rule 3745-17-11(B)	See b)(2)b and b)(2)d
d.	OAC rule 3745-17-07(A)	See b)(2)b and b)(2)d
e.	OAC rule 3745-17-11(C)	See b)(2)c
f.	ORC 3704.03(F)(4)(c) and OAC rule 3745-114	See g)(1)
g.	40 CFR, Part 63, Subpart M [40 CFR 63.3880-3981]  In accordance with 40 CFR 63.3890(b)(4), this emissions unit is a rubber-to-metal coating affected source at an existing surface coating facility subject to the emission limitations/control measures specified in this section.	Organic hazardous air pollutant (HAP) emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period. [40 CFR 63.3890(b)(4)]  See c)(4), d)(10) and e)(5)
h.	40 CFR 63.1-15	Table 2 to 40 CFR, Part 63, Subpart M – Applicability of General Provisions to Subpart M shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with OAC rule 3745-21-09(U)(1)(c).
- b. The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C) pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan (SIP).
- d. The requirements to comply with this rule shall terminate on the date the U.S. EPA approves the requirements based on OAC rule 3745-17-11(C) as a revision to the Ohio SIP for particulate emissions.



- e. Best available technology (BAT) for carbon monoxide (CO) emissions is determined to be the use of a regenerative thermal oxidizer (RTO), a CO emission rate of 0.90 lb CO/hr and 3.94 tons CO/yr from products of combustion from firing natural gas for the stack exhaust from the RTO for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined, with an associated RTO minimum operating temperature of 1,508 degrees Fahrenheit.
  - f. The RTO shall meet the following requirements for OC emissions from this emission unit:
    - i. minimum OC destruction efficiency of 95%.
- c) Operational Restrictions
- (1) The permittee shall operate the dry filtration system or water wash for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter or water wash in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
  - (2) The permittee shall expeditiously repair the dry particulate filter or water wash or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.
  - (3) The RTO serving this emissions unit shall be employed at all times when the emissions unit is in operation.
  - (4) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and maintain daily records of the following information for the clean-up operations:
    - a. the name and identification number of each clean-up material, employed;
    - b. the number of gallons of each clean-up material employed;
    - c. the OC content of each clean-up material, employed, in lbs/gal;
    - d. the OC input rate for clean-up material,  $d)(1)b. \times d)(1)c.$ , in lbs per day;
    - e. the total monthly OC emission rate for all clean-up materials employed, in tons, summation of  $d)(1)d.$
  - (2) The permittee, having chosen to demonstrate compliance with a limitation based on pounds of VOC per gallon of coating solids, shall collect and record the following information each day for the coating line and control equipment:
    - a. the name and identification number of each coating applied;



- b. for each coating, the calculation for the VOC content in pounds of VOC per gallon of coating solids and the record of each variable for each coating applied:

$$C_{VOC,3} = (D_C)(W_{VOC}) / V_S$$

where:

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$D_C$  = density of coating, in pounds of coating per gallon of coating

$$W_{VOC} = W_{VM} - W_W - W_{ES}$$

$W_{VM}$  = weight fraction of VOC in coating, in pound of VOC per pound of coating

$W_W$  = weight fraction of water in coating, in pound of water per pound of coating

$W_{ES}$  = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating;

- c. the maximum VOC content per gallon of coating solids for all the coatings applied; **or**
- d. the daily volume-weighted average VOC content in pounds of VOC per gallon of coating solids of all the coatings applied, calculated as follows:
- e.  $n \quad n$

$$(C_{VOC,3})_A = \frac{\sum_{i=1}^n (C_{VOC,3i}) (L_{Ci}) (V_{Si})}{\sum_{i=1}^n (L_{Ci}) (V_{Si})}$$

where:

$(C_{VOC,3})_A$  = daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied)

$C_{VOC,3}$  = VOC content, in pounds of VOC per gallon of solids

$L_C$  = liquid volume of each coating employed during the day

$V_S$  = volume fraction of solids in coating, in gallon of solids per gallon of coating

$i$  = subscript denoting a specific coating employed during the day or averaging period

$A$  = subscript denoting that the indicated VOC content is a weighted average of the coatings employed during the day or during the averaging period.



- f. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the maximum VOC content of any coating applied or the daily volume-weighted average) using the overall control efficiency, as determined for the RTO during the most recent emission test that demonstrated that the emissions unit(s) was/were in compliance.
- (3) The permittee shall collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:
- a. the number of gallons of coatings applied;
  - b. the total volume of solids from all coatings applied, in gallons;
  - c. the daily volume-weighted average VOC content **or** the maximum VOC content of the coatings applied, in pounds of VOC per gallon of coating solids, as calculated above;
  - d. the uncontrolled VOC emissions from all coatings applied, i.e., “b” x “c”;
  - e. the overall control efficiency determined for the thermal oxidizer during the most recent demonstration of compliance;
  - f. the total controlled VOC emissions from all coatings applied, i.e., “d” x “e”;
  - g. the name and identification of each cleanup material employed;
  - h. the VOC content of each cleanup material, in pounds per gallon;
  - i. the number of gallons of each cleanup material employed;
  - j. the total VOC emissions from all cleanup materials employed, i.e., the summation of the products of “h” x “i”, in pounds; and
  - k. the total VOC emissions from all coatings and cleanup materials employed during the day, i.e., “f” + “j”, in pounds.
- (4) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The acceptable operating temperature shall be 1,508 degrees Fahrenheit. The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit controlled by the RTO was in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the acceptable operating temperature of 1,508 degrees Fahrenheit; and



- b. a log or record of the operating time for the capture (collection) system, RTO, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

Whenever the monitored combustion temperature within the RTO deviates from the operating temperature value specified above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- c. the date and time the deviation began;
- d. the magnitude of the deviation at that time;
- e. the date the investigation was conducted;
- f. the name(s) of the personnel who conducted the investigation; and
- g. 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 in conformance with the acceptable temperature value specified above, 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:

- h. a description of the corrective action;
- i. the date corrective action was completed;
- j. the date and time the deviation ended;
- k. the total period of time (in minutes) during which there was a deviation;
- l. the temperature readings immediately after the corrective action was implemented; and
- m. 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 operating temperature requirement is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted temperature value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the operating temperature value will not constitute a relaxation of the monitoring requirements and may be incorporated into this permit by means of an administrative modification.



- (5) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter or water wash, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA, Northwest District Office upon request.
- (6) The permittee shall conduct periodic inspections of the dry particulate filter or water wash to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (7) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter or water wash while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (8) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system or water wash and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Ohio EPA, Northwest District Office upon request.

- (9) The permittee shall maintain records that document any time periods when the dry particulate filter or water wash was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter or water wash was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
  - (10) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).
- e) Reporting Requirements
- (1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the dry particulate filter system or water wash was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;



- (2) In accordance with the Standard Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports for emissions unit K062 which identify exceedances of any of the following:
  - a. any exceedances of the 139.50 lbs OC/month from cleanup material limitation.
- (3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the exceedance occurs.
- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the RTO during the operation of the emissions unit:
  - a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the operating temperature of 1,508 degrees Fahrenheit.
  - b. each period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the RTO;
  - c. an identification of each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the RTO 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 "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (5) See 40 CFR, Part 63, Subpart M (40 CFR 63.3880-3981).

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitations:  
0.64 lb OC/hr, 2.80 tons OC/yr from primer coating operations



Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the primer coating operations for this emissions unit is based on a maximum hourly primer usage of 1.0 gallon per hour multiplied by the maximum solids content of 0.096 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual OC emission limitation was developed by multiplying the hourly OC emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be ensured.

b. Emission Limitations:

0.64 lb OC/hr, 2.80 tons OC/yr from topcoat coating operations

Applicable Compliance Method:

The hourly OC emission limitation is based on the emission unit's potential to emit\*. Therefore, no recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance.

\* The potential to emit for the topcoat coating operations for this emissions unit is based on a maximum hourly primer usage of 1.04 gallons per hour multiplied by the maximum solids content of 0.092 gallon solids per gallon of coating, multiplied by the maximum allowed OC content of 6.7 lbs OC per gallon of coating solids.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.

c. Emission Limitations:

139.50 lbs OC/month, 0.84 ton OC/yr from cleanup materials

Applicable Compliance Method:

Compliance with this monthly limitation shall be determined by the recordkeeping in section d)(1) of this permit.

The annual limitation was established by multiplying the monthly OC cleanup limitation by a maximum operating schedule of 12 months per year, then dividing by 2,000 lbs/ton. Therefore, provided compliance is demonstrated with the monthly OC cleanup limitation, compliance with the annual cleanup limitation will be assumed.



d. Emission Limitation:

0.90 lb CO/hr, 3.94 tons CO/yr for the stack exhaust from the regenerative thermal oxidizer (RTO) for emissions units K004, K009, K011, K013, K016, K017, K018, K030, K031, K032, K033, K043, K046, K048, K055, K056, K060 and K062 combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate CO emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the RTO. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 10, 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly imitation is maintained, compliance with the annual limitation shall be ensured.

e. Emission Limitations:

0.15 lb PE/hr, 0.66 ton PE/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined in accordance with the following:

The permittee may calculate the actual PE rates utilizing the following equation:

$$E = (\text{maximum coating solids usage rate in lbs/hr}) \times (1-TE) \times (1-CE)$$

where:

$$E = \text{PE rate (lbs/hr)}$$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, assumed to be 25%

CE = control efficiency of the control equipment, assumed to be 90%

If required, compliance with the hourly PE limitation shall be based on stack testing in accordance with 40 CFR, Part 60, Appendix A - Test Methods 1-5.

The annual PE limitation was developed by multiplying the hourly PE limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly PE limitation is maintained, compliance with the annual PE limitation shall be ensured.



f. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with 40 CFR, Part 60, Appendix A, Method 9.

g. Emission Limitation:

6.7 lbs of VOC per gallon of solids for an extreme performance coating; where a control system is employed

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(2) of this permit.

h. Emission Limitation:

Organic HAP emissions shall not exceed 4.5 kg organic HAP per liter (37.7 lbs/gallon) coating solids used during each 12-month compliance period.

Applicable Compliance Method:

Compliance with this limitation shall be determined by recordkeeping in section d)(10) of this permit.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit is subject to 40 CFR, Part 63, Subpart M.