Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

5/3/2011

Certified Mail

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

Tate Tyson
Bridgestone APM Co.- AVD Plant
235 Commerce Way
Upper Sandusky, OH 43351

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0388010047
Permit Number: P0107521
Permit Type: Administrative Modification
County: Wyandot

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 restrictio ns, we urge you to read it carefully.Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

Environmental Review Appeals Commission
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 can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Canada

Response to Comments

Response to comments for: Permit-To-Install

Facility ID:	0388010047
Facility Name:	Bridgestone APM Co.- AVD Plant
Facility Description:	Bonded rubber to metal anti-vibration parts for the automotive industry
Facility Address:	235 Commerce Way Upper Sandusky, OH 43351 Wyandot County
Permit #:	P0107521, Administrative Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Daily Cheif-Union on 04/01/2011. The comment period ended on 05/01/2011.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

No comments were received.

1. Topic: **None**
    a. Comment: **None**
    b. Response: **None**
2. Topic: **None**
    a. Comment: **None**
    b. Response: **None**

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Bridgestone APM Co.- AVD Plant

Facility ID:	0388010047
Permit Number:	P0107521
Permit Type:	Administrative Modification
Issued:	5/3/2011
Effective:	5/3/2011

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Bridgestone APM Co.- AVD Plant

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Authorization

Facility ID: 0388010047
Facility Description: Bonded rubber to metal anti-vibration parts for the automotive industry
Application Number(s): M0001109
Permit Number: P0107521
Permit Description: Administrative modification to PTI #P0105318 to: remove 40 CFR Part 63, Subpart MMMM requirements from the terms and conditions for R003 and R004; add standard 40 CFR Part 63, Subpart MMMM language to K004-K013; add federal enforceability under OAC rule 3745-31-05(D) to all emissions units.
Permit Type: Administrative Modification
Permit Fee: $0.00
Issue Date: 5/3/2011
Effective Date: 5/3/2011

This document constitutes issuance to:

Bridgestone APM Co.- AVD Plant
235 Commerce Way
Upper Sandusky, OH 43351

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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107521
Permit Description: Administrative modification to PTI #P0105318 to: remove 40 CFR Part 63, Subpart MMMM requirements from the terms and conditions for R003 and R004; add standard 40 CFR Part 63, Subpart MMMM language to K004-K013; add federal enforceability under OAC rule 3745-31-05(D) to all emissions units.

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

Group Name: Honda Bond Lines

Emissions Unit ID:	**R003**
Company Equipment ID:	Roll Coat No. 3
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**R004**
Company Equipment ID:	Bond Line No. 4
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable

Group Name: Various Coating Lines (Group A)

Emissions Unit ID:	**K004**
Company Equipment ID:	Index #1
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K005**
Company Equipment ID:	Index #2
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K006**
Company Equipment ID:	Robot Line #1
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K007**
Company Equipment ID:	Chain-On-Edge #1
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K008**
Company Equipment ID:	Chain-On-Edge #2
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K009**
Company Equipment ID:	Robot Line #2
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K010**
Company Equipment ID:	Roll-Coater
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable

Emissions Unit ID:	**K011**
Company Equipment ID:	Flange Index Bonding Line
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable

Group Name: Various Coating Lines (Group B)

Emissions Unit ID:	**K012**
Company Equipment ID:	Tumble & Spray Bond Line
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K013**
Company Equipment ID:	Flange Index #2 Bonding Line
Superseded Permit Number:	P0105318
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) 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 emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, 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, andreportingrequirements 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 by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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 deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if 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 enteredupon 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 new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed.The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart MMMM, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products: K004-K013. The complete MACT requirements, including the MACT 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 Ohio EPA, Northwest District Office.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Honda Bond Lines: R003, R004,

EU ID	Operations, Property and/or Equipment Description
R003	roll coat machine no.3 roll with RTO
R004	Honda bondline no.4 vented to a regenerative thermal oxidizer

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) b)(1)i; d)(8); d)(9); d)(10); d)(11) and e)(2)c.

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(D)	<u>For R003 and R004 individually</u>: 0.33 lb organic compounds (OC)/hr; 1.45 tons OC/year from coating and cleanup operations 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined See b)(2)a., b)(2)b., and c)(1).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-21-07(G)(2)	See b)(2)e. and b)(2)f.
e.	OAC rule 3745-21-07(M)	See b)(2)g.
f.	OAC rule 3745-17-11(B)	<u>For R003 and R004 individually</u> 0.551 lb particulate emissions (PE)/hr See b)(2)h.
g.	OAC rule 3745-17-11(C)	See b(2)i. and c)(2).
h.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule. See b)(2)h.

i.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(b)	See d)(8) through d)(11).

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE). The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which requires control equipment:

i. 0.33 lb organic compounds (OC)/hr; 1.45 tons OC/year from coating and cleanup operations, and

ii. 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined.

b. A voluntarily request for a grouped annual OC emission limitation of 39.86 tons is being established for K004-K013 and R003-R004 combined to ease the monitoring and recordkeepingrequirements for these emissions units, which are controlled by the same regenerative thermal oxidizer.

c. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the OC emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to PE from this air contaminant source since the calculated annual emission rate for PE is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 pounds PE per hour from each coating booth operation under OAC rule 3745-17-11(B).

e. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

None

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

None.

f. The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).

g. These emissions units meet the conditions contained in OAC rule 3745-21-07(M)(3)(c)(iii), which are more stringent than the requirements of OAC rule 3745-21-07(M)(2). Therefore, OAC rules 3745-21-07(M)(3)(a) and 3745-21-07(M)(3)(b) are not considered applicable.

h. 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.

i. 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.

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. These emissions units shall be vented to a regenerative thermal oxidizer capable of achieving a minimum destruction efficiency of 95% (100% capture).

(2) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(3) The permittee shall expeditiously repair the dry particulate filter 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.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each coating and cleanup material employed each month for emissions units K004-K013 and R003-R004 combined:

a. the name and identification of each coating and cleanup material employed;

b. the number of gallons of each coating and cleanup material employed;

c. the OC content of each coating and cleanup material employed, as applied, in pounds per gallon;

d. the total controlled OC emission rate for all the coatings and cleanup materials, in lbs per month, calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance {[summation of d)(1)b. x d)(1)c. (for all coatings and cleanup materials employed] x [1 - over all control efficiency (from the most recent emission testing that demonstrated the emissions unit was in compliance]} ; and

e. the annual year-to-date organic compound emissions [sum of d)(1)d. for each month to date from January to December].

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

(2) The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the firebox of the thermal oxidizer (or immediately downstream of the firebox before any substantial heat exchange) when the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the

manufacturer's recommendations, with any modifications deemed necessary by the permittee; and shall be capable of accurately measuring the temperature. The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was less than the average combustion temperature maintained during the performance test that demonstrated compliance, or below the temperature recommended by the manufacturer until performance testing is completed; and

b. a log of the downtime for the capture (collection) system, thermal oxidizer, and/or monitoring equipment when the associated emissions unit was in operation.

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, 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 appropriate Ohio EPA District Office or local air agency upon request.

(4) The permittee shall conduct periodic inspections of the dry particulate filter 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.

(5) 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 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.

(6) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system 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 appropriate Ohio EPA District Office or local air agency upon request.

(7) The permittee shall maintain records that document any time periods when the dry particulate filter 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 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.

(8) The permit-to-install application for these emissions unit(s), K004-K013, and R001-R004 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists" (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists" (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 9.43

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 287.3

MAGLC (ug/m3): 4486

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) K004-K013, and R001-R004, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

(9) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual actual OC emissions from K004-K013 and R003-R004 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was less than the average combustion temperature maintained and established during the most recent performance test that demonstrated compliance;

b. any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturers recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation; and

c. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration; or if no changes to the emissions, emissions unit(s), or the exhaust stack have been made, a statement to this effect.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31, April 30, July 31, and October 31, and shall cover the previous calendar quarters unless an alternative schedule has been established and approved by the Director (Ohio EPA, Northwest District Office).

f) Testing Requirements

(1) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.33 lb OC/hour from R003 and R004, individually

Applicable Compliance Method:
The lb/hr limit represents each emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (0.9 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

b. Emission Limitation:
1.45 tons OC/year from R003 and R004, individually

Applicable Compliance Method:
The annual limitation of 1.45 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

c. Emission Limitation:
39.86 tons OC/year from coating and cleanup operations from K004-K013 and R003-R004 combined

Applicable Compliance Method:
Compliance with the 39.86 tons OC/yr combined emission limitation above shall be based upon the record keeping requirements specified in section d)(1) of this permit.

d. Emission Limitation:
0.551 pound PE per hour from R003 and R004, individually

Applicable Compliance Method:
To determine the actual worst case PE rate (E), the following equation shall be used for each individual coating operations:

E = PE rate (lbs/hr)

E = maximum coating solids usage rate, in pounds per hour (1-TE) x (1-CE)

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

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the emission limitation above pursuant to OAC rule 3745-17-03(B)(10).

e. Emission Limitation:
Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule.

Applicable Compliance Method:
If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group -Various Coating Lines (Group A): K004, K005, K006, K007, K008, K009, K010, K011

EU ID	Operations, Property and/or Equipment Description
K004	Index coating line no. 1 vented to a regenerative thermal oxidizer
K005	Index coating line no.2 vented to a regenerative thermal oxidizer
K006	Robot coating operation vented to a regenerative thermal oxidizer
K007	Chain on edge coating line no.1 vented to a regenerative thermal oxidizer
K008	Chain on edge coating line no. 2 vented to a regenerative thermal oxidizer
K009	Robot coating line no.2 vented to a regenerative thermal oxidizer
K010	Roll coat line no.1 vented to regenerative thermal oxidizer
K011	Flange index bond line no. 1 vented to regenerative thermal oxidizer

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) b)(1)g.; d)(16); d)(17); d)(18); d)(19); and e)(10)b.

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(D)	<u>For K004 and K005 individually</u>: 0.98 lb organic compounds (OC)/hr; 4.29 tons OC/year from coating and cleanup operations <u>For K006</u>: 0.72 lb OC/hour, 3.15 tons OC/year from coating and cleanup operations <u>For K007 and K008 individually</u>: 1.14 lbs OC/hour, 4.99 tons OC/year from coating and cleanup operations <u>For K009</u>: 0.82 lb OC/hour, 3.59 tons OC/year from coating and cleanup operations <u>For K010</u>: 0.43 lb OC/hour, 1.88 tons OC/year from coating and cleanup operations

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		For K011: 0.49 lb OC/hour, 2.15 tons OC/year from coating and cleanup operations 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined. See b)(2)a., b)(2)b. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-21-09(B)(6)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	For K004-K011 individually 0.551 lb particulate emissions (PE)/hr See b)(2)f.
f.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule. See b)(2)f.
g.	OAC rule 3745-17-11(C)	See b(2)g. and c)(2).
h.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(b)	See d)(15) through d)(18).
i.	40 CFR Part 63, Subpart MMMM (See 40 CFR Part 63.3880 et seq.) [In accordance with 40 CFR 63.3881, this emissions unit is a rubber-to-metal coating source at an existing miscellaneous metal parts and products surface coating facility.]	63.3890(a)(4): 0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emitted per liter (gal) coating solids used during each 12-month compliance period See section B.1.a. – FACILITY – WIDE TERMS AND CONDITIONS See b)(2)h. through b)(2)l.
j.	40 CFR 63.1-15 (40 CFR 63.3901)	Table 2 to Subpart MMMM of 40 CFR Part 63- Applicability to Subpart MMMM shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE). The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which requires control equipment:

i. 0.98 lb OC/hr; 4.29 tons OC/year from coating and cleanup operations for emissions units K004 and K005, individually;

ii. 0.72 lb OC/hour, 3.15 tons OC/year from coating and cleanup operations for emissions unit K006;

iii. 1.14 lbs OC/hour, 4.99 tons OC/year from coating and cleanup operations for emissions units K007 and K008;

iv. 0.82 lb OC/hour, 3.59 tons OC/year from coating and cleanup operations for emissions unit K009;

v. 0.43 lb OC/hour, 1.88 tons OC/year from coating and cleanup operations for emissions unit K010;

vi. 0.49 lb OC/hour, 2.15 tons OC/year from coating and cleanup operations for emissions unit K011; and

vii. 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined.

The permittee has committed to reclaim 100% of all cleanup material used resulting in no emissions from cleanup operations [see c)(3)]. Cleanup solvents are only used in the enclosed booths when coating operations have been discontinued. The cleanup operation is a closed loop system using covered paint pots and covered pails to recover the used solvents.

b. A voluntarily request for a grouped annual OC emission limitation of 39.86 tons is being established for K004-K013 and R003-R004 combined to ease the monitoring and recordkeepingrequirements for these emissions units.

c. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists

as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the OC emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to PE from this air contaminant source since the calculated annual emission rate for PE is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 pounds PE per hour from each coating booth operation under OAC rule 3745-17-11(B).

e. In lieu of complying with the pounds of VOC per gallon of solids limitation contained in paragraph (U) of OAC rule 3745-21-09, the permittee has elected to demonstrate that the capture and control equipment meet the requirements contained in OAC rule 3745-21-09(B)(6). The capture and control requirements specified in OAC rule 3745-21-09(B)(6) are less stringent than the capture and control requirements established pursuant to OAC rule 3745-31-05(D).

f. 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.

g. 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.

h. The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart MMMM.

The final rules found in 40 CFR Part 63, Subpart MMMM establish national emission standards for hazardous air pollutants (HAP), work practice standards,

operating limitations, and compliance requirements for miscellaneous metal parts coating operations. The affected source is the collection of all of the following operations for or from the surface coating of miscellaneous metal parts and products:

i. all coating operations as defined in 40 CFR 63.3981;

ii. all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

iii. all manual and automated equipment and containers used for conveying coatings, thinners, other additives, purge, and cleaning materials; and

iv. all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by the coating operations.

The permittee shall be subject to this NESHAP upon the startup of the coating operations. The first day of operations shall begin the initial compliance period, which shall end on the last day of the 12th month following the compliance date, or the last day of the 12th month following the month including the compliance date, if startup operations do not begin on the first day of the month.

i. The coating operation(s) shall comply with the applicable emission limitation(s) in 40 CFR 63.3890 and the operating limits for the thermal oxidizer (add-on control device) and emission capture system(s) as required by 40 CFR 63.3892 at all times except during periods of startup, shutdown, and malfunction; and the coating operation(s) shall be operated in compliance with the work practice standards in 40 CFR 63.3893 at all times.

j. The permittee shall conduct a performance test according to 40 CFR sections 63.3964, 63.3965, and 63.3966 for each capture system and the thermal oxidizer; and shall establish the operating limits required by 40 CFR 63.3892 and as required by 40 CFR 63.3967 no later than 180 days after the compliance date specified above.

k. The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) by the compliance date of the NESHAP and according to the provisions found in 40 CFR 63.6(e)(3), as follows:

i. The written startup, shutdown, and malfunction plan (SSMP) shall describe, in detail, procedures for operating and maintaining the emissions unit(s) during periods of startup, shutdown, and malfunction.

ii. The plan shall document detailed procedures of corrective action for the malfunction of the process source, the air pollution control equipment, and the monitoring equipment (including CMSs), used to comply with the requirements of this permit and the NESHAP.

iii. The SSMP does not need to address any scenario that would not cause the emissions unit(s) to exceed an applicable emission limitation in the NESHAP.

iv. The SSMP shall address any coating operation equipment that might cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

v. The SSMP shall be written for the following purpose:

(a) to ensure that, at all times, each emissions unit, including the associated air pollution control equipment and monitoring equipment, is maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions;

(b) to ensure that operators are prepared to correct malfunctions as soon as practicable after their occurrence, in order to minimize excess emissions of hazardous air pollutants;

(c) to reduce the reporting burden associated with periods of startup, shutdown, and malfunction; and

(d) to document corrective actions and operating procedures to be taken to restore malfunctioning processes and air pollution control equipment to its normal or usual manner of operation.

vi. The plan shall provide a means to maintain a record of actions (including those conducted to correct a malfunction) taken by the operator during any startup, shutdown, or malfunction event where the emissions unit exceeded an applicable emission limitation, and where actions are consistent with the procedures specified in the SSMP. These records may take the form of a “checklist,” or other effective form of record keeping, that confirms conformance with the SSMP and describes the actions taken during each startup, shutdown, and/or malfunction event. The plan (and checklist, if used) can then be modified to correct or change any sequence of actions and/or equipment settings to help prevent future exceedances of the same limitation for the same reason.

vii. If an/the action(s) taken by the operator during a startup, shutdown, or malfunction event is/are not consistent with the procedures specified in the emissions unit’s SSMP, and the unit’s emissions exceed an applicable emission limitation in the relevant standard (NESHAP), the plan shall require the operator to record the actions taken during each such an event, and shall require the permittee to report (via phone call or FAX) the exceedance and its cause (actions taken) to the regulating agency within 2 working days following the actions conducted that were inconsistent with the plan. The plan shall also require that this notification be followed by a letter, within 7 working days after the end of the event, in accordance with the reporting requirements of this permit (from 40 CFR

63.10(d)(5)(ii)), unless the permittee makes alternative reporting arrangements, in advance, with the Director.

viii. The permittee may use the standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) plan or other similar document to satisfy the requirements for a SSMP, provided the alternative plans meet all the requirements of the permit and the NESHAP, and the document is available for inspection or is submitted when requested by the Director.

ix. The Director shall require appropriate revisions to the SSMP, if the plan contains one of the following inadequacies:

(a) does not address a startup, shutdown, or malfunction event that has occurred;

(b) fails to provide for the operation of the emissions unit (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions;

(c) does not provide adequate procedures for correcting malfunctioning processes and/or air pollution control and monitoring equipment as quickly as practicable; or

(d) includes an event that does not meet the definition of startup, shutdown, or malfunction in 40 CFR 63.2.

63.2 definitions:

Malfunction: means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Shutdown: means the cessation of operation of an affected source or portion of an affected source for any purpose.

Startup: means the setting in operation of an affected source or portion of an affected source for any purpose.

x. The permittee shall periodically review the SSMP, as necessary, to reflect changes in equipment or procedures that would affect the emissions unit's operations. Unless determined otherwise by the Director, the permittee may make revisions to the SSMP without prior approval; however, each such revision to the SSMP shall be reported in the semiannual report, as required in this permit (and 40 CFR 63.10(d)(5)).

xi. If the SSMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall revise the SSMP within 45 days after the event, to include detailed procedures for operating and maintaining the emissions unit using a program of corrective actions for the process source, pollution control equipment, and/or monitoring equipment, and which are to be implemented during any similar malfunction event.

xii. The permittee shall maintain a current SSMP at the facility and shall make the plan available, upon request, for inspection and copying by the Director. If the SSMP is revised, the permittee shall maintain each previous (i.e., superseded) version of the SSMP for a period of 5 years after revision of the plan.

xiii. The record keeping requirements contained in this permit include the required documentation of actions taken during startup, shutdown, and malfunction events.

xiv. The permittee shall document in each semiannual report, that actions taken during each startup, shutdown, and malfunction event, during the relevant reporting period, were either consistent or not consistent with the emissions unit's(s') SSMP.

l. The emission standards set forth in this subpart shall apply at all times except during periods of startup, shutdown, and malfunction. The Director shall determine compliance with the applicable emission limitations, operational restrictions, and/or work practice standards through review and evaluation of required records of operational and maintenance procedures, monitoring data, CPMS evaluations, performance testing results, supporting calculations and emissions data, and any other applicable records required in this permit.

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. These emissions units shall be vented to a regenerative thermal oxidizer capable of achieving a minimum destruction efficiency of 95% (100% capture).

(2) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this/these emissions unit(s) is/are in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(3) The permittee shall expeditiously repair the dry particulate filter 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.

(4) The permittee shall recover 100% of all cleanup material employed in emissions units K004-K011.

(5) The permittee shall develop and implement, by the compliance date, a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, additives, and cleaning/purge materials used in the controlled coating operations and the collection, storage, and/or off-site shipment preparations of waste materials generated by the coating operations. The plan shall specify practices and procedures to ensure that, at a minimum, the following elements are implemented:

a. requirements to maintain all organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials in closed containers;

b. procedures to minimize spills of organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials;

c. requirements to move organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials from one location to another in closed containers or pipes;

d. requirements to keep mixing vessels containing organic HAP-containing coatings, thinners, solvent blends, additives, and/or cleaning materials closed, except when adding, removing, or mixing the contents (where a non-automated/non-mechanical mixing system is used); and

e. procedures to minimize emissions of organic HAP during cleaning of storage, mixing, and conveying equipment.

(6) The permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following requirements:

a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period of time, with a minimum of four equally-spaced successive cycles of CPMS operation in 1 hour;

b. the CPMS shall maintain a record of the average of all the readings, as required by Table 1 of subpart MMMM, for each successive 3-hour block of time of coating operations for the emission capture system and thermal oxidizer;

c. the results of each inspection, calibration, validation check, and the certification of each CPMS shall be recorded;

d. the CPMS shall be maintained at all times and the necessary parts for routine repairs and maintenance of the monitoring equipment shall be available on site;

e. each CPMS shall be installed to accurately measure the process and/or the control device parameter;

f. verification of the operational status of each CPMS shall include the completion of the manufacturer's written specifications or the recommendations for installation, operation, and calibration of the system;

g. the read out, (the visual display or measured record of the CPMS) or other indication of operation, shall be readily accessible and visible for monitoring and recording by the operator of the equipment;

h. the CPMS, emission capture system(s), thermal oxidizer, and all required parameter data recordings shall be in operation at all times the controlled coating operation is in process, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and zero and span adjustments); and

i. emission capture system and thermal oxidizer parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods of the monitor or recorder, or required quality assurance or control activities for the CPMS shall not be used in calculating data averages for determining compliance.

A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(7) The permittee shall operate and maintain, at all times, any emissions unit contained in this permit (including the associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the operator/permittee reduce emissions to the greatest extent which is consistent with safety and good air pollution control practices. Malfunctions must be corrected as soon as practicable after their occurrence.

The requirement to minimize emissions during any period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times, if it is not consistent with safety and good air pollution control practices; nor does it require the operator/permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. The operational and maintenance requirements contained in the NESHAP are enforceable, independent of the emissions limitations or other requirements of the rule.

Determination of whether such operation and maintenance procedures are being applied shall be based on information requested by and made available to the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency), which may include, but shall not be limited to: monitoring results, operation and maintenance procedures (including the startup, shutdown, and malfunction plan or other standard operating procedures), operation and maintenance records, and inspection of the facility.

(8) The average combustion temperature in the firebox of the thermal oxidizer (or immediately downstream of the firebox before any substantial heat exchange) in any 3-hour block of time shall not be less than the average combustion temperature maintained during the most recent performance test that demonstrated compliance, and as recommended by the manufacturer until testing.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each coating and cleanup material employed each month for emissions units K004-K013 and R003-R004 combined:

a. the name and identification of each coating and cleanup material employed;

b. the number of gallons of each coating and cleanup material employed;

c. the OC content of each coating and cleanup material employed, as applied, in pounds per gallon;

d. the total controlled OC emission rate for all the coatings and cleanup materials, in lbs per month, calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance {[summation of d)(1)b. x d)(1)c. (for all coatings and cleanup materials employed] x [(1 - over all control efficiency (from the most recent emission testing that demonstrated the emissions unit was in compliance]} ; and

e. the annual year-to-date organic compound emissions (sum of d)(1)d. for each month to date from January to December).

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

(2) The permittee shall collect and record the following information each month for this emissions unit [excluding clean-up/purge materials that are 100% reclaimed as described in b)(2)a.]:

a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the miscellaneous metal parts coating operation(s), including information from the supplier or manufacturer, formulation data, and/or coating/material testing data;

b. the number of gallons or liters of each coating, thinner/additive and cleanup/purge material employed;

c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;

d. the mass fraction of organic HAP for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:

   i. Method 311 from 40 CFR Part 63, Appendix A;

   ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP;

   iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pound HAP/gallon of material ÷ pounds/gallon of material, or calculated in kg/liter); or

   iv. solvent blends listed as single components and where neither test data nor manufacturer's data is available, default values from Table 3 to Subpart MMMM or Table 4 if not listed in Table 3, can be used.

e. the volume fraction of coating solids (gallon of coating solids/gallon of coating or liter of coating solids/liter of coating) for each coating applied which can be calculated using one of the following methods:

   i. divide the nonvolatile volume percent, obtained from either ASTM Method D2697-86 ("Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings") or Method D6093-97 ("Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer"), by 100 to convert percent to the volume fraction of coating solids; or

   ii. calculated from: $V_s = 1 - m_{volatiles} / D_{avg}$

   where:

   V_s is the volume fraction of coating solids, in gallon of coating solids/gallon of coating or liter of coating solids/liter of coating;

   $m_{volatiles}$ is the total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined in accordance to Method 24 in Appendix A of 40 CFR Part 60, in pound of volatile matter per gallon of coating or grams volatile matter per liter of coating;

   D_{avg} is the average density of volatile matter in the coating, i.e., pound of volatile matter per gallon of volatile matter or grams volatile matter per liter volatile matter, determined from test results using ASTM Method

D1475-98 "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" or from information provided by the supplier or manufacturer, or from reference sources providing density or specific gravity data for pure materials; or

iii. the volume fraction of coating solids can be calculated using information provided by the manufacturer, by using the following information to convert percent by weight to percent by volume, if not provided directly:

(a) for each coating, change the percent by weight solids, percent by weight water, and percent by weight total solvent to the same number of "pounds" or "kilograms" (by assuming 100 pounds {or kg} of coating is applied) and divide each component's assumed weight by its density in the coating, to get the gallons of solids, gallons of water, and gallons of solvent;

(b) add the gallons of solids, gallons of water, and gallons of solvent from (a); and

(c) divide the gallons of solids, from (a) by the sum of the gallons of coating components from (b), to get the volume fraction of coating solids (gallon of coating solids per gallon of coating or liter of coating solids per liter of coating);

f. the total mass of organic HAP (pound or kg) in all of the coatings, thinners/additives, and cleanup/purge materials (as purchased) applied during the month, calculated separately for coatings, thinners/additives, and cleanup/purge materials as follows:

$$HAP = \sum_{i=1}^{r} (VOL_i)(D_i)(W_i)$$

where:

HAP is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials used each month, in pound or kg of HAP for each: 1. the coatings (HAP_c), 2. thinners/additives (HAP_t), and 3. cleanup/purge materials (HAP_{cu})

VOL_i is the volume of material "i" documented in (b) above, in gallons or liters.

D_i is the density of material "i" as documented in (c) above, in pounds/gallon or kg/liter.

$W_i$is the mass fraction of organic HAP in material "i" as calculated in (d) above, in pound/pound or kg/kg.

r is the number of coatings, the number of thinners/additives, or the number of cleanup/purge materials used during the month, each source (coating, thinner/additive, cleanup/purge) calculated separately for its HAP, and

g. the total mass of organic HAP applied each month in each coating operation, in pound or kg of HAP, calculated as follows:

$$H_{TOT} = HAP_c + HAP_t + HAP_{cu} - R_w$$

where:

H_{TOT} is the total mass of organic HAP applied each month in each coating operation, in pound or kg of HAP, i.e., the sum of the total mass of HAP calculated for each material, above; minus the calculated HAP in recovered materials, R_w, if meeting the requirements for this allowance.

HAP_c is the total mass of organic HAP in all the coatings used during the month, summed from the total mass of HAP calculated from all the coatings applied, as required in (f) above, in pound or kg.

HAP_t is the total mass of organic HAP in all the thinners and additives used during the month, summed from the total mass of HAP calculated from all the thinners/additives applied, as required in (f) above, in pound or kg.

HAP_{cu} is the total mass of organic HAP in all cleanup and purge materials used during the month, summed from the total mass of HAP calculated from all the cleanup/purge materials applied, as required in (f) above, in pound or kg.

R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R_w if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

h. the total volume of coating solids applied during the month, calculated as follows:

$$VOL_s = \sum_{h=1}^{m} (VOL_h)(V_h)$$

where:

VOL_s is the total volume of coating solids used during the month, in gallons or liters.

VOL_h is the total volume of coating “h” used during the month, as documented in (b) above, in gallons or liters.

V_h is the volume fraction of coating solids for coating "h", in liter of solids per liter of coating or gallon of solids per gallon of coating, calculated as required in (e) above.

m is the number of coatings applied during the month.

i. the mass of organic HAP emission reduction for the month for the controlled coating operations, using the emissions capture system and the thermal oxidizer control, calculated as follows:

$HAP_{contr} = (A_c + B_t + C_{cu} - R_w - H_{dev}^*)\ (CE/100 \times DRE/100)$

where:

HAP_{contr} is the mass of organic HAP emission reduction for the controlled coating operations (or calculated for each system) during each month, in pound or kg.

* H_{dev} If an operating parameter deviates from that established as required in Table 1 to this subpart or if there is a malfunction of the CPMS equipment or the capture or control devices, the capture and control efficiency shall be assumed to be zero during the period of deviation unless an approval to use other efficiency data is obtained, per 40 CFR 63.3963(c)(2).

A_c is the total mass of organic HAP in the coatings used in the coating operations controlled by the thermal oxidizer collection and control system during the month, calculated as follows:

$$A_c = \sum_{h=1}^{r} (VOL_h)\ (D_h)\ (W_h)$$

where:

A_c is the total mass of organic HAP in the coatings used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_h is the volume of coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_h is the density of coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_h is the mass fraction of organic HAP in coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

r is the number of coatings used in the coating operations controlled by the thermal oxidizer during the month.

B_t is the total mass of organic HAP in the thinners/additives used in the coating operations controlled by the thermal oxidizer during the month, calculated as follows:

$$B_t = \sum_{j=1}^{q} (VOL_j)(D_j)(W_j)$$

where:

B_t is the total mass of organic HAP in the thinners/additives used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_j is the volume of thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_j is the density of thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_j is the mass fraction of organic HAP in thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

q is the number of thinners/additives used in the coating operations controlled by the thermal oxidizer during the month.

C_{cu} is the total mass of organic HAP in the cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month, calculated as follows:

$$C_{cu} = \sum_{k=1}^{s} (VOL_k)(D_k)(W_k)$$

where:

C_{cu} is the total mass of organic HAP in the cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_k is the volume of cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_k is the density of cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_k is the mass fraction of organic HAP in cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

s is the number of cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month.

R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R_w if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

H_{dev} is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials applied during all periods of deviation during the month in the controlled coating operation(s), calculated as follows:

$$H_{dev} = \sum_{d=1}^{q} (VOL_d)(D_d)(W_d)$$

where:

H_{dev} is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials applied during all periods of deviation during the month in the controlled coating operation(s), in pound or kg.

VOL_d is the volume of coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in gallons or liters.

D_d is the density of coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in pounds/gallon or kg/liter.

W_d is the mass fraction of organic HAP in coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in pound/pound or kg/kg.

q is the number of different coatings, thinners/additives, and cleanup/purge materials applied during periods of deviation during the month.

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

DRE is the organic HAP destruction efficiency of the thermal oxidizer, in percent.

j. the mass of organic HAP emissions for each month, calculated as follows:

$$HAP_T = [H_2 - \sum_{b=1}^{x}(HAP_{contr,\,b})] + [\sum_{d=1}^{z} H_4]$$

where:

HAP_T is the total mass of organic HAP emissions for the month, in pound or kg.

H_2 and/or H_4 is/are calculated for each coating operation, prior to control, as H_{TOT} in (g) above.

H_2 is the total mass of organic HAP contained in the coatings, thinners/additives, and cleanup materials applied during the month in the controlled coating operations, (H_2 is calculated as the sum of the total mass of HAP from all materials applied in the coating operation(s) controlled by a/the thermal oxidizer, minus the HAP content in any materials collected and sent to a hazardous waste TSDF (R_w) if meeting the requirements for this reduction), in pound or kg.

H_4 is the total mass of organic HAP contained in the coatings, thinners/additives, and cleanup materials applied during the month in any uncontrolled coating operations (H_4 is calculated as the sum of the total mass of HAP from all materials applied in each uncontrolled coating operation, minus the HAP content in any materials collected and sent to a hazardous waste TSDF (R_w) if meeting the requirements for this reduction), in pound or kg.

$HAP_{contr,\,b}$ is the total mass of organic HAP emission reduction for the month, for the thermal oxidizer control for coating operation “b”, calculated as required in (i) above.

x is the number of controlled coating operations where emissions are captured and vented to the thermal oxidizer.

z is the number of coating operations without control.

k. the total organic HAP emission rate for the 12-month compliance period, in pound of HAP per gallon of coating solids applied or kg of HAP per liter of coating solids applied during the rolling, 12-month compliance period, calculated as follows:

$$HAP_{comply} = \sum_{y=1}^{n} (HAP_{T,y}) / \sum_{y=1}^{n} (VOL_{s,\,y})$$

HAP_{comply} is the organic HAP emission rate for the 12-month compliance period, in pound organic HAP emitted per gallon of coating solids applied or kg organic HAP emitted per liter of coating solids applied.

$HAP_{T,\ y}$ is the total mass of organic HAP emissions from all materials used during month y, calculated in (j) above, in pound or kg.

$VOL_{s,\ y}$ is the total volume of coating solids used during month y, calculated in (h) above, in gallons or liters.

y is the identifier for the month.

n is the number of full or partial months in the compliance period; for the initial compliance period, n equals 13 where the compliance date does not fall on the first day of the month; for all following compliance periods n equals 12; and

l. all calculations required above for each monthly rolling, 12-month compliance period.

In order to demonstrate continuous compliance, the organic HAP emission rate for each rolling, 12-month compliance period must be less than or equal to the applicable emission limit in 40 CFR 63.3890. The compliance demonstration shall be conducted on a monthly basis, using the data from the previous 12 months of operation, as documented through the above calculations and records.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

(3) The permittee shall also maintain records of the following documentation for all controlled coating operations:

a. a copy of each notification, report, each performance test, supporting documentation, and each rolling, 12-month calculation of the total mass of organic HAP emissions used to comply with the NESHAP, including the results from each compliance demonstration and records establishing the operating limits during performance testing as required in 40 CFR 63.3892 and as specified in 40 CFR 63.3967;

b. records of the coating operation conditions during the thermal oxidizer organic HAP destruction and/or removal efficiency determination, to document the representative operating conditions during compliance testing;

c. records for establishing the criteria for the permanent total enclosure and the test data documenting that the enclosure used for each capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 and has a capture efficiency or 100%; or

d. records for establishing the criteria for the temporary total enclosure or building enclosure:

i. if using the liquid-to-uncaptured-gas protocol the record shall include:

(a) the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204 F of Appendix M to 40 CFR Part 51, for each material used in the coating operation during each capture efficiency test run, including a copy of the test report;

(b) the total TVH for all materials used during each capture efficiency test run, including a copy of the test report;

(c) the mass of TVH emissions not captured, that exited the temporary enclosure or building enclosure during each capture efficiency test run, as measured my Method 204D of 204 E of Appendix M to 40 CFR Part 51, including a copy of the test report; and

(d) records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure;

ii. if using the gas-to-gas protocol the record shall include:

(a) the mass of TVH emissions captured by the emission capture system, as measured by Method 204B or 204C of Appendix M to 40 CFR Part 51, at the inlet to the thermal oxidizer, including a copy of the test report;

(b) the mass of TVH emissions not captured, that exited the temporary enclosure or building enclosure during each capture efficiency test run, as measured my Method 204D of 204 E of Appendix M to 40 CFR Part 51, including a copy of the test report; and

(c) records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure;

e. a record of the work practice plans required per 40 CFR 63.3893 and any operational and maintenance records or inspections that would document the plans are/were implemented on a continuous basis;

f. records pertaining to the design and operation of control and monitoring systems, maintained on site for the life of the equipment;

g. results of each inspection, calibration and validation check, and certification of the continuous parameter monitoring system(s);

h. the average of all recorded readings of the continuous parameter monitoring system(s) for each successive 3-hour period of operation of the emission capture system and thermal oxidizer;

i. the date, time, and duration of each deviation and whether it occurred during a period of startup, shutdown, or malfunction, to include any bypass of the capture and/or add-on control systems;

j. if using the predominant activity alternative under 40 CFR 63.3890(c)(1), records of the data and calculations used to determine the predominant activity;

k. if using the "facility-specific emission limit" alternative under 40 CFR 63.3890(c)(2), data used to calculate the "facility-specific" emission limit; and

l. the records required per 40 CFR 63.6(e)(3), established in the startup, shutdown, and malfunction plan required in this permit.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or one can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets or VOC data sheets typically include a listing of the solids and solvents contained in the coatings and cleanup/purge materials.

(4) The permittee shall meet the following requirements for any bypass line to the capture and add-on control system, that could divert emissions from the coating operations to the atmosphere:

a. The valve or closure mechanism controlling the bypass line shall be secured in a nondiverting position, in such a way that the valve or closure mechanism cannot be opened without creating a record documenting that the valve was opened. The method used to monitor or secure the valve or closure mechanism shall meet one of the following requirements:

i. A flow control position indicator shall be Installed, calibrated, maintained, and operated according to the manufacturer's specifications. The flow control position indicator shall take a reading at least once every 15 minutes and shall provide a record indicating that the emissions are captured and directed to the thermal oxidizer. The flow indicator shall record the time of the reading, the flow control position, and shall maintain a record of every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the emissions away from the thermal oxidizer to the atmosphere; or

ii. The bypass line valve shall be secured in the closed position using a car-seal or a lock-and-key. The seal or closure mechanism shall be inspected at least once every month to ensure that the valve is

maintained in the closed position and that the emissions from the coating operations are captured and delivered to the thermal oxidizer. A log or record of the monthly inspection shall be maintained and made available to the regulating agency upon request; or

iii. A valve closure monitoring system shall be installed, operated, and maintained to ensure that any bypass line valve is in the closed (nondiverting) position at all times. The valve closure monitoring system shall monitor the valve position at least once every 15 minutes. The monitoring system shall be inspected at least once every month to verify that the monitor correctly indicating valve position. A log or record of the monthly inspection of the valve closure monitoring system shall be maintained and made available to the regulating agency upon request; or

iv. An automatic shutdown system shall be installed, operated, and maintained to shut down the coating operation(s) when air flow is diverted by the bypass line away from the capture system and thermal oxidizer. The automatic shutdown system shall be inspected at least once every month to verify that it will detect diversions of flow and shut down the coating operation(s). A log or record of the monthly inspection of the automatic shutdown system shall be maintained and made available to the regulating agency upon request; or

v. The permittee shall install, calibrate, maintain, and operate a flow direction indicator according to the manufacturer's specifications. The flow direction indicator shall take a reading at least once every 15 minutes and shall provide a record indicating that the emissions are captured and directed to the thermal oxidizer. The flow indicator shall record the time of the reading, the air flow direction, and shall maintain a record of every time the flow direction is changed. The flow direction indicator shall be installed at the entrance to any bypass line that could divert the emissions away from the thermal oxidizer to the atmosphere.

b. If any bypass line is opened, a record shall be created to document reason for the bypass and the length of time it remained open. The deviation shall be included in the semiannual compliance reports as required in 40 CFR 63.3920 and this permit.

(5) The emission capture system shall be installed, operated and maintained according to the following requirements:

a. Each flow measurement device shall meet the following requirements:

i. The flow sensor shall be located in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the thermal oxidizer.

ii. Each flow sensor shall have an accuracy of at least 10 percent of the flow.

iii. An initial sensor calibration shall be performed in accordance with the manufacturer's requirements or recommendations.

iv. A validation check shall be performed before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

v. An accuracy audit shall be conducted every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

vi. Monthly leak checks shall be conducted and a record shall be maintained of the date and the location of each flow measurement device checked. These records shall be made available to the regulating agency upon request.

vii. Quarterly visual inspections shall be conducted for each sensor system and a record shall be maintained of the date and the location of each sensor inspected.

b. Each pressure drop measurement device shall comply with the following requirements:

i. Each pressure sensor device shall be located in or as close to a position that provides a representative measurement of the pressure drop across the opening it was installed to monitor.

ii. Each pressure sensor device shall have an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

iii. Each pressure sensor shall initially be calibrated according to the manufacturer's requirements or recommendations.

iv. A validation check shall be conducted before initial operation or upon relocation or replacement of any sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

v. An accuracy audit shall be conducted every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

vi. Monthly leak checks shall be conducted on each pressure connection. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds. A log or record of the monthly leak checks, to include the date and location of the pressure

connection, shall be maintained and made available to the regulating agency upon request.

vii. A monthly visual inspection of each sensor shall be conducted and a log or record of the inspection, to include the date and location, shall be maintained and made available to the regulating agency upon request.

(6) The permittee shall maintain records of the following information for a period of 5 years following the date of each occurrence, measurement, maintenance activity, corrective action, report, and/or record:

a. the occurrence and duration of each startup or shutdown when the startup or shutdown causes the emissions unit to exceed any applicable emission limitation in the NESHAP;

b. the occurrence and duration of each malfunction of operation (i.e., process equipment) and/or the required air pollution control and monitoring equipment;

c. all required maintenance performed on the air pollution control and monitoring equipment, i.e., date, equipment, maintenance activity performed;

d. actions taken during periods of startup and shutdown, when the emissions unit exceeds any applicable emission limitation in the NESHAP, and when these actions are different from the procedures specified in the emissions unit's startup, shutdown, and malfunction plan (SSMP);

e. actions taken during periods of malfunction (of the process, the air pollution control equipment, and/or the monitoring equipment) that are different from the procedures specified in the emissions unit's SSMP;

f. actions taken to demonstrate compliance with the SSMP during periods of startup and/or shutdown, where an applicable NESHAP emission limitation was exceeded; and actions taken during any malfunction (of the process, the air pollution control equipment, and/or the monitoring equipment), where the actions are consistent with the procedures specified in the SSMP*;

g. each period of operation (date and number of hours) during which a/the continuous monitoring system (CMS) is inoperative or is not functioning properly;

h. all required measurements needed to demonstrate compliance with the limitations contained in this permit, including, but not limited to: the 15-minute averages of CMS data, raw performance testing measurements, raw performance evaluation measurements, and any supporting data needed to demonstrate compliance with the limitations and reporting requirements of the NESHAP;

i. all results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

j. all measurements needed to determine the conditions of performance tests and performance evaluations, including the analysis of samples, determination of emissions, and raw data;

k. all CMS calibration checks;

l. all adjustments and maintenance performed on CMS; and

m. all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9, and as required in this permit.

*The information needed to demonstrate compliance with the SSMP plan may be recorded using a "checklist" or some other effective form of record keeping, in order to minimize the recording burden for conforming procedures.

(7) The permittee shall maintain the following records for the continuous monitoring system (CMS) in accordance with the general requirements of 40 CFR 63.10(c) as follows:

a. all required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

b. the date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

c. the date and time identifying each period during which the CMS was out of control;

d. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during startups, shutdowns, and malfunctions of the emissions unit;

e. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during periods other than startups, shutdowns, and malfunctions of the emissions unit;

f. the nature and cause of any malfunction (if known);

g. the corrective action taken or preventive measures adopted;

h. the nature of the repairs or adjustments to the CMS whenever it/they is/are inoperative or out of control;

i. the total process operating time during the reporting period; and

j. all records of the procedures that are required as part of a quality control program, developed and implemented for the CMS under 40 CFR 63.8(d), as reflected in this permit.

To avoid duplication of records, the permittee may maintain the records for the information in “f”, “g”, and “h” as part of the SSMP.

(8) If using the allowance for an emission reduction of the uncontrolled/pre-controlled emissions for organic HAP contained in waste materials sent to (or designated for shipment to) a hazardous waste TSDF during the month, the permittee shall maintain records of the following information:

a. the name and address of each hazardous waste TSDF to which waste materials were sent or are scheduled to be sent, and for which an allowance was applied to the calculated uncontrolled/pre-controlled emissions;

b. a statement of which subparts under 40 CFR Parts 262, 264, 265, and 266 apply to each hazardous waste TSDF;

c. for each allowance applied in any month:

i. the volume, weight, and source of recovered material collected and an identification of the coating operations producing the waste materials;

ii. the month the allowance was applied and the mass of organic HAP used as the allowance, including the calculations;

iii. the date the recovered material was shipped and its volume and weight (excluding the weight of the container) at the time of shipment to the hazardous waste TSDF and the manifest number accompanying the shipment;

iv. the methodology used to determine the total amount of waste materials collected;

v. the methodology used to determine the mass of organic HAP contained in the wastes, sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment; and

d. for each container of recovered materials shipped to a hazardous waste TSDF, the following records shall be maintained in a log:

i. the date each container was first used and the date of the last addition;

ii. the date and amount of recovered materials added, from first to the last addition;

iii. the date the container was shipped and identification of which hazardous waste TSDF it was shipped to, if more than one facility in (a) above; and

iv. the volume and weight of the material as it was recorded on the waste manifest (minus the weight of the container, if included).

(9) The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the firebox of the thermal oxidizer (or immediately downstream of the firebox before any substantial heat exchange) when the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee; and shall be capable of accurately measuring the temperature. The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was less than the average combustion temperature maintained during the performance test that demonstrated compliance, or below the temperature recommended by the manufacturer until performance testing is completed; and

b. a log of the downtime for the capture (collection) system, thermal oxidizer, and/or monitoring equipment when the associated emissions unit was in operation.

(10) The permittee shall maintain records that document any cleanup operations for K004-K013 which were not performed as described in b)(2)a.and/or reclaimed as specified in d)(1)e.above.

(11) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, 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 appropriate Ohio EPA District Office or local air agency upon request.

(12) The permittee shall conduct periodic inspections of the dry particulate filter 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.

(13) 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 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.

(14) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system 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 appropriate Ohio EPA District Office or local air agency upon request.

(15) The permittee shall maintain records that document any time periods when the dry particulate filter 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 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.

(16) The permit-to-install application for these emissions unit(s), K004-K013, and R001-R004 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists" (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists" (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and

7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 9.43

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 287.3

MAGLC (ug/m3): 4486

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) K004-K013, and R001-R004, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

(17) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a

"modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(18) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(19) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual actual OC emissions from K004-K013 and R003-R004 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

(2) The permittee shall submit an initial notification of compliance status report no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" section of this permit). The initial notification of compliance shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and beginning and ending dates of the reporting period;

d. identification of the compliance method for each coating operation, i.e., if using "compliant materials"; the capture and control device(s) employed and the estimated or demonstrated efficiency of each; and a statement as to if cleanup solvents were collected for recovery or disposal and if they were shipped to a certified hazardous waste TSDF;

e. statement of whether the affected source achieved the emission limitations for the initial compliance period;

f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limitation(s);

g. calculations and supporting documentation for the coatings, thinners, and cleanup materials applied (information from supplier or manufacturer or summary of testing results) and waste materials sent to a hazardous waste TSDF, if used, to include the following:

    i. mass fraction of organic HAP for one coating, one thinner and/or other additive, and one cleanup/purge material;

    ii. the volume fraction of coating solids for one coating;

    iii. density for one coating, one thinner and/or other additive, and one cleanup/purge material; and

    iv. the average amount of waste materials collected in any month and average mass of organic HAP contained in the waste materials sent off-site to a hazardous waste TSDF;

h. for coating operations meeting the emissions limitation without add-on controls, the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:

    i. the calculations of the total volume of coating solids used each month;

    ii. the calculations of the total mass of organic HAP emissions for each month; and

    iii. the calculation of the initial 12-month organic HAP emission rate;

i. for coating operations meeting the emissions limitation with add-on controls the calculations of the total organic HAP emission rate for the 12-month compliance

period, from the coatings, thinners/additives, and cleaning materials used each month, to include:

i. the calculations of the total volume of coating solids used each month;

ii. the calculations of the mass of organic HAP emission reduction for each month for the emission capture systems and thermal oxidizers;

iii. the calculations of the total mass of organic HAP emissions for each month; and

iv. the calculation of the initial 12-month organic HAP emission rate;

j. information for the add-on-controls and capture system:

i. a summary of the data and copies of the calculations supporting the determination that each emissions capture system is a permanent total enclosure or a measurement of the emission capture system's efficiency, including the protocol/procedures followed;

ii. a summary of the results of each capture efficiency test and performance test conducted for the thermal oxidizer; and

iii. a list of each emission capture system's and thermal oxidizer's operating limits and summary of the data used to establish these parameter limitations;

k. a statement of whether or not the work practice plan was developed and implemented;

l. if using the predominant activity alternative under 40 CFR 63.3890(c)(1), the data and calculations used to determine the predominant activity; and

m. if using the "facility-specific emission limit" alternative under 40 CFR 63.3890(c)(2), the calculation of the "facility-specific" emission limitation.

(3) The permittee shall submit semiannual compliance reports which shall be postmarked or delivered no later than July 31 and January 31 following the end of each semiannual reporting period. The reporting period is each 6-month period of time ending on June 30 and December 31 of each year. The semiannual compliance reports shall cover the previous 6 months of operation, and each monthly compliance calculation shall be based on the records from the previous (rolling) 12 months of operation. The semiannual report shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and the beginning and ending dates of the reporting period;

d. identification of the compliance method for each coating operation;

e. statement of whether the affected source achieved the emission limitations for the compliance period;

f. the calculation results for each rolling, 12-month organic HAP emission rate during the 6-month reporting period;

g. if using the predominant activity alternative according to 40 CFR 63.3890(c)(1), the annual determination of predominant activity if it was not included in the previous semi-annual compliance report;

h. if using the "facility-specific emission limit" alternative according to 40 CFR 63.3890(c)(2), the calculation of the "facility-specific" emission limit for each 12-month compliance period during the 6-month reporting period;

i. if there were no deviations from the emission limitations in 63.3890, the operating limits in 40 CFR 63.3892, or the work practice standards in 40 CFR 63.63.3893, a statement that there were no deviations from the emissions limitations during the reporting period;

j. if there were no periods of operation during which the continuous parameter monitoring system(s) (CPMS) was/were out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods of time when the CPMS was/were out-of-control during the reporting period; and

k. if there were any deviations during the compliance period, from the controlled coating operation, the report shall include the following information:

   i. the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit;

   ii. any periods of time when emissions bypassed the thermal oxidizer and were diverted to the atmosphere;

   iii. the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, including the total mass of organic HAP emissions from coatings, thinners/additives, and cleaning materials used each month of deviation from the applicable limitation(s);

   iv. if applicable, the calculation used to determine mass of organic HAP in waste materials;

   v. the calculation of the total volume of coating solids used each month, as required in this permit;

   vi. the calculation of the mass of organic HAP emission reduction each month by emission capture systems and thermal oxidizers, as required in this permit;

vii. the calculation of the total mass of organic HAP emission rate each month of deviation and the 12-month emission rate, as required in this permit, in kg (or lb) of organic HAP per liter (or gallon) of coating solids applied;

viii. the date and time that each malfunction started and stopped;

ix. a brief description of the continuous parameter monitoring system (CPMS);

x. the date of the latest CPMS certification or audit;

xi. the date(s) and time that each CPMS was inoperative, except for zero/low-level and high-level checks;

xii. the date(s), time, and duration (start and end dates and hours) that each CPMS was out-of-control and the corrective actions taken, per 40 CFR 63.8(c)(8);

xiii. the date, time, and duration of each deviation from any operating limit(s) contained in this permit, from Table 1 to this subpart, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period;

xiv. the date, time, and duration of any bypass of the thermal oxidizer, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period;

xv. a summary of the total duration of each deviation from an operating limit in Table 1 to this subpart during the semiannual reporting period, and the total duration as a percent of the total source operating time during the semiannual reporting period;

xvi. a summary of each bypass of the thermal oxidizer during the semiannual reporting period, and the total duration as a percent of the total source operating time during the semiannual reporting period;

xvii. a breakdown of the total duration of the deviations from the operating limits established as required in Table 1 to this subpart and any bypasses of the thermal oxidizer during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, and other known or unknown causes;

xviii. a summary of the total duration of CPMS downtime during the semiannual reporting period, and the total duration of the CPMS downtime as a percent of the total source operating time during the semiannual reporting period;

xix. a description of any changes in the CPMS, coating operation emission capture system, or thermal oxidizer since the last semiannual reporting period;

xx. for each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the action taken to correct the deviation; and

xxi. a statement of the cause of each deviation.

(4) The permittee shall include the following information in the semiannual report for any monthly record where the allowance for an emission reduction was applied in the uncontrolled/pre-controlled HAP emissions calculations for materials that were shipped (or scheduled to be shipped) to a hazardous waste TSDF:

a. any monthly record where measurements were not taken or appropriate records were not maintained for recovered material(s) that were applied as an emission reduction in the calculated HAP emissions before add-on controls and used to demonstrate compliance with the NESHAP and the limitations in this permit;

b. any record of recovered solvent that was not finally shipped to a hazardous waste TSDF and/or was shipped to a TSDF not regulated under 40 CFR Parts 262, 264, 265, or 266 and which was also applied as an emission reduction to HAP emissions prior to add-on controls;

c. any record of discrepancy between the total volume or weight of material(s) collected and the total volume shipped to a hazardous waste TSDF, as documented in the recovered materials log;

d. any record of recovered material being applied more than one time in a monthly compliance demonstration; and/or

e. a miscalculation of the HAP emission reduction calculation for recovered materials sent to a hazardous waste TSDF.

(5) The permittee shall include startup, shutdown, and malfunction reports in the semiannual report if actions taken by the permittee during a startup, shutdown, and/or malfunction are consistent with the procedures specified in the facility startup, shutdown, and malfunction plan. The startup, shutdown, and/or malfunction report shall consist of a letter containing the name of the responsible official and his certification that all startup, shutdown, or malfunction events were conducted according to the plan.

If actions taken during any startup, shutdown, or malfunction were not consistent with the startup, shutdown, and malfunction plan, the permittee shall submit immediate startup, shutdown, and/or malfunction reports as follows:

a. If actions taken during any startup, shutdown, or malfunction were not consistent with the startup, shutdown, and malfunction plan, the permittee shall submit immediate startup, shutdown, and/or malfunction reports as follows:

b. unless alternative arrangements are made, within 7 working days after the end of the event, a letter shall be sent to the appropriate Ohio EPA District Office or local air agency and it shall contain:

i. the name, title, and signature of the responsible official who is certifying the accuracy of the report,

ii. an explanation of the circumstances of the event, i.e., the reasons for not following the startup, shutdown, and malfunction plan; and

iii. if any excess emissions and/or parameter monitoring exceedances have occurred.

(6) The permittee shall immediately report a startup, shutdown, and/or malfunction event to the regulating agency when either of the following scenarios occur:

a. actions taken by the permittee/operator during a startup or shutdown cause the emissions unit(s) to exceed an emission limitation from the NESHAP and procedures specified in the SSMP are not followed; and/or

b. actions taken during a malfunction are not consistent with the procedures specified in the SSMP.

(7) The immediate report shall consist of a telephone call (or facsimile {FAX} transmission) to the Director within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event. The written report shall contain:

a. the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy;

b. the explanation of the circumstances of the event;

c. the reasons for not following the SSMP;

d. description of all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions); and

e. actions taken to minimize emissions in conformance with 40 CFR 63.6(e)(1)(i) and as required in this permit.

(8) Performance test results for the emission capture system(s) and thermal oxidizer(s) shall be submitted no later than 30 days after completion of the performance test(s). Results of each performance test shall include the analysis of samples, determination of emissions, and the supporting raw data. Performance testing results shall be retained for a minimum of 5 years from the test date and shall be made available to the Director, or representative of the Director, upon request.

(9) The permittee shall identify in the semiannual reports all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature

within the thermal oxidizer was less than the average combustion temperature maintained and established during the most recent performance test that demonstrated compliance.

(10) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. any daily record showing that the dry particulate filter system 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; and

b. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration; or if no changes to the emissions, emissions unit(s), or the exhaust stack have been made, a statement to this effect.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31, April 30, July 31, and October 31, and shall cover the previous calendar quarters unless an alternative schedule has been established and approved by the Director (Ohio EPA, Northwest District Office).

(11) The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that cleanup operations which were not performed as described in b)(2)a. and/or reclaimed as specified in c)(3) above. The notification shall include a copy of such record and shall be sent to the Northwest District Office within 30 days after the exceedance occurs.

f) Testing Requirements

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

a. The emission testing shall be conducted no later than 180 days following the compliance date specified in the Additional Terms and Conditions of this permit.

b. The emission testing shall be conducted in order to determine the capture efficiency of the emission capture system vented to the thermal oxidizer and the destruction efficiency of the thermal oxidizer, both in percent.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. Method 1 of 1A of Appendix A to 40 CFR Part 60, to select sampling sites and velocity traverse points;

ii. Method 2, 2A, 2C, 2D, 2F or 2G of Appendix A to 40 CFR Part 60, as appropriate, to measure gas volumetric flow rate;

iii. Method 3, 3A, or 3B of Appendix A to 40 CFR Part 60, as appropriate, for gas analysis to determine dry molecular weight;

iv. Method 4 of Appendix A to 40 CFR Part 60, to determine stack gas moisture;

v. Method 25 or 25A, to determine the total gaseous organic mass emissions as carbon at the inlet and outlet of the thermal oxidizer, simultaneously, using:

(a) Method 25 if testing an oxidizer with expected carbon concentrations to exceed 50 ppm

(b) Method 25A if testing an oxidizer with expected carbon concentrations to be 50 ppm or less, or if the control is not an oxidizer; and

vi. Method 204 A through 204F (appropriate method) of Appendix M to 40 CFR Part 51 to determine the capture efficiency.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The total gaseous organic emissions mass flow rates shall be determined at the inlet and the outlet of the thermal oxidizer for each of the 3 test runs.

f. The total gaseous organic emissions mass flow rates shall be determined at the inlet and the outlet of the thermal oxidizer for each of the 3 test runs.

$M_f = Q_{sd}\ C_c\ (12)\ (0.0416)\ (10^{-6})$

where:

M_f is the total gaseous organic emissions mass flow rate, in kg/hr.

Q_{sd} is the volumetric flow rate of gases entering or exiting the thermal oxidizer, as determine by Method 2, 2A, 2C, 2D, 2F or 2G, in dscm/hour.

C_c is the concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or 25A, in parts per million by volume on a dry basis (ppmv).

0.0416 is the conversion factor for molar volume, Kg-moles per cubic meter (mol/m^3) @ 293 degrees Kelvin and 760 mmHg.

g. For each test run the thermal oxidizer's organic emissions destruction efficiency shall be calculated as follows:

$DRE = [(M_{fi} - M_{fo}) / M_{fi}] \times 100$

where:

DRE is the organic emissions destruction efficiency of the thermal oxidizer, in percent.

M_{fi} is the total gaseous organic emissions mass flow rate at the inlet(s) to the thermal oxidizer, from the equation above, in kg/hour.

$M_{fo}$is the total gaseous organic emissions mass flow rate at the outlet(s) to the thermal oxidizer, from the equation above, in kg/hour.

The emission destruction or removal efficiency of the thermal oxidizer shall be the average of the efficiencies determined in the three test runs.

h. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

i. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

j. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

(2) The permittee shall conduct a performance test of each emission capture system when operating at a representative flow rate and when the thermal oxidizer is operating at a representative inlet concentration. The capture efficiency of each emission capture system shall be determined using one of the following methods. If the capture system does not meet the criteria for a permanent total enclosure in (a) below, the permittee shall determine the capture efficiency of each emissions capture system for the coating operations using either the “liquid-to-uncaptured-gas protocol” in (b) or the “gas-to-gas protocol” in (c) below:

a. The capture system efficiency can be assumed to be 100% if both of the following conditions are met:

i. the capture system meets the criteria in Method 204 found in 40 CFR Part 51, Appendix M for a permanent total enclosure and all the exhaust gases from the enclosure are directed to the thermal oxidizer.

ii. all coatings, thinners and or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system.

b. The liquid-to-uncaptured-gas protocol compares the mass of liquid total volatile hydrocarbon (TVH) in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. To measure the emission capture system efficiency using the liquid-to uncaptured gas protocol the following procedures shall be followed:

i. The coating operations must be enclosed either by using the building enclosure or by constructing an enclosure around all operations where coatings, thinners and/or other additives, and cleaning materials are applied and any areas following the application where emissions from these applied coatings and thinners/additives and cleaning materials subsequently occur (flash-off, curing, and drying areas). Areas where capture devices collect emissions for routing to the thermal oxidizer, such as the entrance and exit areas of an oven or spray booth must also be inside the enclosure. The enclosure must meet the definition of a temporary total enclosure or building enclosure in Method 204 found in 40 CFR Part 51, Appendix M.

ii. Method 204A or 204F in 40 CFR Part 51, Appendix M shall be used to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours.

iii. Calculate the total mass of TVH liquid input from all coatings, thinners and/or additives, and cleaning materials used in the coating operation during each capture efficiency test run as follows:

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(VOL_i)(D_i)$$

where:

TVH_{used} is the mass of liquid TVH in the materials used in the coating operation during the capture efficiency test run, in kg or pound.

TVH_i is the mass fraction of TVH in coating, thinner and/or other additive, or cleaning material "i" that is used in the coating operation during the capture efficiency test run, in kg of TVH per kg material or pound of TVH per pound material.

VOL_i is the total volume of coating, thinner and/or other additive, or cleaning material "i" used in the coating operation during the capture efficiency test run, in liters or gallons.

D_i is the density of coating, thinner and/or other additive, or cleaning material "i" used in the coating operation during the capture efficiency test run, in kg of material per liter of material or pound of material per gallon of material.

n is the number of different coatings, thinners and/or other additives, or cleaning materials used in the coating operation during the capture efficiency test run.

iv. Method 204D for a temporary total enclosure or 204E for a building enclosure, both in 40 CFR Part 51, Appendix M, shall be used to measure the total mass, kg or pound, of TVH emissions that are not captured by the emission capture system, as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. If using the building as the enclosure, all organic compound emitting operations inside the building enclosure, other than the coating operation for which the capture efficiency is being determined must be shut down, with all fans and blowers operating normally.

v. Use the following equation to determine the percent capture efficiency of the emission capture system for each capture efficiency test run:

$$CE = [(TVH_{used} - TVH_{uncaptured}) / TVH_{used}] \times 100$$

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

TVH_{used} is the total mass of TVH liquid input used in the coating operation during the capture efficiency test run, in kg or pound.

$TVH_{uncaptured}$ is the total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, in kg or pound.

vi. The capture efficiency of the emission capture system shall be calculated as the average of the capture efficiencies measured in the three test runs.

c. The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. To measure the emission capture system efficiency using the gas-to-gas protocol the following procedures shall be followed:

i. The coating operations must be enclosed either by using the building enclosure or by constructing an enclosure around all operations where coatings, thinners and/or other additives, and cleaning materials are applied and any areas following the application where emissions from these applied coatings and thinners/additives and/or cleaning materials subsequently occur (flash-off, curing, and drying areas). Areas where capture devices collect emissions for routing to the thermal oxidizer, such as the entrance and exit areas of an oven or spray booth must also be inside the enclosure. The enclosure must meet the definition of a temporary total enclosure or building enclosure in Method 204 found in 40 CFR Part 51, Appendix M.

ii. Method 204B or 204C in 40 CFR Part 51, Appendix M shall be used to measure the total mass, in kg or pound, of TVH emissions captured by the emission capture system during each capture efficiency test run, as measured at the inlet to the thermal oxidizer. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. The sampling points must be upstream from the thermal oxidizer and must represent total emissions routed from the capture system and entering the thermal oxidizer. If multiple emission streams from the capture system enter the thermal oxidizer without a single common duct, then the emissions entering the thermal oxidizer must be simultaneously measured in each duct and the total emissions entering the thermal oxidizer must be determined.

iii. Method 204D for a temporary total enclosure or 204E for a building enclosure, both in 40 CFR Part 51, Appendix M, shall be used to measure the total mass, kg or pound, of TVH emissions that are not captured by the emission capture system, as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. If using the building as the enclosure, all organic compound emitting operations inside the building enclosure, other than the coating operation for which the capture efficiency is being determined must be shut down, with all fans and blowers operating normally.

iv. Use the following equation to determine the percent capture efficiency of the emission capture system for each capture efficiency test run:

$$CE = [(TVH_{captured}) / (TVH_{captured} + TVH_{uncaptured})] \times 100$$

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

$TVH_{captured}$ is the total mass of TVH captured by the emission capture system as measured at the inlet to the thermal oxidizer during the emission capture efficiency test run, in kg or pound.

$TVH_{uncaptured}$ is the total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, in kg or pound.

v. The capture efficiency of the emission capture system shall be calculated as the average of the capture efficiencies measured in the three test runs.

(3) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.98 lb OC/hour from K004 and K005 coating and cleanup operations, individually

Applicable Compliance Method:
The lb/hr limit represents each emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (3.0 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

b. Emission Limitation:
4.29 tons OC/year from K004 and K005 coating and cleanup operations, individually

Applicable Compliance Method:
The annual limitation of 4.29 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

c. Emission Limitation:
0.72 lb OC/hour from K006 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (2.20 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

d. Emission Limitation:
3.15 tons OC/year from K006 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 3.15 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

e. Emission Limitation:
1.14 lbs OC/hour from K007 and K008 coating and cleanup operations, individually

Applicable Compliance Method:
The lb/hr limit represents each emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (3.50 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

f. Emission Limitation:
4.99 tons OC/year from K007 and K008 coating and cleanup operations, individually

Applicable Compliance Method:
The annual limitation of 4.99 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

g. Emission Limitation:
0.82 lb OC/hour from K009 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (2.50 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate

compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

h. Emission Limitation:
3.59 tons OC/year from K009 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 3.59 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

i. Emission Limitation:
0.43 lb OC/hour from K010 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (1.30 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

j. Emission Limitation:
1.88 tons OC/year from K010 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 1.88 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

k. Emission Limitation:
0.49 lb OC/hour from K011 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (1.50 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

l. Emission Limitation:
2.15 tons OC/year from K011 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 2.15 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

m. Emission Limitation:
39.86 tons OC/year from coating and cleanup operations from K004-K013 and R003-R004 combined

Applicable Compliance Method:
Compliance with the 39.86 tons OC/yr combined emission limitation above shall be based upon the record keeping requirements specified in section d)(1) of this permit.

n. Emission Limitation:
0.551 pound PE per hour for K004-K011 individually

Applicable Compliance Method:
To determine the actual worst case PE rate (E), the following equation shall be used for each individual coating operations:

E = PE rate (lbs/hr)

E = maximum coating solids usage rate, in pounds per hour (1-TE) x (1-CE)

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

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the emission limitation above pursuant to OAC rule 3745-17-03(B)(10).

o. Emission Limitation:
Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule.

Applicable Compliance Method:
If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

p. Emission Limitation:
0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emitted per liter (gal) coating solids used during each 12-month compliance period

Applicable Compliance Method:
Compliance with the 0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emission limitation above shall be based upon the testing requirements specified in sections f)(1) and f)(2) and the record keeping requirements specified in section d)(2) through d)(9) of this permit.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group -Various Coating Lines (Group B): K012, K013,

EU ID	Operations, Property and/or Equipment Description
K012	Tumble and spray bond line vented to a regenerative thermal oxidizer
K013	Flange index bond line no. 2 vented to a regenerative thermal oxidizer

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) b)(1)g; d)(16); d)(17); d)(18); d)(19); and e)(10)b.

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(D)	<u>For K012 individually</u>: 0.92 lb organic compounds (OC)/hr; 4.03 tons OC/year from coating and cleanup operations <u>For K013 individually</u>: 0.49 lb organic compounds (OC)/hr; 2.15 tons OC/year from coating and cleanup operations 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined See b)(2)a., b)(2)b. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-21-09(B)(6)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	<u>For K012 and K013 individually</u> 0.551 lb particulate emissions (PE)/hr See b)(2)f.

f.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule. See b)(2)f.
g.	OAC rule 3745-17-11(C)	See b(2)g. and c)(2).
h.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(b)	See d)(16) through d)(19).
i.	40 CFR Part 63, Subpart MMMM (See 40 CFR Part 63.3880 et seq.) [In accordance with 40 CFR 63.3881, this emissions unit is a rubber-to-metal coating source at an existing miscellaneous metal parts and products surface coating facility.]	63.3890(a)(4): 0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emitted per liter (gal) coating solids used during each 12-month compliance period See section B.1.a. – FACILITY – WIDE TERMS AND CONDITIONS See b)(2)h.
j.	40 CFR 63.1-15 (40 CFR 63.3901)	Table 2 to Subpart MMMM of 40 CFR Part 63- Applicability to Subpart MMMM shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE). The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which requires control equipment:

i. 0.92 lb OC/hr; 4.03 tons OC/year from coating and cleanup operations for emissions unit K012;

ii. 0.49 lb organic compounds (OC)/hr; 2.15 tons OC/year from coating and cleanup operations; and

iii. 39.86 tons OC year from coating and cleanup from emissions units K004-K013 and R003-R004 combined.

The permittee has committed to reclaim 100% of all cleanup material used resulting in no emissions from cleanup operations [see c)(3)]. Cleanup solvents are only used in the enclosed booths when coating operations have been discontinued. The cleanup operation is a closed loop system using covered paint pots and covered pails to recover the used solvents.

b. A voluntarily request for a grouped annual OC emission limitation of 39.86 tons is being established for K004-K013 and R003-R004 combined to ease the monitoring and recordkeepingrequirements for these emissions units.

c. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the OC emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to PE from this air contaminant source since the calculated annual emission rate for PE is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 pounds PE per hour from each coating booth operation under OAC rule 3745-17-11(B).

e. In lieu of complying with the pounds of VOC per gallon of solids limitation contained in paragraph (U) of OAC rule 3745-21-09, the permittee has elected to demonstrate that the capture and control equipment meet the requirements contained in OAC rule 3745-21-09(B)(6). The capture and control requirements specified in OAC rule 3745-21-09(B)(6) are less stringent than the capture and control requirements established pursuant to OAC rule 3745-31-05(C).

f. 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.

g. 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.

h. The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart MMMM.

The final rules found in 40 CFR Part 63, Subpart MMMM establish national emission standards for hazardous air pollutants (HAP), work practice standards, operating limitations, and compliance requirements for miscellaneous metal parts coating operations. The affected source is the collection of all of the following operations for or from the surface coating of miscellaneous metal parts and products:

i. all coating operations as defined in 40 CFR 63.3981;

ii. all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

iii. all manual and automated equipment and containers used for conveying coatings, thinners, other additives, purge, and cleaning materials; and

iv. all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by the coating operations.

The permittee shall be subject to this NESHAP upon the startup of the coating operations. The first day of operations shall begin the initial compliance period, which shall end on the last day of the 12th month following the compliance date, or the last day of the 12th month following the month including the compliance date, if startup operations do not begin on the first day of the month.

i. The coating operation(s) shall comply with the applicable emission limitation(s) in 40 CFR 63.3890 and the operating limits for the thermal oxidizer (add-on control device) and emission capture system(s) as required by 40 CFR 63.3892 at all times except during periods of startup, shutdown, and malfunction; and the coating operation(s) shall be operated in compliance with the work practice standards in 40 CFR 63.3893 at all times.

j. The permittee shall conduct a performance test according to 40 CFR sections 63.3964, 63.3965, and 63.3966 for each capture system and the thermal oxidizer; and shall establish the operating limits required by 40 CFR 63.3892 and

as required by 40 CFR 63.3967 no later than 180 days after the compliance date specified above.

k. The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) by the compliance date of the NESHAP and according to the provisions found in 40 CFR 63.6(e)(3), as follows:

i. The written startup, shutdown, and malfunction plan (SSMP) shall describe, in detail, procedures for operating and maintaining the emissions unit(s) during periods of startup, shutdown, and malfunction.

ii. The plan shall document detailed procedures of corrective action for the malfunction of the process source, the air pollution control equipment, and the monitoring equipment (including CMSs), used to comply with the requirements of this permit and the NESHAP.

iii. The SSMP does not need to address any scenario that would not cause the emissions unit(s) to exceed an applicable emission limitation in the NESHAP.

iv. The SSMP shall address any coating operation equipment that might cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

v. The SSMP shall be written for the following purpose:

(a) to ensure that, at all times, each emissions unit, including the associated air pollution control equipment and monitoring equipment, is maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions;

(b) to ensure that operators are prepared to correct malfunctions as soon as practicable after their occurrence, in order to minimize excess emissions of hazardous air pollutants;

(c) to reduce the reporting burden associated with periods of startup, shutdown, and malfunction; and

(d) to document corrective actions and operating procedures to be taken to restore malfunctioning processes and air pollution control equipment to its normal or usual manner of operation.

vi. The plan shall provide a means to maintain a record of actions (including those conducted to correct a malfunction) taken by the operator during any startup, shutdown, or malfunction event where the emissions unit exceeded an applicable emission limitation, and where actions are consistent with the procedures specified in the SSMP. These records may take the form of a “checklist,” or other effective form of record keeping, that confirms conformance with the SSMP and describes the

actions taken during each startup, shutdown, and/or malfunction event. The plan (and checklist, if used) can then be modified to correct or change any sequence of actions and/or equipment settings to help prevent future exceedances of the same limitation for the same reason.

vii. If an/the action(s) taken by the operator during a startup, shutdown, or malfunction event is/are not consistent with the procedures specified in the emissions unit's SSMP, and the unit's emissions exceed an applicable emission limitation in the relevant standard (NESHAP), the plan shall require the operator to record the actions taken during each such an event, and shall require the permittee to report (via phone call or FAX) the exceedance and its cause (actions taken) to the regulating agency within 2 working days following the actions conducted that were inconsistent with the plan. The plan shall also require that this notification be followed by a letter, within 7 working days after the end of the event, in accordance with the reporting requirements of this permit (from 40 CFR 63.10(d)(5)(ii)), unless the permittee makes alternative reporting arrangements, in advance, with the Director.

viii. The permittee may use the standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) plan or other similar document to satisfy the requirements for a SSMP, provided the alternative plans meet all the requirements of the permit and the NESHAP, and the document is available for inspection or is submitted when requested by the Director.

ix. The Director shall require appropriate revisions to the SSMP, if the plan contains one of the following inadequacies:

(a) does not address a startup, shutdown, or malfunction event that has occurred;

(b) fails to provide for the operation of the emissions unit (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions;

(c) does not provide adequate procedures for correcting malfunctioning processes and/or air pollution control and monitoring equipment as quickly as practicable; or

(d) includes an event that does not meet the definition of startup, shutdown, or malfunction in 40 CFR 63.2.

63.2 definitions:

Malfunction: means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to

cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Shutdown: means the cessation of operation of an affected source or portion of an affected source for any purpose.

Startup: means the setting in operation of an affected source or portion of an affected source for any purpose.

x. The permittee shall periodically review the SSMP, as necessary, to reflect changes in equipment or procedures that would affect the emissions unit's operations. Unless determined otherwise by the Director, the permittee may make revisions to the SSMP without prior approval; however, each such revision to the SSMP shall be reported in the semiannual report, as required in this permit (and 40 CFR 63.10(d)(5)).

xi. If the SSMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall revise the SSMP within 45 days after the event, to include detailed procedures for operating and maintaining the emissions unit using a program of corrective actions for the process source, pollution control equipment, and/or monitoring equipment, and which are to be implemented during any similar malfunction event.

xii. The permittee shall maintain a current SSMP at the facility and shall make the plan available, upon request, for inspection and copying by the Director. If the SSMP is revised, the permittee shall maintain each previous (i.e., superseded) version of the SSMP for a period of 5 years after revision of the plan.

xiii. The record keeping requirements contained in this permit include the required documentation of actions taken during startup, shutdown, and malfunction events.

xiv. The permittee shall document in each semiannual report, that actions taken during each startup, shutdown, and malfunction event, during the relevant reporting period, were either consistent or not consistent with the emissions unit's(s') SSMP.

l. The emission standards set forth in this subpart shall apply at all times except during periods of startup, shutdown, and malfunction. The Director shall determine compliance with the applicable emission limitations, operational restrictions, and/or work practice standards through review and evaluation of required records of operational and maintenance procedures, monitoring data, CPMS evaluations, performance testing results, supporting calculations and emissions data, and any other applicable records required in this permit.

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:

a. These emissions units shall be vented to a regenerative thermal oxidizer capable of achieving a minimum destruction efficiency of 95% (100% capture).

(2) The permittee shall operate the dry filtration systems for the control of particulate emissions whenever emissions units K012 and/or K013 are in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(3) The permittee shall expeditiously repair the dry particulate filter 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.

(4) The permittee shall recover 100% of all cleanup material employed in emissions units K012 and K013.

(5) The permittee shall develop and implement, by the compliance date, a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, additives, and cleaning/purge materials used in the controlled coating operations and the collection, storage, and/or off-site shipment preparations of waste materials generated by the coating operations. The plan shall specify practices and procedures to ensure that, at a minimum, the following elements are implemented:

a. requirements to maintain all organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials in closed containers;

b. procedures to minimize spills of organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials;

c. requirements to move organic HAP-containing coatings, thinners, solvent blends, additives, cleanup/purge materials, and waste materials from one location to another in closed containers or pipes;

d. requirements to keep mixing vessels containing organic HAP-containing coatings, thinners, solvent blends, additives, and/or cleaning materials closed, except when adding, removing, or mixing the contents (where a non-automated/non-mechanical mixing system is used); and

e. procedures to minimize emissions of organic HAP during cleaning of storage, mixing, and conveying equipment.

(6) The permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following requirements:

a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period of time, with a minimum of four equally-spaced successive cycles of CPMS operation in 1 hour;

b. the CPMS shall maintain a record of the average of all the readings, as required by Table 1 of subpart MMMM, for each successive 3-hour block of time of coating operations for the emission capture system and thermal oxidizer;

c. the results of each inspection, calibration, validation check, and the certification of each CPMS shall be recorded;

d. the CPMS shall be maintained at all times and the necessary parts for routine repairs and maintenance of the monitoring equipment shall be available on site;

e. each CPMS shall be installed to accurately measure the process and/or the control device parameter;

f. verification of the operational status of each CPMS shall include the completion of the manufacturer's written specifications or the recommendations for installation, operation, and calibration of the system;

g. the read out, (the visual display or measured record of the CPMS) or other indication of operation, shall be readily accessible and visible for monitoring and recording by the operator of the equipment;

h. the CPMS, emission capture system(s), thermal oxidizer, and all required parameter data recordings shall be in operation at all times the controlled coating operation is in process, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and zero and span adjustments); and

i. emission capture system and thermal oxidizer parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods of the monitor or recorder, or required quality assurance or control activities for the CPMS shall not be used in calculating data averages for determining compliance.

A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(7) The permittee shall operate and maintain, at all times, any emissions unit contained in this permit (including the associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the operator/permittee reduce emissions to the greatest extent which is consistent with safety and good air pollution control practices. Malfunctions must be corrected as soon as practicable after their occurrence.

The requirement to minimize emissions during any period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times, if it is not consistent with safety and good air pollution control practices; nor does it require the operator/permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. The operational and maintenance requirements contained in the NESHAP are enforceable, independent of the emissions limitations or other requirements of the rule.

Determination of whether such operation and maintenance procedures are being applied shall be based on information requested by and made available to the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency), which may include, but shall not be limited to: monitoring results, operation and maintenance procedures (including the startup, shutdown, and malfunction plan or other standard operating procedures), operation and maintenance records, and inspection of the facility.

(8) The average combustion temperature in the firebox of the thermal oxidizer (or immediately downstream of the firebox before any substantial heat exchange) in any 3-hour block of time shall not be less than the average combustion temperature maintained during the most recent performance test that demonstrated compliance, and as recommended by the manufacturer until testing.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each coating and cleanup material employed each month for emissions units K004-K013 and R003-R004 combined:

a. the name and identification of each coating and cleanup material employed;

b. the number of gallons of each coating and cleanup material employed;

c. the OC content of each coating and cleanup material employed, as applied, in pounds per gallon;

d. the total controlled OC emission rate for all the coatings and cleanup materials, in lbs per month, calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance {[summation of d)(1)b. x d)(1)c. (for all coatings and cleanup materials employed] x (1 - over all control efficiency (from the most recent emission testing that demonstrated the emissions unit was in compliance]} ; and

e. the annual year-to-date organic compound emissions [sum of d)(1)d. for each month to date from January to December].

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) – (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

(2) The permittee shall collect and record the following information each month for this emissions unit [excluding clean-up/purge materials that are 100% reclaimed as described in b)(2)a.]:

a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the miscellaneous metal parts coating operation(s), including information from the supplier or manufacturer, formulation data, and/or coating/material testing data;

b. the number of gallons or liters of each coating, thinner/additive and cleanup/purge material employed;

c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;

d. the mass fraction of organic HAP for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:

i. Method 311 from 40 CFR Part 63, Appendix A;

ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP;

iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pound HAP/gallon of material ÷ pounds/gallon of material, or calculated in kg/liter); or

iv. solvent blends listed as single components and where neither test data nor manufacturer's data is available, default values from Table 3 to Subpart MMMM or Table 4 if not listed in Table 3, can be used.

e. the volume fraction of coating solids (gallon of coating solids/gallon of coating or liter of coating solids/liter of coating) for each coating applied which can be calculated using one of the following methods:

i. divide the nonvolatile volume percent, obtained from either ASTM Method D2697-86 ("Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings") or Method D6093-97 ("Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer"), by 100 to convert percent to the volume fraction of coating solids; or

ii. calculated from: $V_s = 1 - m_{volatiles} / D_{avg}$

where:

V_s is the volume fraction of coating solids, in gallon of coating solids/gallon of coating or liter of coating solids/liter of coating;

$m_{volatiles}$ is the total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined in accordance to Method 24 in Appendix A of 40 CFR Part 60, in pound of volatile matter per gallon of coating or grams volatile matter per liter of coating;

D_{avg} is the average density of volatile matter in the coating, i.e., pound of volatile matter per gallon of volatile matter or grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-98 "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" or from information provided by the supplier or manufacturer, or from reference sources providing density or specific gravity data for pure materials; or

iii. the volume fraction of coating solids can be calculated using information provided by the manufacturer, by using the following information to convert percent by weight to percent by volume, if not provided directly:

(a) for each coating, change the percent by weight solids, percent by weight water, and percent by weight total solvent to the same number of "pounds" or "kilograms" (by assuming 100 pounds {or kg} of coating is applied) and divide each component's assumed weight by its density in the coating, to get the gallons of solids, gallons of water, and gallons of solvent;

(b) add the gallons of solids, gallons of water, and gallons of solvent from (a); and

(c) divide the gallons of solids, from (a) by the sum of the gallons of coating components from (b), to get the volume fraction of coating solids (gallon of coating solids per gallon of coating or liter of coating solids per liter of coating);

f. the total mass of organic HAP (pound or kg) in all of the coatings, thinners/additives, and cleanup/purge materials (as purchased) applied during the month, calculated separately for coatings, thinners/additives, and cleanup/purge materials as follows:

$$HAP = \sum_{i=1}^{r} (VOL_i)(D_i)(W_i)$$

where:

HAP is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials used each month, in pound or kg of HAP for each: 1. the coatings (HAP_c), 2. thinners/additives (HAP_t), and 3. cleanup/purge materials (HAP_{cu})

VOL_i is the volume of material "i" documented in (b) above, in gallons or liters.

D_i is the density of material "i" as documented in (c) above, in pounds/gallon or kg/liter.

$W_i$is the mass fraction of organic HAP in material "i" as calculated in (d) above, in pound/pound or kg/kg.

r is the number of coatings, the number of thinners/additives, or the number of cleanup/purge materials used during the month, each source (coating, thinner/additive, cleanup/purge) calculated separately for its HAP, and

g. the total mass of organic HAP applied each month in each coating operation, in pound or kg of HAP, calculated as follows:

$H_{TOT} = HAP_c + HAP_t + HAP_{cu} - R_w$

where:

H_{TOT} is the total mass of organic HAP applied each month in each coating operation, in pound or kg of HAP, i.e., the sum of the total mass of HAP calculated for each material, above; minus the calculated HAP in recovered materials, R_w, if meeting the requirements for this allowance.

HAP_c is the total mass of organic HAP in all the coatings used during the month, summed from the total mass of HAP calculated from all the coatings applied, as required in (f) above, in pound or kg.

HAP_t is the total mass of organic HAP in all the thinners and additives used during the month, summed from the total mass of HAP calculated from all the thinners/additives applied, as required in (f) above, in pound or kg.

HAP_{cu} is the total mass of organic HAP in all cleanup and purge materials used during the month, summed from the total mass of HAP calculated from all the cleanup/purge materials applied, as required in (f) above, in pound or kg.

R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R_w if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

h. the total volume of coating solids applied during the month, calculated as follows:

$$VOL_s = \sum_{h=1}^{m} (VOL_h)(V_h)$$

where:

VOL_s is the total volume of coating solids used during the month, in gallons or liters.

VOL_h is the total volume of coating "h" used during the month, as documented in (b) above, in gallons or liters.

V_h is the volume fraction of coating solids for coating "h", in liter of solids per liter of coating or gallon of solids per gallon of coating, calculated as required in (e) above.

m is the number of coatings applied during the month.

i. the mass of organic HAP emission reduction for the month for the controlled coating operations, using the emissions capture system and the thermal oxidizer control, calculated as follows:

$$HAP_{contr} = (A_c + B_t + C_{cu} - R_w - H_{dev}^*)(CE/100 \times DRE/100)$$

where:

HAP_{contr} is the mass of organic HAP emission reduction for the controlled coating operations (or calculated for each system) during each month, in pound or kg.

* H_{dev} If an operating parameter deviates from that established as required in Table 1 to this subpart or if there is a malfunction of the CPMS equipment or the capture or control devices, the capture and control efficiency shall be assumed to be zero during the period of deviation unless an approval to use other efficiency data is obtained, per 40 CFR 63.3963(c)(2).

A_c is the total mass of organic HAP in the coatings used in the coating operations controlled by the thermal oxidizer collection and control system during the month, calculated as follows:

$$A_c = \sum_{h=1}^{r} (VOL_h)(D_h)(W_h)$$

where:

A_c is the total mass of organic HAP in the coatings used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_h is the volume of coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_h is the density of coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_h is the mass fraction of organic HAP in coating "h" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

r is the number of coatings used in the coating operations controlled by the thermal oxidizer during the month.

B_t is the total mass of organic HAP in the thinners/additives used in the coating operations controlled by the thermal oxidizer during the month, calculated as follows:

$$B_t = \sum_{j=1}^{q} (VOL_j)(D_j)(W_j)$$

where:

B_t is the total mass of organic HAP in the thinners/additives used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_j is the volume of thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_j is the density of thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_j is the mass fraction of organic HAP in thinner/additive "j" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

q is the number of thinners/additives used in the coating operations controlled by the thermal oxidizer during the month.

C_{cu} is the total mass of organic HAP in the cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month, calculated as follows:

$$C_{cu} = \sum_{k=1}^{s} (VOL_k)(D_k)(W_k)$$

where:

C_{cu} is the total mass of organic HAP in the cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month, in pound or kg.

VOL_k is the volume of cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in gallons or liters.

D_k is the density of cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in pounds/gallon or kg/liter.

W_k is the mass fraction of organic HAP in cleanup/purge material "k" used in the coating operations controlled by the thermal oxidizer during the month, in pound/pound or kg/kg.

s is the number of cleanup/purge materials used in the coating operations controlled by the thermal oxidizer during the month.

R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R_w if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

H_{dev} is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials applied during all periods of deviation during the month in the controlled coating operation(s), calculated as follows:

$$H_{dev} = \sum_{d=1}^{q} (VOL_d)(D_d)(W_d)$$

where:

H_{dev} is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials applied during all periods of deviation during the month in the controlled coating operation(s), in pound or kg.

VOL_d is the volume of coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in gallons or liters.

D_d is the density of coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in pounds/gallon or kg/liter.

W_d is the mass fraction of organic HAP in coating, thinner/additive, or cleanup/purge material "d" applied in the controlled coating operation(s) during periods of deviation during the month, in pound/pound or kg/kg.

q is the number of different coatings, thinners/additives, and cleanup/purge materials applied during periods of deviation during the month.

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

DRE is the organic HAP destruction efficiency of the thermal oxidizer, in percent.

j. the mass of organic HAP emissions for each month, calculated as follows:

$$HAP_T = [H_2 - \sum_{b=1}^{x}(HAP_{contr,\,b})] + [\sum_{d=1}^{z} H_4]$$

where:

HAP_T is the total mass of organic HAP emissions for the month, in pound or kg.

H_2 and/or H_4 is/are calculated for each coating operation, prior to control, as H_{TOT} in (g) above.

H_2 is the total mass of organic HAP contained in the coatings, thinners/additives, and cleanup materials applied during the month in the controlled coating operations, (H_2 is calculated as the sum of the total mass of HAP from all materials applied in the coating operation(s) controlled by a/the thermal oxidizer, minus the HAP content in any materials collected and sent to a hazardous waste TSDF (R_w) if meeting the requirements for this reduction), in pound or kg.

H_4 is the total mass of organic HAP contained in the coatings, thinners/additives, and cleanup materials applied during the month in any uncontrolled coating operations (H_4 is calculated as the sum of the total mass of HAP from all materials applied in each uncontrolled coating operation, minus the HAP content in any materials collected and sent to a hazardous waste TSDF (R_w) if meeting the requirements for this reduction), in pound or kg.

$HAP_{contr,\ b}$ is the total mass of organic HAP emission reduction for the month, for the thermal oxidizer control for coating operation "b", calculated as required in (i) above.

x is the number of controlled coating operations where emissions are captured and vented to the thermal oxidizer.

z is the number of coating operations without control.

k. the total organic HAP emission rate for the 12-month compliance period, in pound of HAP per gallon of coating solids applied or kg of HAP per liter of coating solids applied during the rolling, 12-month compliance period, calculated as follows:

$$HAP_{comply} = \sum_{y=1}^{n} (HAP_{T,y}) / \sum_{y=1}^{n} (VOL_{s,\ y})$$

HAP_{comply} is the organic HAP emission rate for the 12-month compliance period, in pound organic HAP emitted per gallon of coating solids applied or kg organic HAP emitted per liter of coating solids applied.

$HAP_{T,\ y}$ is the total mass of organic HAP emissions from all materials used during month y, calculated in (j) above, in pound or kg.

$VOL_{s,\ y}$ is the total volume of coating solids used during month y, calculated in (h) above, in gallons or liters.

y is the identifier for the month.

n is the number of full or partial months in the compliance period; for the initial compliance period, n equals 13 where the compliance date does not fall on the first day of the month; for all following compliance periods n equals 12; and

l. all calculations required above for each monthly rolling, 12-month compliance period.

In order to demonstrate continuous compliance, the organic HAP emission rate for each rolling, 12-month compliance period must be less than or equal to the applicable emission limit in 40 CFR 63.3890. The compliance demonstration shall be conducted on a monthly basis, using the data from the previous 12 months of operation, as documented through the above calculations and records.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

(3) The permittee shall also maintain records of the following documentation for all controlled coating operations:

a. a copy of each notification, report, each performance test, supporting documentation, and each rolling, 12-month calculation of the total mass of organic HAP emissions used to comply with the NESHAP, including the results from each compliance demonstration and records establishing the operating limits during performance testing as required in 40 CFR 63.3892 and as specified in 40 CFR 63.3967;

b. records of the coating operation conditions during the thermal oxidizer organic HAP destruction and/or removal efficiency determination, to document the representative operating conditions during compliance testing;

c. records for establishing the criteria for the permanent total enclosure and the test data documenting that the enclosure used for each capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 and has a capture efficiency or 100%; or

d. records for establishing the criteria for the temporary total enclosure or building enclosure:

i. if using the liquid-to-uncaptured-gas protocol the record shall include:

(a) the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204 F of Appendix M to 40 CFR Part 51, for each material used in the coating operation during each capture efficiency test run, including a copy of the test report;

(b) the total TVH for all materials used during each capture efficiency test run, including a copy of the test report;

(c) the mass of TVH emissions not captured, that exited the temporary enclosure or building enclosure during each capture efficiency test run, as measured my Method 204D of 204 E of Appendix M to 40 CFR Part 51, including a copy of the test report; and

(d) records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure;

ii. if using the gas-to-gas protocol the record shall include:

(a) the mass of TVH emissions captured by the emission capture system, as measured by Method 204B or 204C of Appendix M to 40 CFR Part 51, at the inlet to the thermal oxidizer, including a copy of the test report;

(b) the mass of TVH emissions not captured, that exited the temporary enclosure or building enclosure during each capture efficiency test run, as measured my Method 204D of 204 E of

Appendix M to 40 CFR Part 51, including a copy of the test report; and

(c) records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure;

e. a record of the work practice plans required per 40 CFR 63.3893 and any operational and maintenance records or inspections that would document the plans are/were implemented on a continuous basis;

f. records pertaining to the design and operation of control and monitoring systems, maintained on site for the life of the equipment;

g. results of each inspection, calibration and validation check, and certification of the continuous parameter monitoring system(s);

h. the average of all recorded readings of the continuous parameter monitoring system(s) for each successive 3-hour period of operation of the emission capture system and thermal oxidizer;

i. the date, time, and duration of each deviation and whether it occurred during a period of startup, shutdown, or malfunction, to include any bypass of the capture and/or add-on control systems;

j. if using the predominant activity alternative under 40 CFR 63.3890(c)(1), records of the data and calculations used to determine the predominant activity;

k. if using the "facility-specific emission limit" alternative under 40 CFR 63.3890(c)(2), data used to calculate the "facility-specific" emission limit; and

l. the records required per 40 CFR 63.6(e)(3), established in the startup, shutdown, and malfunction plan required in this permit.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or one can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets or VOC data sheets typically include a listing of the solids and solvents contained in the coatings and cleanup/purge materials.

(4) The permittee shall meet the following requirements for any bypass line to the capture and add-on control system, that could divert emissions from the coating operations to the atmosphere:

a. The valve or closure mechanism controlling the bypass line shall be secured in a nondiverting position, in such a way that the valve or closure mechanism cannot be opened without creating a record documenting that the valve was opened.

The method used to monitor or secure the valve or closure mechanism shall meet one of the following requirements:

i. A flow control position indicator shall be Installed, calibrated, maintained, and operated according to the manufacturer's specifications. The flow control position indicator shall take a reading at least once every 15 minutes and shall provide a record indicating that the emissions are captured and directed to the thermal oxidizer. The flow indicator shall record the time of the reading, the flow control position, and shall maintain a record of every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the emissions away from the thermal oxidizer to the atmosphere; or

ii. The bypass line valve shall be secured in the closed position using a car-seal or a lock-and-key. The seal or closure mechanism shall be inspected at least once every month to ensure that the valve is maintained in the closed position and that the emissions from the coating operations are captured and delivered to the thermal oxidizer. A log or record of the monthly inspection shall be maintained and made available to the regulating agency upon request; or

iii. A valve closure monitoring system shall be installed, operated, and maintained to ensure that any bypass line valve is in the closed (nondiverting) position at all times. The valve closure monitoring system shall monitor the valve position at least once every 15 minutes. The monitoring system shall be inspected at least once every month to verify that the monitor correctly indicating valve position. A log or record of the monthly inspection of the valve closure monitoring system shall be maintained and made available to the regulating agency upon request; or

iv. An automatic shutdown system shall be installed, operated, and maintained to shut down the coating operation(s) when air flow is diverted by the bypass line away from the capture system and thermal oxidizer. The automatic shutdown system shall be inspected at least once every month to verify that it will detect diversions of flow and shut down the coating operation(s). A log or record of the monthly inspection of the automatic shutdown system shall be maintained and made available to the regulating agency upon request; or

v. The permittee shall install, calibrate, maintain, and operate a flow direction indicator according to the manufacturer's specifications. The flow direction indicator shall take a reading at least once every 15 minutes and shall provide a record indicating that the emissions are captured and directed to the thermal oxidizer. The flow indicator shall record the time of the reading, the air flow direction, and shall maintain a record of every time the flow direction is changed. The flow direction indicator shall be installed at the entrance to any bypass line that could divert the emissions away from the thermal oxidizer to the atmosphere.

b. If any bypass line is opened, a record shall be created to document reason for the bypass and the length of time it remained open. The deviation shall be included in the semiannual compliance reports as required in 40 CFR 63.3920 and this permit.

(5) The emission capture system shall be installed, operated and maintained according to the following requirements:

a. Each flow measurement device shall meet the following requirements:

i. The flow sensor shall be located in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the thermal oxidizer.

ii. Each flow sensor shall have an accuracy of at least 10 percent of the flow.

iii. An initial sensor calibration shall be performed in accordance with the manufacturer's requirements or recommendations.

iv. A validation check shall be performed before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

v. An accuracy audit shall be conducted every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

vi. Monthly leak checks shall be conducted and a record shall be maintained of the date and the location of each flow measurement device checked. These records shall be made available to the regulating agency upon request.

vii. Quarterly visual inspections shall be conducted for each sensor system and a record shall be maintained of the date and the location of each sensor inspected.

b. Each pressure drop measurement device shall comply with the following requirements:

i. Each pressure sensor device shall be located in or as close to a position that provides a representative measurement of the pressure drop across the opening it was installed to monitor.

ii. Each pressure sensor device shall have an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

iii. Each pressure sensor shall initially be calibrated according to the manufacturer's requirements or recommendations.

iv. A validation check shall be conducted before initial operation or upon relocation or replacement of any sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

v. An accuracy audit shall be conducted every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

vi. Monthly leak checks shall be conducted on each pressure connection. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds. A log or record of the monthly leak checks, to include the date and location of the pressure connection, shall be maintained and made available to the regulating agency upon request.

vii. A monthly visual inspection of each sensor shall be conducted and a log or record of the inspection, to include the date and location, shall be maintained and made available to the regulating agency upon request.

(6) The permittee shall maintain records of the following information for a period of 5 years following the date of each occurrence, measurement, maintenance activity, corrective action, report, and/or record:

a. the occurrence and duration of each startup or shutdown when the startup or shutdown causes the emissions unit to exceed any applicable emission limitation in the NESHAP;

b. the occurrence and duration of each malfunction of operation (i.e., process equipment) and/or the required air pollution control and monitoring equipment;

c. all required maintenance performed on the air pollution control and monitoring equipment, i.e., date, equipment, maintenance activity performed;

d. actions taken during periods of startup and shutdown, when the emissions unit exceeds any applicable emission limitation in the NESHAP, and when these actions are different from the procedures specified in the emissions unit's startup, shutdown, and malfunction plan (SSMP);

e. actions taken during periods of malfunction (of the process, the air pollution control equipment, and/or the monitoring equipment) that are different from the procedures specified in the emissions unit's SSMP;

f. actions taken to demonstrate compliance with the SSMP during periods of startup and/or shutdown, where an applicable NESHAP emission limitation was exceeded; and actions taken during any malfunction (of the process, the air pollution control equipment, and/or the monitoring equipment), where the actions are consistent with the procedures specified in the SSMP*;

g. each period of operation (date and number of hours) during which a/the continuous monitoring system (CMS) is inoperative or is not functioning properly;

h. all required measurements needed to demonstrate compliance with the limitations contained in this permit, including, but not limited to: the 15-minute averages of CMS data, raw performance testing measurements, raw performance evaluation measurements, and any supporting data needed to demonstrate compliance with the limitations and reporting requirements of the NESHAP;

i. all results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

j. all measurements needed to determine the conditions of performance tests and performance evaluations, including the analysis of samples, determination of emissions, and raw data;

k. all CMS calibration checks;

l. all adjustments and maintenance performed on CMS; and

m. all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9, and as required in this permit.

*The information needed to demonstrate compliance with the SSMP plan may be recorded using a “checklist” or some other effective form of record keeping, in order to minimize the recording burden for conforming procedures.

(7) The permittee shall maintain the following records for the continuous monitoring system (CMS) in accordance with the general requirements of 40 CFR 63.10(c) as follows:

a. all required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

b. the date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

c. the date and time identifying each period during which the CMS was out of control;

d. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during startups, shutdowns, and malfunctions of the emissions unit;

e. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during periods other than startups, shutdowns, and malfunctions of the emissions unit;

f. the nature and cause of any malfunction (if known);

g. the corrective action taken or preventive measures adopted;

h. the nature of the repairs or adjustments to the CMS whenever it/they is/are inoperative or out of control;

i. the total process operating time during the reporting period; and

j. all records of the procedures that are required as part of a quality control program, developed and implemented for the CMS under 40 CFR 63.8(d), as reflected in this permit.

To avoid duplication of records, the permittee may maintain the records for the information in “f”, “g”, and “h” as part of the SSMP.

(8) If using the allowance for an emission reduction of the uncontrolled/pre-controlled emissions for organic HAP contained in waste materials sent to (or designated for shipment to) a hazardous waste TSDF during the month, the permittee shall maintain records of the following information:

a. the name and address of each hazardous waste TSDF to which waste materials were sent or are scheduled to be sent, and for which an allowance was applied to the calculated uncontrolled/pre-controlled emissions;

b. a statement of which subparts under 40 CFR Parts 262, 264, 265, and 266 apply to each hazardous waste TSDF;

c. for each allowance applied in any month:

i. the volume, weight, and source of recovered material collected and an identification of the coating operations producing the waste materials;

ii. the month the allowance was applied and the mass of organic HAP used as the allowance, including the calculations;

iii. the date the recovered material was shipped and its volume and weight (excluding the weight of the container) at the time of shipment to the hazardous waste TSDF and the manifest number accompanying the shipment;

iv. the methodology used to determine the total amount of waste materials collected;

v. the methodology used to determine the mass of organic HAP contained in the wastes, sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment; and

d. for each container of recovered materials shipped to a hazardous waste TSDF, the following records shall be maintained in a log:

i. the date each container was first used and the date of the last addition;

ii. the date and amount of recovered materials added, from first to the last addition;

iii. the date the container was shipped and identification of which hazardous waste TSDF it was shipped to, if more than one facility in (a) above; and

iv. the volume and weight of the material as it was recorded on the waste manifest (minus the weight of the container, if included).

(9) The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the firebox of the thermal oxidizer (or immediately downstream of the firebox before any substantial heat exchange) when the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee; and shall be capable of accurately measuring the temperature. The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was less than the average combustion temperature maintained during the performance test that demonstrated compliance, or below the temperature recommended by the manufacturer until performance testing is completed; and

b. a log of the downtime for the capture (collection) system, thermal oxidizer, and/or monitoring equipment when the associated emissions unit was in operation.

(10) The permittee shall maintain records that document any cleanup operations for K012 and K013 which were not performed as described in b)(2)a.and/or reclaimed as specified in d)(1)e.above.

(11) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, 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 appropriate Ohio EPA District Office or local air agency upon request.

(12) The permittee shall conduct periodic inspections of the dry particulate filter 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.

(13) 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

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.

(14) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system 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 appropriate Ohio EPA District Office or local air agency upon request.

(15) The permittee shall maintain records that document any time periods when the dry particulate filter 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 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.

(16) The permit-to-install application for these emissions unit(s), K004-K013, and R001-R004 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists" (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 9.43

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 287.3

MAGLC (ug/m3): 4486

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) K004-K013, and R001-R004, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

(17) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(18) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(19) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual actual OC emissions from K004-K013 and R003-R004 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

(2) The permittee shall submit an initial notification of compliance status report no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" section of this permit). The initial notification of compliance shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and beginning and ending dates of the reporting period;

d. identification of the compliance method for each coating operation, i.e., if using "compliant materials"; the capture and control device(s) employed and the estimated or demonstrated efficiency of each; and a statement as to if cleanup solvents were collected for recovery or disposal and if they were shipped to a certified hazardous waste TSDF;

e. statement of whether the affected source achieved the emission limitations for the initial compliance period;

f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limitation(s);

g. calculations and supporting documentation for the coatings, thinners, and cleanup materials applied (information from supplier or manufacturer or summary of testing results) and waste materials sent to a hazardous waste TSDF, if used, to include the following:

i. mass fraction of organic HAP for one coating, one thinner and/or other additive, and one cleanup/purge material;

ii. the volume fraction of coating solids for one coating;

iii. density for one coating, one thinner and/or other additive, and one cleanup/purge material; and

iv. the average amount of waste materials collected in any month and average mass of organic HAP contained in the waste materials sent off-site to a hazardous waste TSDF;

h. for coating operations meeting the emissions limitation without add-on controls, the calculations of the total organic HAP emission rate for the 12-month

compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:

i. the calculations of the total volume of coating solids used each month;

ii. the calculations of the total mass of organic HAP emissions for each month; and

iii. the calculation of the initial 12-month organic HAP emission rate;

i. for coating operations meeting the emissions limitation with add-on controls the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:

i. the calculations of the total volume of coating solids used each month;

ii. the calculations of the mass of organic HAP emission reduction for each month for the emission capture systems and thermal oxidizers;

iii. the calculations of the total mass of organic HAP emissions for each month; and

iv. the calculation of the initial 12-month organic HAP emission rate;

j. information for the add-on-controls and capture system:

i. a summary of the data and copies of the calculations supporting the determination that each emissions capture system is a permanent total enclosure or a measurement of the emission capture system's efficiency, including the protocol/procedures followed;

ii. a summary of the results of each capture efficiency test and performance test conducted for the thermal oxidizer; and

iii. a list of each emission capture system's and thermal oxidizer's operating limits and summary of the data used to establish these parameter limitations;

k. a statement of whether or not the work practice plan was developed and implemented;

l. if using the predominant activity alternative under 40 CFR 63.3890(c)(1), the data and calculations used to determine the predominant activity; and

m. if using the "facility-specific emission limit" alternative under 40 CFR 63.3890(c)(2), the calculation of the "facility-specific" emission limitation.

(3) The permittee shall submit semiannual compliance reports which shall be postmarked or delivered no later than July 31 and January 31 following the end of each semiannual reporting period. The reporting period is each 6-month period of time ending on June 30

and December 31 of each year. The semiannual compliance reports shall cover the previous 6 months of operation, and each monthly compliance calculation shall be based on the records from the previous (rolling) 12 months of operation. The semiannual report shall contain the following information:

a. company name and address;

b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);

c. the date of the report and the beginning and ending dates of the reporting period;

d. identification of the compliance method for each coating operation;

e. statement of whether the affected source achieved the emission limitations for the compliance period;

f. the calculation results for each rolling, 12-month organic HAP emission rate during the 6-month reporting period;

g. if using the predominant activity alternative according to 40 CFR 63.3890(c)(1), the annual determination of predominant activity if it was not included in the previous semi-annual compliance report;

h. if using the "facility-specific emission limit" alternative according to 40 CFR 63.3890(c)(2), the calculation of the "facility-specific" emission limit for each 12-month compliance period during the 6-month reporting period;

i. if there were no deviations from the emission limitations in 63.3890, the operating limits in 40 CFR 63.3892, or the work practice standards in 40 CFR 63.63.3893, a statement that there were no deviations from the emissions limitations during the reporting period;

j. if there were no periods of operation during which the continuous parameter monitoring system(s) (CPMS) was/were out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods of time when the CPMS was/were out-of-control during the reporting period; and

k. if there were any deviations during the compliance period, from the controlled coating operation, the report shall include the following information:

    i. the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit;

    ii. any periods of time when emissions bypassed the thermal oxidizer and were diverted to the atmosphere;

    iii. the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, including the total mass of organic HAP emissions from coatings,

thinners/additives, and cleaning materials used each month of deviation from the applicable limitation(s);

iv. if applicable, the calculation used to determine mass of organic HAP in waste materials;

v. the calculation of the total volume of coating solids used each month, as required in this permit;

vi. the calculation of the mass of organic HAP emission reduction each month by emission capture systems and thermal oxidizers, as required in this permit;

vii. the calculation of the total mass of organic HAP emission rate each month of deviation and the 12-month emission rate, as required in this permit, in kg (or lb) of organic HAP per liter (or gallon) of coating solids applied;

viii. the date and time that each malfunction started and stopped;

ix. a brief description of the continuous parameter monitoring system (CPMS);

x. the date of the latest CPMS certification or audit;

xi. the date(s) and time that each CPMS was inoperative, except for zero/low-level and high-level checks;

xii. the date(s), time, and duration (start and end dates and hours) that each CPMS was out-of-control and the corrective actions taken, per 40 CFR 63.8(c)(8);

xiii. the date, time, and duration of each deviation from any operating limit(s) contained in this permit, from Table 1 to this subpart, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period;

xiv. the date, time, and duration of any bypass of the thermal oxidizer, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period;

xv. a summary of the total duration of each deviation from an operating limit in Table 1 to this subpart during the semiannual reporting period, and the total duration as a percent of the total source operating time during the semiannual reporting period;

xvi. a summary of each bypass of the thermal oxidizer during the semiannual reporting period, and the total duration as a percent of the total source operating time during the semiannual reporting period;

xvii. a breakdown of the total duration of the deviations from the operating limits established as required in Table 1 to this subpart and any bypasses of the thermal oxidizer during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, and other known or unknown causes;

xviii. a summary of the total duration of CPMS downtime during the semiannual reporting period, and the total duration of the CPMS downtime as a percent of the total source operating time during the semiannual reporting period;

xix. a description of any changes in the CPMS, coating operation emission capture system, or thermal oxidizer since the last semiannual reporting period;

xx. for each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the action taken to correct the deviation; and

xxi. a statement of the cause of each deviation.

(4) The permittee shall include the following information in the semiannual report for any monthly record where the allowance for an emission reduction was applied in the uncontrolled/pre-controlled HAP emissions calculations for materials that were shipped (or scheduled to be shipped) to a hazardous waste TSDF:

a. any monthly record where measurements were not taken or appropriate records were not maintained for recovered material(s) that were applied as an emission reduction in the calculated HAP emissions before add-on controls and used to demonstrate compliance with the NESHAP and the limitations in this permit;

b. any record of recovered solvent that was not finally shipped to a hazardous waste TSDF and/or was shipped to a TSDF not regulated under 40 CFR Parts 262, 264, 265, or 266 and which was also applied as an emission reduction to HAP emissions prior to add-on controls;

c. any record of discrepancy between the total volume or weight of material(s) collected and the total volume shipped to a hazardous waste TSDF, as documented in the recovered materials log;

d. any record of recovered material being applied more than one time in a monthly compliance demonstration; and/or

e. a miscalculation of the HAP emission reduction calculation for recovered materials sent to a hazardous waste TSDF.

(5) The permittee shall include startup, shutdown, and malfunction reports in the semiannual report if actions taken by the permittee during a startup, shutdown, and/or malfunction are consistent with the procedures specified in the facility startup, shutdown, and malfunction plan. The startup, shutdown, and/or malfunction report shall consist of a

letter containing the name of the responsible official and his certification that all startup, shutdown, or malfunction events were conducted according to the plan.

If actions taken during any startup, shutdown, or malfunction were not consistent with the startup, shutdown, and malfunction plan, the permittee shall submit immediate startup, shutdown, and/or malfunction reports as follows:

a. If actions taken during any startup, shutdown, or malfunction were not consistent with the startup, shutdown, and malfunction plan, the permittee shall submit immediate startup, shutdown, and/or malfunction reports as follows:

b. unless alternative arrangements are made, within 7 working days after the end of the event, a letter shall be sent to the appropriate Ohio EPA District Office or local air agency and it shall contain:

i. the name, title, and signature of the responsible official who is certifying the accuracy of the report,

ii. an explanation of the circumstances of the event, i.e., the reasons for not following the startup, shutdown, and malfunction plan; and

iii. if any excess emissions and/or parameter monitoring exceedances have occurred.

(6) The permittee shall immediately report a startup, shutdown, and/or malfunction event to the regulating agency when either of the following scenarios occur:

a. actions taken by the permittee/operator during a startup or shutdown cause the emissions unit(s) to exceed an emission limitation from the NESHAP and procedures specified in the SSMP are not followed; and/or

b. actions taken during a malfunction are not consistent with the procedures specified in the SSMP.

(7) The immediate report shall consist of a telephone call (or facsimile {FAX} transmission) to the Director within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event. The written report shall contain:

a. the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy;

b. the explanation of the circumstances of the event;

c. the reasons for not following the SSMP;

d. description of all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions); and

e. actions taken to minimize emissions in conformance with 40 CFR 63.6(e)(1)(i) and as required in this permit.

(8) Performance test results for the emission capture system(s) and thermal oxidizer(s) shall be submitted no later than 30 days after completion of the performance test(s). Results of each performance test shall include the analysis of samples, determination of emissions, and the supporting raw data. Performance testing results shall be retained for a minimum of 5 years from the test date and shall be made available to the Director, or representative of the Director, upon request.

(9) The permittee shall identify in the semiannual reports all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was less than the average combustion temperature maintained and established during the most recent performance test that demonstrated compliance.

(10) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. any daily record showing that the dry particulate filter system 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; and

b. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration; or if no changes to the emissions, emissions unit(s), or the exhaust stack have been made, a statement to this effect.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31, April 30, July 31, and October 31, and shall cover the previous calendar quarters unless an alternative schedule has been established and approved by the Director (Ohio EPA, Northwest District Office).

(11) The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that cleanup operations which were not performed as described in b)(2)b.i. and/or reclaimed as specified in c)(3) above. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northwest District Office) within 30 days after the exceedance occurs.

f) Testing Requirements

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

a. The emission testing shall be conducted no later than 180 days following the compliance date specified in the Additional Terms and Conditions of this permit.

b. The emission testing shall be conducted in order to determine the capture efficiency of the emission capture system vented to the thermal oxidizer and the destruction efficiency of the thermal oxidizer, both in percent.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. Method 1 of 1A of Appendix A to 40 CFR Part 60, to select sampling sites and velocity traverse points;

ii. Method 2, 2A, 2C, 2D, 2F or 2G of Appendix A to 40 CFR Part 60, as appropriate, to measure gas volumetric flow rate;

iii. Method 3, 3A, or 3B of Appendix A to 40 CFR Part 60, as appropriate, for gas analysis to determine dry molecular weight;

iv. Method 4 of Appendix A to 40 CFR Part 60, to determine stack gas moisture;

v. Method 25 or 25A, to determine the total gaseous organic mass emissions as carbon at the inlet and outlet of the thermal oxidizer, simultaneously, using:

(a) Method 25 if testing an oxidizer with expected carbon concentrations to exceed 50 ppm

(b) Method 25A if testing an oxidizer with expected carbon concentrations to be 50 ppm or less, or if the control is not an oxidizer; and

vi. Method 204 A through 204F (appropriate method) of Appendix M to 40 CFR Part 51 to determine the capture efficiency.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The total gaseous organic emissions mass flow rates shall be determined at the inlet and the outlet of the thermal oxidizer for each of the 3 test runs.

f. The total gaseous organic emissions mass flow rates shall be determined at the inlet and the outlet of the thermal oxidizer for each of the 3 test runs.

$M_f = Q_{sd}\ C_c\ (12)\ (0.0416)\ (10^{-6})$

where:

M_f is the total gaseous organic emissions mass flow rate, in kg/hr.

Q_{sd} is the volumetric flow rate of gases entering or exiting the thermal oxidizer, as determine by Method 2, 2A, 2C, 2D, 2F or 2G, in dscm/hour.

C_c is the concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or 25A, in parts per million by volume on a dry basis (ppmv).

0.0416 is the conversion factor for molar volume, Kg-moles per cubic meter (mol/m^3) @ 293 degrees Kelvin and 760 mmHg.

g. For each test run the thermal oxidizer's organic emissions destruction efficiency shall be calculated as follows:

$DRE = [(M_{fi} - M_{fo}) / M_{fi}] \times 100$

where:

DRE is the organic emissions destruction efficiency of the thermal oxidizer, in percent.

M_{fi} is the total gaseous organic emissions mass flow rate at the inlet(s) to the thermal oxidizer, from the equation above, in kg/hour.

$M_{fo}$is the total gaseous organic emissions mass flow rate at the outlet(s) to the thermal oxidizer, from the equation above, in kg/hour.

The emission destruction or removal efficiency of the thermal oxidizer shall be the average of the efficiencies determined in the three test runs.

h. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

i. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

j. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

(2) The permittee shall conduct a performance test of each emission capture system when operating at a representative flow rate and when the thermal oxidizer is operating at a

representative inlet concentration. The capture efficiency of each emission capture system shall be determined using one of the following methods. If the capture system does not meet the criteria for a permanent total enclosure in (a) below, the permittee shall determine the capture efficiency of each emissions capture system for the coating operations using either the "liquid-to-uncaptured-gas protocol" in (b) or the "gas-to-gas protocol" in (c) below:

a. The capture system efficiency can be assumed to be 100% if both of the following conditions are met:

   i. the capture system meets the criteria in Method 204 found in 40 CFR Part 51, Appendix M for a permanent total enclosure and all the exhaust gases from the enclosure are directed to the thermal oxidizer.

   ii. all coatings, thinners and or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system.

b. The liquid-to-uncaptured-gas protocol compares the mass of liquid total volatile hydrocarbon (TVH) in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. To measure the emission capture system efficiency using the liquid-to uncaptured gas protocol the following procedures shall be followed:

   i. The coating operations must be enclosed either by using the building enclosure or by constructing an enclosure around all operations where coatings, thinners and/or other additives, and cleaning materials are applied and any areas following the application where emissions from these applied coatings and thinners/additives and cleaning materials subsequently occur (flash-off, curing, and drying areas). Areas where capture devices collect emissions for routing to the thermal oxidizer, such as the entrance and exit areas of an oven or spray booth must also be inside the enclosure. The enclosure must meet the definition of a temporary total enclosure or building enclosure in Method 204 found in 40 CFR Part 51, Appendix M.

   ii. Method 204A or 204F in 40 CFR Part 51, Appendix M shall be used to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours.

   iii. Calculate the total mass of TVH liquid input from all coatings, thinners and/or additives, and cleaning materials used in the coating operation during each capture efficiency test run as follows:

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(VOL_i)(D_i)$$

where:

TVH_{used} is the mass of liquid TVH in the materials used in the coating operation during the capture efficiency test run, in kg or pound.

TVH_i is the mass fraction of TVH in coating, thinner and/or other additive, or cleaning material "i" that is used in the coating operation during the capture efficiency test run, in kg of TVH per kg material or pound of TVH per pound material.

VOL_i is the total volume of coating, thinner and/or other additive, or cleaning material "i" used in the coating operation during the capture efficiency test run, in liters or gallons.

D_i is the density of coating, thinner and/or other additive, or cleaning material "i" used in the coating operation during the capture efficiency test run, in kg of material per liter of material or pound of material per gallon of material.

n is the number of different coatings, thinners and/or other additives, or cleaning materials used in the coating operation during the capture efficiency test run.

iv. Method 204D for a temporary total enclosure or 204E for a building enclosure, both in 40 CFR Part 51, Appendix M, shall be used to measure the total mass, kg or pound, of TVH emissions that are not captured by the emission capture system, as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. If using the building as the enclosure, all organic compound emitting operations inside the building enclosure, other than the coating operation for which the capture efficiency is being determined must be shut down, with all fans and blowers operating normally.

v. Use the following equation to determine the percent capture efficiency of the emission capture system for each capture efficiency test run:

$$CE = [(TVH_{used} - TVH_{uncaptured}) / TVH_{used}] \times 100$$

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

TVH_{used} is the total mass of TVH liquid input used in the coating operation during the capture efficiency test run, in kg or pound.

$TVH_{uncaptured}$ is the total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, in kg or pound.

vi. The capture efficiency of the emission capture system shall be calculated as the average of the capture efficiencies measured in the three test runs.

c. The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. To measure the emission capture system efficiency using the gas-to-gas protocol the following procedures shall be followed:

i. The coating operations must be enclosed either by using the building enclosure or by constructing an enclosure around all operations where coatings, thinners and/or other additives, and cleaning materials are applied and any areas following the application where emissions from these applied coatings and thinners/additives and/or cleaning materials subsequently occur (flash-off, curing, and drying areas). Areas where capture devices collect emissions for routing to the thermal oxidizer, such as the entrance and exit areas of an oven or spray booth must also be inside the enclosure. The enclosure must meet the definition of a temporary total enclosure or building enclosure in Method 204 found in 40 CFR Part 51, Appendix M.

ii. Method 204B or 204C in 40 CFR Part 51, Appendix M shall be used to measure the total mass, in kg or pound, of TVH emissions captured by the emission capture system during each capture efficiency test run, as measured at the inlet to the thermal oxidizer. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. The sampling points must be upstream from the thermal oxidizer and must represent total emissions routed from the capture system and entering the thermal oxidizer. If multiple emission streams from the capture system enter the thermal oxidizer without a single common duct, then the emissions entering the thermal oxidizer must be simultaneously measured in each duct and the total emissions entering the thermal oxidizer must be determined.

iii. Method 204D for a temporary total enclosure or 204E for a building enclosure, both in 40 CFR Part 51, Appendix M, shall be used to measure the total mass, kg or pound, of TVH emissions that are not captured by the emission capture system, as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. Substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. If using the

building as the enclosure, all organic compound emitting operations inside the building enclosure, other than the coating operation for which the capture efficiency is being determined must be shut down, with all fans and blowers operating normally.

iv. Use the following equation to determine the percent capture efficiency of the emission capture system for each capture efficiency test run:

$$CE = [(TVH_{captured}) / (TVH_{captured} + TVH_{uncaptured})] \times 100$$

CE is the capture efficiency of the emission capture system vented to the thermal oxidizer, in percent.

$TVH_{captured}$ is the total mass of TVH captured by the emission capture system as measured at the inlet to the thermal oxidizer during the emission capture efficiency test run, in kg or pound.

$TVH_{uncaptured}$ is the total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, in kg or pound.

v. The capture efficiency of the emission capture system shall be calculated as the average of the capture efficiencies measured in the three test runs.

(3) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.92 lb OC/hour from K012 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (2.80 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

b. Emission Limitation:
2.15 tons OC/year from K012 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 2.15 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

c. Emission Limitation:
0.49 lb OC/hour from K013 coating and cleanup operations

Applicable Compliance Method:
The lb/hr limit represents the emissions unit's potential to emit and was developed by multiplying the maximum hourly coating usage (1.50 gallons/hr), the maximum coating OC content (6.54 lbs/gallon coating) and applying a 95% overall control efficiency (100% capture, 95% destruction efficiency).

Compliant emissions tests were conducted on August 23, 2007 for RTO #1 and on December 8, 2005 for RTO #2. If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR, Part 60 Appendix A, Methods 1-4 and 18, 25 or 25 A.

d. Emission Limitation:
2.15 tons OC/year from K013 coating and cleanup operations

Applicable Compliance Method:
The annual limitation of 2.15 tons OC/year was established by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

e. Emission Limitation:
39.86 tons OC/year from coating and cleanup operations from K004-K013 and R003-R004 combined

Applicable Compliance Method:
Compliance with the 39.86 tons OC/yr combined emission limitation above shall be based upon the record keeping requirements specified in section d)(1) of this permit.

f. Emission Limitation:
0.551 pound PE per hour from K012 and K013, individually

Applicable Compliance Method:
To determine the actual worst case PE rate (E), the following equation shall be used for each individual coating operations:

E = PE rate (lbs/hr)

E = maximum coating solids usage rate, in pounds per hour (1-TE) x (1-CE)

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

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the emission limitation above pursuant to OAC rule 3745-17-03(B)(10).

g. Emission Limitation:
Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average except as provided by rule.

Applicable Compliance Method:
If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:
0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emitted per liter (gal) coating solids used during each 12-month compliance period

Applicable Compliance Method:
Compliance with the 0.81 kg (6.8 lb) organic hazardous air pollutants (HAP) emission limitation above shall be based upon the testing requirements specified in sections f)(1) and f)(2) and the record keeping requirements specified in section d)(2) through d)(9) of this permit.

g) Miscellaneous Requirements

(1) None.