



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: DRAFT PERMIT TO INSTALL MODIFICATION**

**PICKAWAY COUNTY**

**Application No: 01-08785**

**Fac ID: 0165000045**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
40 CFR 63 subpart SSSS	MACT
TT	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 8/31/2006

ALSCO Metals Ashville Facility  
Chris Brown  
1 Reynolds Road  
Ashville, OH 43103

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **\$ 200** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

CDO

KY

**PICKAWAY COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 01-08785 FOR AN AIR CONTAMINANT SOURCE FOR  
ALSCO Metals Ashville Facility**

On 8/31/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **ALSCO Metals Ashville Facility**, located at **1 Reynolds Road, Ashville, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-08785:

**K001 and K002.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Isaac Robinson, Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417  
[(614)728-3778]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT MODIFICATION OF PERMIT TO INSTALL 01-08785**

Application Number: 01-08785  
Facility ID: 0165000045  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: ALSCO Metals Ashville Facility  
Person to Contact: Chris Brown  
Address: 1 Reynolds Road  
Ashville, OH 43103

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1 Reynolds Road  
Ashville, Ohio**

Description of proposed emissions unit(s):  
**K001 and K002.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Director

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and 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 appropriate Ohio EPA District Office or local air agency. 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 B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency 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.
  - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

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

**4. Title IV Provisions**

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

**5. Severability Clause**

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

**6. General Requirements**

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

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

#### **10. Permit-To-Operate Application**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

#### **11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

#### **12. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to “installation” of “any air contaminant source” as defined in OAC rule 3745-31-01, or “modification”, as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

**1. Compliance Requirements**

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.

**2. 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 appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and 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 appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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.)

**3. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing 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 modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**5. Construction of New Sources(s)**

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.

**6. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**8. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit-To-Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
VOC	67.0
PE	0.79
NOx	10.33
CO	8.7
SO2	0.07
OC	0.57

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

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

None

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

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K001) - Strip paint line primer coater room and curing oven controlled with a thermal incinerator.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05	<p>See terms A.I.2.a and A.I.2.e below.</p> <p>Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities shall not exceed 21.3 tons per year.</p> <p>Particulate emissions (PE) from the oven natural gas combustion shall not exceed 0.04 pound per hour and 0.2 ton per year.</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions from the oven natural gas combustion shall not exceed 0.6 pound per hour and 2.6 ton per year.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions from the oven natural gas combustion shall not exceed 0.004 pound per hour and 0.02 ton per year.</p> <p>Carbon monoxide (CO) emissions from the oven natural gas combustion shall not exceed 0.5 pound per hour and 2.2 tons per year.</p> <p>Organic compound (OC) emissions from the oven natural gas combustion shall not exceed 0.03 pound per hour and 0.14 ton per year.</p> <p>PE from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.07 pound per hour and 0.33 ton per year.</p> <p>NO<sub>x</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not</p>

	<p>exceed 0.98 pound per hour and 4.29 tons per year.</p> <p>SO<sub>2</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.01 pound per hour and 0.03 ton per year.</p> <p>CO emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.82 pounds per hour and 3.61 tons per year.</p> <p>OC emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.05 pound per hour and 0.24 ton per year.</p>
<p>OAC rule 3745-17-07(A)</p>	<p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(E), 40 CFR Part 63.5120, 40 CFR Part 63, Subpart SSSS, 40 CFR 60.462 and OAC rule 3745-17-07(A).</p> <p>Visible particulate emissions from thermal oxidizer stack shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).</p>
<p>OAC rule 3745-21-09(E)</p>	<p>VOC emissions shall not exceed 4.0 lbs/gallon of solids when using the thermal oxidizer.</p>
<p>40 CFR Part 60, Subpart TT and 40 CFR Part 63, Subpart SSSS</p>	<p>See term A.I.2.b below.</p> <p>Compliance Option A:</p> <p>for Subpart TT: VOC emissions shall not exceed 0.14 kg/liter (1.17 lbs/gal) of coating solids applied for each calendar month with the use of the thermal oxidizer.</p> <p>See terms A.I.2.c and A.I.2.g below; and</p> <p>for Subpart SSSS: Organic HAP emissions shall not exceed 0.046 kg/liter (0.38 lbs/gallon) of solids applied during each rolling 12-month compliance period with the use of the thermal oxidizer.</p>
<p>40 CFR Part 60, Subpart TT and 40 CFR Part 63, Subpart SSSS</p>	<p>See terms A.I.2.d, A.I.2.f and A.I.2.g below.</p> <p>Compliance Option B:</p> <p>for Subpart TT: VOC emissions (stack and fugitive) shall not exceed 10 percent of the VOC's applied for each calendar month</p>

(90 percent reduction with the use of the thermal oxidizer).

See terms A.I.2.c and A.I.2.g below.; and

for Subpart SSSS: Organic HAP emissions (stack and fugitive) shall not exceed 2 percent of the organic HAP applied during each rolling 12-month compliance period (98 percent reduction).

See terms A.I.2.a, A.I.2.d, A.I.2.f and A.I.2.g below.

## 2. Additional Terms and Conditions

- 2.a** The permittee shall demonstrate compliance with the annual VOC emission limit on a 12-month rolling average basis. The annual limit, which is equivalent to 98 percent reduction based on the coating operations uncontrolled potential to emit, may be complied with through a combination of low-VOC content coatings and/or the use of the thermal oxidizer.
- 2.b** Pursuant to OAC rule 3745-21-09(B)(6), the 81 percent overall capture and control and 90 percent destruction efficiency option is available in lieu of complying with the 4.0 lbs/gallon solids emission limitation contained in OAC rule 3745-21-09(E).
- 2.c** Compliance with the VOC emission limitations established pursuant to 40 CFR Part 60, Subpart TT shall be demonstrated on a calendar month basis using all coating materials applied in this emissions unit.
- 2.d** Compliance with the organic HAP emission limits established pursuant to 40 CFR Part 63, Subpart SSSS shall be demonstrated on a 12-month rolling average basis using all materials applied in this emissions unit. The permittee shall limit total organic HAP emissions, to no more than 2 percent of the HAP applied for each month during each 12-month compliance period (98 percent reduction).
- 2.e** The hourly and annual emission limitations from natural gas combustion in the process and in the regenerative thermal oxidizer were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.f** The applicable compliance date for 40 CFR Part 63, Subpart SSSS is June 10, 2005.
- 2.g** The permittee shall elect to use one of the following combination of options from each Subpart on a monthly basis ::
- i. Option A for 40 CFR Part 60, Subpart TT; along with either:
    - (a) Option A for 40 CFR Part 63, Subpart SSSS; or

- (b) Option B for 40 CFR Part 63, Subpart SSSS;
- ii. Option B for 40 CFR Part 60, Subpart TT; along with either:
  - (a) Option A for 40 CFR Part 63, Subpart SSSS; or
  - (b) Option B for 40 CFR Part 63, Subpart SSSS.

The permittee shall employ all of the associated monitoring, record keeping, reporting and testing methods required by this permit at all times for the combination of options that is being used to determine compliance for each month.

## **II. Operational Restrictions**

1. The emission capture system shall be maintained under negative pressure whenever the emissions unit is in operation and all emissions shall be vented to the regenerative thermal oxidizer.
2. The emission capture system shall be operated and maintained according to the capture system monitoring plan required under 40 CFR 63.5150(a)(4).
3. Per 40 CFR 60.464(c), the average thermal oxidizer combustion temperature shall not, for more than 3 hours, fall more than 28 degrees Celsius (50 degrees Fahrenheit) below the temperature at which compliance with 40 CFR 60, Subpart TT was demonstrated during the most recent measurement of thermal oxidizer efficiency required by 40 CFR 60.8.
4. Per Table 1 to 40 CFR Part 63, Subpart SSSS, the 3-hour black average regenerative thermal oxidizer combustion temperature shall not fall below the average combustion temperature limit established during the most recent emission test that demonstrated the emissions unit was in compliance.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall install, operate, monitor and inspect each monitoring, capture and control device as described below to comply with 40 CFR Part 63, Subpart SSSS:
  - a. Temperature monitoring of oxidizer per 40 CFR 63.5150(a)(3) and Table 1 to 40 CFR Part 63, Subpart SSSS. The permittee shall comply with the following:
    - i. install , calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every 3 months; or the chart recorder, data logger, or temperature indicator shall be replaced. The permittee shall replace the equipment either if the permittee chooses not to perform the calibration, or if the equipment cannot be calibrated properly. Each temperature monitoring device shall be equipped

- with a continuous recorder. The device shall have an accuracy of  $\pm 1$  percent of the temperature being monitored in degrees Celsius, or  $\pm 1$  degrees Celsius, whichever is greater;
- ii. install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone; and
  - iii. reduced the data to 3-hour block averages.
- b. Capture system monitoring per 40 CFR 63.5150(a)(4). The permittee shall develop a capture system monitoring plan containing the information specified in paragraphs (i.) and (ii.) of this section. The permittee shall monitor the capture system in accordance with paragraph (iii.) of this section. The permittee shall make the monitoring plan available for inspection by the permitting authority upon request.
- i. The monitoring plan shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures.
  - ii. The plan also shall specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in sections A.I.1 and A.I.2. The operating limits shall represent the conditions indicative of proper operation and maintenance of the capture system.
  - iii. The permittee shall conduct monitoring in accordance with the plan.
2. For purposes of determining compliance with requirements in both OAC rules 3745-21-09(B)(3)(j) and (E), the permittee, when showing compliance with the VOC emission rate of shall not exceed 4.0 lbs/gallon of solids with the use of the thermal oxidizer limitation, shall collect and record the following information each day for emissions unit K001 and thermal oxidizer:
- a. The name and identification number of each coating, as applied.
  - b. The pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
  - c. The maximum VOC content (in pounds of VOC per gallon of coating solids, as applied) or the daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings.
  - d. The calculated, controlled  $VOC_{coat}$  emission rate, in pounds of VOC per gallon of coating solids, as applied. The controlled  $VOC_{coat}$  emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with paragraph (c) above and (ii) the overall control

efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

- e. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
  - f. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
3. For purposes of compliance with the requirements in OAC rule 3745-21-09(E) thru OAC rule 3745-21-09(B)(6), the permittee shall collect and record the following information each day for the thermal oxidizer:
    - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
    - b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
  4. For purposes of determining annual VOC emissions, the permittee shall calculate the mass of VOC<sub>cs</sub>'s used in solvent cleanup activities ( $M_{cs}$ ) on K001 during each calendar month by the following equation:

$$M_{cs} = \sum_{i=1}^n L_{csi} D_{csi} W_{csi}$$

where:

$n$  = the number of different VOC containing cleanup solvents used during the calendar month,

$D_{cs}$  = density of each VOC containing cleanup solvent used (pounds per gallon),

$L_{cs}$  = the volume of each VOC containing cleanup solvent used (gallons),

$M_{cs}$  = the mass of VOC containing cleanup solvent used (pounds),

$W_{cs}$  = the proportion of VOC's in each cleanup solvent (fraction by weight).

5. The permittee shall compute and record the average VOC content of coatings applied during each calendar month, using the following equations per 40 CFR 60.464(a), 40 CFR 60.463(c)(2)(ii), and 40 CFR 60.463(c)(1)(i)(A) - (C) as specified:
  - a. When determining compliance with 40 CFR Part 60, Subpart TT for either Option A or B, the permittee shall calculate the mass of VOC's used ( $M_o + M_d$ ) on K001 during each calendar month by the following equation:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj}$$

( $\sum L_{dj} D_{dj}$  will be 0 if no VOC solvent is added to the coatings, as received)

where:

n = the number of different coatings used during the calendar month,

m = the number of different VOC solvents added to coatings used during the calendar month,

$D_c$  = density of each coating, as received (kilograms per liter),

$D_d$  = density of each VOC-solvent added to coatings (kilograms per liter),

$L_c$  = the volume of each coating consumed, as received (liters),

$L_d$  = the volume of each VOC-solvent added to coatings (liters),

$M_d$  = the mass of VOC-solvent added to coatings (kilograms),

$M_o$  = the mass of VOC's in coatings consumed, as received (kilograms), and

$W_o$  = the proportion of VOC's in each coating, as received (fraction by weight).

6. When determining compliance with 40 CFR Part 60, Subpart TT using either Option A or B, the permittee shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance per 40 CFR 60.464(c) as described below:
- a. The temperature monitoring device shall have an accuracy of  $\pm 2.5^\circ\text{C}$  or  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius, whichever is greater.
  - b. Each owner or operator shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the thermal oxidizer used to control emissions from an affected facility remains more than  $28^\circ\text{C}$  ( $50^\circ\text{F}$ ) below the temperature at which compliance with 40 CFR Part 60, Subpart TT was demonstrated during the most recent measurement of oxidizer efficiency required by 40 CFR 60.8. The records required by 40 CFR 60.7 shall identify each such occurrence and its duration.
  - c. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the total volume of coating solids used ( $L_s$ ) on K001 in each calendar month by the following equation:

$$L_s = \sum_{i=1}^n V_{si} L_{ci}$$

where:

$n$  = the number of different coatings used during the calendar month,  
 $V_{si}$  = the proportion of solids in each coating, as received (fraction by volume), and  
 $L_{ci}$  = the volume of each coating consumed, as received (liter) .

- d. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the volume-weighted average mass of VOC's used per unit volume of coating solids applied ( $G$ ) on K001 during the calendar month by the following equation:

$$G = \frac{M_o + M_d}{L_s}$$

- e. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the volume-weighted average of VOC emissions to the atmosphere ( $N$ ) from K001 during the calendar month by the following equation:

$$N = G(1 - R)$$

where:

$R$  = overall organic VOC control efficiency as calculated using Equation 7 of 40 CFR 60.463.

- f. When determining compliance with 40 CFR Part 60, Subpart TT using Option A, K001 shall be, if the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month ( $N$ ) is less than or equal to 0.14 kg/l of coating solids applied, in compliance.
- g. When determining compliance with 40 CFR Part 60, Subpart TT using Option B, the permittee shall determine overall reduction efficiency ( $R$ ) using the following formula:

$$R = EF$$

where:

$F$  = the fraction of total VOC's emitted by K001 that enter the control device using Equation 5 in 40 CFR 60.463, and

$E$  = the destruction efficiency of the control device using Equation 6 in 40 CFR 60.463.

7. Pursuant to 40 CFR 63.5190(a)(1), the permittee shall maintain records on which compliance option was used and the time periods (beginning and ending dates and times) each option was used on K001.

8. When determining compliance with 40 CFR 63, Subpart SSSS using Option A, the permittee shall calculate the organic HAP emission rate based on solids applied for the 12-month compliance period,  $L_{\text{ANNUAL}}$ , using Equation 6 of 40 CFR 63.5170 and included below:

$$L_{\text{annual}} = \frac{\sum_{y=1}^{12} H_e}{\sum_{y=1}^{12} \left[ \sum_{i=1}^p C_{si} M_i \right]}$$

where:

p = the number of different coatings applied.

y = identifier for months.

$H_e$  = total monthly organic HAP emitted, in kg, as calculated using Equation 8 of 40 CFR 63.5170.

$M_i$  = the mass of each coating material applied on all work stations (K001 and K002) in kg.

The permittee shall collect and record the following information for K001 during each month in order to support calculation of the organic HAP emission rate based on solids applied for the 12-month compliance period,  $L_{\text{ANNUAL}}$ , as described above:

- a. The solids content of each coating material applied on K001, expressed as liters of solids/kg of material,  $C_{si}$ .
9. When determining compliance with 40 CFR Part 63, Subpart SSSS using Option A, the permittee shall calculate the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 and included below:

$$H_e = \sum_{A=1}^w \left[ \left( 1 - \left( DRE_K CE_A \right) \left( \sum_{i=1}^p \left( C_{hi} M_{Ai} + \sum_{j=1}^q C_{hij} M_{Aij} \right) \right) \right) \right]$$

where:

p = the number of different coatings applied,

q = the number of different solvent, thinner, reducer, diluent, or other non-solids-containing materials applied,

w = the number of always-controlled work stations (w = 2 for K001 and K002),

$DRE_K$  = the organic volatile matter destruction or removal efficiency of the thermal oxidizer, in percent, determined using the procedure in 40 CFR 63.5160(d) as described in section A.V.2.h, and

$CE_A$  = the organic volatile matter capture efficiency of the capture system for each work station, in percent, determined in accordance with 40 CFR 63.5160(e) as described in section A.V.2.i.

The permittee shall collect and record the following information for K001 at this facility during each month in order to support calculation of the organic HAP emitted, ( $H_e$ ) using equation 8 in 40 CFR 63.5170:

- a. The organic hazardous air pollutant(s) HAP content of each coating material applied in K001, expressed as a weight fraction, kg/kg ( $C_{hi}$ ).
  - b. The organic hazardous air pollutant(s) HAP content of each solvent applied in K001, expressed as a weight fraction, kg/kg ( $C_{hij}$ ).
10. When determining compliance with 40 CFR 63, Subpart SSSS using Option A, the permittee shall follow the procedures included below per 40 CFR 63.5170(d)(2) and 40 CFR 63.5170(f)(1):
- a. Determine the thermal oxidizer destruction or removal efficiency, DRE, using the procedure in 40 CFR 63.5160(d).
  - b. Whenever K001 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(3).
  - c. Determine the capture system capture efficiency, CE, for K001 in accordance with 40 CFR 63.5160(e).
  - d. Whenever K001 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(4).
  - e. Calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of 40 CFR 63.5170.
  - f. Measure the mass of each coating material applied on K001 during the month.
  - g. Determine the organic HAP content of each coating material applied on K001 during the month following the procedure in 40 CFR 63.5160(b).
  - h. Determine the solids content of each coating material applied on K001 during the month following the procedure in 40 CFR 63.5160(c).
  - i. Calculate the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 as described in section A.III.9. For periods when the oxidizer has not operated within its established operating limit, the control device efficiency is determined to be zero.
  - j. Calculate the organic HAP emission rate based on solids applied,  $L_{ANNUAL}$ , for the 12-month compliance period using Equation 6 of 40 CFR 63.5170.
  - k. The affected source is in compliance if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value

established in 40 CFR 63.5150(a)(3) for each 3-hour block period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in 40 CFR 63.5150(a)(4) for each 3-hour block period; and the organic HAP emission rate based on solids applied,  $L_{\text{ANNUAL}}$ , is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period.

11. When determining compliance with 40 CFR Part 63, Subpart SSSS upon using Option B, the permittee shall calculate the overall organic HAP control efficiency, R, achieved each month using equation number 7 in 40 CFR 63.5170:

$$R = 100 \frac{\sum_{A=1}^w \left[ \left( DRE_K CE_A \right) \left( \sum_{i=1}^p M_{Ai} C_{vi} + \sum_{j=1}^q M_{Aj} \right) \right]}{\sum_{i=1}^p M_i C_{vi} + \sum_{j=1}^q M_j}$$

where:

p = the number of different coatings applied,

q = the number of different solvent, thinner, reducer, diluent, or other non-solids-containing materials applied,

w = the number of always-controlled work stations (w = 2 for K001 and K002),

$DRE_K$  = the organic volatile matter destruction or removal efficiency of the thermal oxidizer, in percent, determined using the procedure in 40 CFR 63.5160(d); and

$CE_A$  = the organic volatile matter capture efficiency of the capture system for each work station, in percent, determined in accordance with 40 CFR 63.5160(e).

$M_i$  = the mass of each coating material applied on all work stations (K001 and K002) in kg

$M_j$  = the mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding  $H_2O$ ) applied on all work stations (K001 and K002) in kg.

The permittee shall collect and record the following information for K001 during each month in order to support the calculation of the overall organic HAP control efficiency, R, as described above:

- The name and identification number for each coating material employed in K001.
- The name and identification number for each solvent, thinner, reducer, diluent, or other non-solids-containing material (including  $H_2O$ ) applied on K001.
- The mass of coating material applied in K001 in kg, ( $M_{Ai}$ ).
- The volatile matter content of each coating material applied in K001, expressed as a weight fraction, kg/kg ( $C_{vi}$ ).

$$R = 100 \frac{\sum_{A=1}^w \left[ (DRE_K CE_A) \left( \sum_{i=1}^p M_{Ai} C_{vi} + \sum_{j=1}^q M_{Aj} \right) \right]}{\sum_{i=1}^p M_i C_{vi} + \sum_{j=1}^q M_j}$$

- e. The mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (including H<sub>2</sub>O) applied in K001 in kg (M<sub>Aj</sub>).
  - f. The mass of solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding H<sub>2</sub>O), applied in kg (M<sub>j</sub>).
12. When determining compliance with 40 CFR 63, Subpart SSSS using Option B, the permittee shall follow the procedures included below per 40 CFR 63.5170(c)(2) and 40 CFR 63.5170(f)(1):
- a. determine the thermal oxidizer destruction or removal efficiency, DRE, using the procedure in 40 CFR 63.5160(d);
  - b. whenever K001 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(3);
  - c. determine the capture system capture efficiency, CE, for K001 in accordance with 40 CFR 63.5160(e);
  - d. whenever K001 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(4);
  - e. calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of 40 CFR 63.5170; and
  - f. K001 is in compliance if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in 40 CFR 63.5150(a)(3) for each 3-hour block period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in 40 CFR 63.5150(a)(4) for each 3-hour block period; and the overall organic HAP control efficiency, R, is 98 percent or greater.
13. Pursuant to 40 CFR 60.465(e), the permittee shall maintain the following records for a period of at least two years:
- a. all data and calculations used to determine monthly VOC emissions;
  - b. all data and calculations used to determine the monthly VOC emissions limit, where applicable; and,

- c. daily records of the thermal oxidizer combustion temperature.

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. For purposes of compliance with both OAC rules 3745-21-09(B)(3)(m) and (E) requirements, the permittee shall submit quarterly summaries of the following records:
  - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
  - b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

3. When determining compliance with 40 CFR Part 60, Subpart TT using Option A:
  - a. the permittee shall, following the initial performance test, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462(a)(2). If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually; and
  - b. the permittee shall include in the initial compliance report required by 40 CFR 60.8 the weighted average of the VOC content of coatings used during a period of one calendar month for each affected facility per 40 CFR 60.465(a).
4. When determining compliance with 40 CFR Part 60, Subpart TT using either Option A and B:
  - a. the permittee shall include the following data in the initial compliance report required by 40 CFR 60.8 per 40 CFR 60.465(b):
    - i. the overall VOC destruction rate used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and
    - ii. the combustion temperature of the thermal incinerator used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and,



- i. The first semiannual reporting period begins on July 1, 2006 and ends on December 31, 2006.
  - ii. The first semiannual compliance report shall cover the first semiannual reporting period and be postmarked or delivered no later than January 30, 2007
  - iii. Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
  - iv. Each subsequent compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  - v. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or part 71, and the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (i) through (iv) of term A.IV.2(a).
- b. The semi-annual compliance report shall contain the following information per 40 CFR 63.5180(g)(2) and 63.5180(h):
- i. Company name and address.
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
  - iv. Identification of the compliance option(s) specified in Table 1 of 40 CFR 63.5170 that the permittee used on each coating operation during the reporting period. If the permittee switched between SSSS-Option A and SSSS-Option B during the reporting period, the permittee must report the beginning dates for each compliance option.
  - v. A statement that there were no deviations from the standards during the reporting period.
  - vi. The total operating time of each affected source during the reporting period.

- vii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
  - viii. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable).
- 7. The permittee shall submit annual reports which specify the total organic compound emissions from this emissions unit. Annual emission reports may be satisfied by including this emissions unit in the submission of the annual Fee Emission Report.
  - 8. The permittee shall submit performance test reports as specified in term A.V.3.

## **V. Testing Requirements**

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

- a. Emissions Limitation:

PE from the oven natural gas combustion shall not exceed 0.04 pound per hour and 0.2 ton per year and PE from the natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.07 pound per hour and 0.33 ton per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for total PE in natural gas combustion (7.6 lbs of particulates/mmft<sup>3</sup>). The maximum capacity of the oven is 5,882 ft<sup>3</sup>/hr and 51,529,400 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- b. Emission Limitation:

NO<sub>x</sub> emissions from the oven natural gas combustion shall not exceed 0.6 pound per hour and 2.6 ton per year and NO<sub>x</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.98 pound per hour and 4.29 tons per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table

1.4-1 (7/98) for uncontrolled NO<sub>x</sub> in natural gas combustion (100 lbs of NO<sub>x</sub>/mmft<sup>3</sup>). The maximum capacity of the oven is 5,882 ft<sup>3</sup>/hr and 51,529,400 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

c. Emission Limitation:

SO<sub>2</sub> emissions from the oven natural gas combustion shall not exceed 0.004 pound per hour and 0.02 ton per year and SO<sub>2</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.01 pound per hour and 0.03 ton per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for SO<sub>2</sub> in natural gas combustion (0.6 lb of SO<sub>2</sub>/mmft<sup>3</sup>). The maximum capacity of the oven is 5,882 ft<sup>3</sup>/hr and 51,529,400 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

d. Emission Limitation:

CO emissions from the oven natural gas combustion shall not exceed 0.5 pound per hour and 2.2 tons per year and CO emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.82 pounds per hour and 3.61 tons per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-1 (7/98) for CO in natural gas combustion (84 lbs of CO/mmft<sup>3</sup>). The maximum capacity of the oven is 5,882 ft<sup>3</sup>/hr and 51,529,400 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

e. Emission Limitation:

OC emissions from the oven natural gas combustion shall not exceed 0.03 pound per hour and 0.13 ton per year and OC emissions from natural gas combustion

associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.05 pound per hour and 0.24 ton per year.

**Applicable Compliance Method:**

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for volatile organic compounds (VOC) in natural gas combustion (5.5 lbs of VOC/mmft<sup>3</sup>). The maximum capacity of the oven is 5,882 ft<sup>3</sup>/hr and 51,529,400 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

f. **Emission Limitation:**

Visible particulate emissions from thermal incinerator stack shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

**Applicable Compliance Method:**

If required, compliance shall be demonstrated through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

g. **Emission Limitation:**

VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 21.3 tons per year.

**Applicable Compliance Method:**

Compliance with this emission limitation shall be based upon the sum total of the VOC emissions from the coating operations ( $VOC_{coat}$ ) and the solvent cleanup activities ( $VOC_{cs}$ ).  $VOC_{coat}$  is determined by summing the results of the 12 most recent monthly calculations required pursuant to section A.III and multiplying the results of that summation by the overall VOC control efficiency, R, as determined by the most recent performance test.  $VOC_{cs}$  is determined by summing the results of the 12 most recent monthly calculations.

h. **Emission Limitation:**

VOC emissions shall not exceed 0.14 kg/liter (1.17 lbs/gallon) of coating solids.

**Applicable Compliance Method:**

Compliance with this emission limitation shall be based upon the records required pursuant to sections A.III and the performance testing required by section A.V.2.

i. **Emission Limitation:**

VOC emissions shall not exceed 10 percent of the VOC's applied for each calendar month (90 percent reduction).

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to sections A.III and the performance testing required by section A.V.2.

j. Emission Limitation:

The permittee shall limit organic HAP emissions to no more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction).

Applicable Compliance Methods:

Calculation of the overall organic HAP control efficiency, R, shall be achieved in accordance with 40 CFR 63.5170, Equation 7 and the performance testing required by section A.V.2.

k. Emission Limitation:

The permittee shall limit organic HAP emissions to no more than 0.046 kg/liter (0.38 lbs/gallon) of solids applied during each 12-month compliance period.

Applicable Compliance Method:

Calculation of the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 and the performance testing required by section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. Consistent with U.S. EPA streamlining policy, the permittee may elect upon approval of Ohio EPA to utilize the applicable performance test methods and procedures per 40 CFR Part 63, Subpart SSSS in lieu of the performance test methods and procedures contained in 40 CFR Part 60, Subpart TT. Subpart SSSS performance test methods and procedures are generally more stringent than the performance test methods and procedures of Subpart TT
  - b. The emission testing shall be conducted within 3 to 6 months after start up. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.
  - c. The test(s) shall be conducted while the emissions units are operating at or near the maximum capacities for collected emissions from this emissions unit (K001) and K002, unless otherwise specified or approved by the Ohio EPA, Central District Office.
  - d. The permittee shall conduct a performance test for each capture and control system to determine the destruction or removal efficiency of each control device according to 40 CFR 63.5160(d) as described in section A.V.2.h, and the capture efficiency of each capture system according to 40 CFR 63.5160(e) as described in section A.V.2.i, while burning natural gas in the curing ovens and collecting emissions from this emissions unit (K001) and K002.

- e. The permittee shall determine the organic HAP weight fraction of each coating material applied by following one of the procedures:
  - i. the permittee may test the material in accordance with Method 311 of appendix A of 40 CFR 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the permittee.. The organic HAP content shall be calculated according to the following criteria and procedures:
    - (1) count only those organic HAP that are measured to be present at greater than or equal to 0.1 weight percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds;
    - (2) express the weight fraction of each organic HAP counted according to subparagraph (2). of this section as a value truncated to four places after the decimal point (for example, 0.3791); and
    - (3) calculate the total weight fraction of organic HAP in the tested material by summing the counted individual organic HAP weight fractions and truncating the result to three places after the decimal point (for example, 0.763);
  - ii. for coatings, the permittee may determine the total volatile matter content as weight fraction of nonaqueous volatile matter and use it as a substitute for organic HAP, using Method 24 of 40 CFR 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee;
  - iii. the permittee may use an alternative test method for determining the organic HAP weight fraction once the Administrator has approved it. The permittee shall follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval; and
  - iv. the permittee may use formulation data provided that the information represents each organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, weighted by the mass fraction of each raw material used in the material. Formulation data may be provided by the manufacturer of the coating material. In the event of any inconsistency between test data obtained with the test methods specified in paragraphs (i) through (iii) of term A.V.2.e and formulation data, the test data will govern.
- f. The permittee shall determine the VOC weight fraction of each coating material applied by following Method 24. For coatings, the permittee may determine the total

volatile matter content as weight fraction of nonaqueous volatile matter using Method 24 of 40 CFR 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee. Results of Method 24 testing on water-borne coatings shall be adjusted as described in section 12.6 of Method 24.

- g. The permittee shall determine the solids content of each coating material applied. The permittee may determine the volume solids content using ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 (incorporated by reference, see 40 CFR 63.14), or an EPA approved alternative method. The ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 determination may be performed by the manufacturer of the material and the results provided to the permittee. Alternatively, the permittee may rely on formulation data provided by material providers to determine the volume solids.
- h. The permittee shall conduct a performance test to establish the destruction or removal efficiency of the control device or the outlet VOC concentration achieved by the oxidizer, according to the methods and procedures in Methods 1 through 4 and 25 or 25A, 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- i. The permittee shall determine the capture efficiency of the enclosure on the coating operation by one of the following procedures:
  - i. for an enclosure that meets the criteria for a PTE, the permittee may assume it achieves 100 percent capture efficiency. The permittee must confirm that the capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR 51, Appendix M (or an EPA approved alternative method), and that all exhaust gases from the enclosure are delivered to a control device;
  - ii. the permittee may determine capture efficiency, CE, according to the protocols for testing with temporary total enclosures that are specified in Method 204A through F of 40 CFR 51, Appendix M. The permittee may exclude never-controlled work stations from such capture efficiency determinations; and
  - iii. as an alternative to the procedures specified in paragraphs (i)(i) and (ii) of this section, if a capture efficiency test is required, the permittee may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in Appendix A to 40 CFR 63, Subpart KK. The permittee may exclude never-controlled work stations from such capture efficiency determinations.
- j. During the performance test specified in paragraph (h) of this section, the permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before

any substantial heat exchange occurs. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 63, Subpart SSSS. This average combustion temperature minus 50 degrees Fahrenheit is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 60, Subpart TT.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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 Ohio EPA, Central District Office.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K001) - Strip paint line primer coater room and curing oven controlled with a thermal incinerator.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K002) - Strip paint line finish coater room and curing oven controlled with a thermal incinerator.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-31-05(A)(3)</p>	<p>See term A.I.2.a. and A.I.2.e below.</p> <p>Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities, shall not exceed 45.7 tons per year.</p> <p>Particulate emissions (PE) from oven natural gas combustion shall not exceed 0.06 pound per hour and 0.26 ton per year.</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions from oven natural gas combustion shall not exceed 0.78 pound per hour and 3.44 tons per year.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions from oven natural gas combustion shall not exceed 0.01 pound per hour and 0.02 ton per year.</p> <p>Carbon monoxide (CO) emissions from oven natural gas combustion shall not exceed 0.66 pounds per hour and 2.89 tons per year.</p> <p>Organic compound (OC) emissions from oven natural gas combustion shall not exceed 0.04 pound per hour and 0.19 ton per year.</p> <p>PE from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.07 pound per hour and 0.33 ton per year.</p> <p>NO<sub>x</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.98 pound per hour and 4.29 tons per year.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>SO<sub>2</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.01 pound per hour and 0.03 ton per year.</p> <p>CO emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.82 pounds per hour and 3.61 tons per year.</p> <p>OC emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.05 pound per hour and 0.24 ton per year.</p>
OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(E), 40 CFR Part 63.5120, 40 CFR Part 63, Subpart SSSS, 40 CFR 60.462 and OAC rule 3745-17-07(A).
OAC rule 3745-21-09(E)	Visible particulate emissions from thermal oxidizer stack shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).
40 CFR Part 60, Subpart TT and 40 CFR Part 63, Subpart SSSS	<p>VOC emissions shall not exceed 4.0 lbs/gallon of solids (when using the thermal oxidizer), or</p> <p>See term A.I.2.b below</p> <p>Compliance Option A:</p> <p>for Subpart TT: VOC emissions shall not exceed 0.14 kg/liter (1.17 lbs/gal) of coating solids applied for each calendar month with the use of the thermal oxidizer.</p> <p>See terms A.I.2.c and A.I.2.g below; and</p>
40 CFR Part 60, Subpart TT and 40 CFR Part 63, Subpart SSSS	<p>for Subpart SSSS: Organic HAP emissions shall not exceed 0.046 kg/liter (0.38 lbs/gallon) of solids applied during each rolling 12-month compliance period with the use of the thermal oxidizer.</p> <p>See terms A.I.2.d, A.I.2.f and A.I.2.g below.</p> <p>Compliance Option B:</p> <p>for Subpart TT: VOC emissions (stack and fugitive) shall not exceed 10 percent of the VOC's applied for each calendar month</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>(90 percent reduction with the use of the thermal oxidizer)</p> <p>See terms A.I.2.c and A.I.2.g below; and</p> <p>for Subpart SSSS: Organic HAP emissions (stack and fugitive) shall not exceed 2 percent of the organic HAP applied during each rolling 12-month compliance period (98 percent reduction)</p> <p>See terms A.I.2.a, A.I.2.d, A.I.2.f and A.I.2.g below.</p>

**2. Additional Terms and Conditions**

- 2.a** The permittee shall demonstrate compliance with the annual VOC emission limit on a 12-month rolling average basis. The annual limit, which is equivalent to 98 percent reduction based on the coating operations uncontrolled potential to emit, may be complied with through a combination of low-VOC content coatings and/or the use of the thermal oxidizer.
- 2.b** Pursuant to OAC rule 3745-21-09(B)(6), the 81 percent overall capture and control and 90 percent destruction efficiency option is available in lieu of complying with the 4.0 lbs/gallon solids emission limitation contained in OAC rule 3745-21-09(E).
- 2.c** Compliance with the VOC emission limits established pursuant to 40 CFR Part 60, Subpart TT shall be demonstrated on a calendar month basis using all coating materials applied in this emissions unit.
- 2.d** Compliance with the organic HAP emission limits established pursuant to 40 CFR Part 63, Subpart SSSS shall be demonstrated on a 12-month rolling average basis using all coating materials applied in this emissions unit. The permittee shall limit total organic HAP emissions, to no more than 2 percent of the HAP applied for each month during each 12-month compliance period (98 percent reduction).
- 2.e** The hourly and annual emission limitations from natural gas combustion in the process and in the regenerative thermal oxidizer were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.f** The applicable compliance date for 40 CFR Part 63, Subpart SSSS is June 10, 2005.
- 2.g** The permittee shall elect to use one of the following combinations of options from each Subpart on a monthly basis :
  - i. Option A for 40 CFR Part 60, Subpart TT; along with either:

- (a) Option A for 40 CFR Part 63, Subpart SSSS; or
- (b) Option B for 40 CFR Part 63, Subpart SSSS;
- ii. Option B for 40 CFR Part 60, Subpart TT along with either:
  - (a) Option A for 40 CFR Part 63, Subpart SSSS; or
  - (b) Option B for 40 CFR Part 63, Subpart SSSS.

The permittee shall employ all of the associated monitoring, record keeping, reporting and testing methods required by this permit at all times for the option that is being used to determine compliance for each month.

## **II. Operational Restrictions**

1. The emission capture system shall be maintained under negative pressure whenever the emissions unit is in operation and all emissions shall be vented to the regenerative thermal oxidizer.
2. The emission capture system shall be operated and maintained according to the capture system monitoring plan required under 40 CFR 63.5150(a)(4).
3. Per 40 CFR 60.464(c), the average thermal oxidizer combustion temperature shall not, for more than 3 hours, fall more than 28 degrees Celsius (50 degrees Fahrenheit) below the temperature at which compliance with TT-Option A or TT-Option B was demonstrated during the most recent measurement of oxidizer efficiency required by 40 CFR 60.8.
4. Per Table 1 to 40 CFR Part 63, Subpart SSSS, the 3-hour block average thermal oxidizer combustion temperature shall not fall below the combustion temperature limit established during the most recent emission test that demonstrated the emissions unit was in compliance.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall install, operate, monitor and inspect each monitoring, capture and control device as described below to comply with 40 CFR Part 63, Subpart SSSS:
  - a. Temperature monitoring of oxidizer per 40 CFR 63.5150(a)(3) and Table 1 to 40 CFR Part 63, Subpart SSSS. The permittee shall comply with the following:
    - i. install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every 3 months; or the chart recorder, data logger, or temperature indicator shall be replaced. The permittee shall replace the equipment either if the permittee choose not to perform the calibration, or if the equipment cannot be calibrated properly. Each temperature monitoring device shall be equipped

- with a continuous recorder. The device shall have an accuracy of  $\pm 1$  percent of the temperature being monitored in degrees Celsius, or  $\pm 1$  degree Celsius, whichever is greater;
- ii. install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone; and
  - iii. reduce the data to 3-hour block averages.
- b. Capture system monitoring per 40 CFR 63.5150(a)(4). The permittee shall develop a capture system monitoring plan containing the information specified in paragraphs (i.) and (ii.) of this section. The permittee shall monitor the capture system in accordance with paragraph (iii.) of this section. The permittee shall make the monitoring plan available for inspection by the permitting authority upon request.
- i. The monitoring plan shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures.
  - ii. The plan also shall specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in section A.I.1 and A.I.2. The operating limits shall represent the conditions indicative of proper operation and maintenance of the capture system.
  - iii. The permittee shall conduct monitoring in accordance with the plan.
2. For purposes of determining compliance with requirements in both OAC rules 3745-21-09(B)(3)(j) and (E), the permittee, when showing compliance with the VOC emission rate of shall not exceed 4.0 lbs/gallon of solids with the use of the thermal oxidizer limitation, shall collect and record the following information each day for emissions unit K002 and thermal oxidizer:
- a. The name and identification number of each coating, as applied.
  - b. The pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
  - c. The maximum VOC content (in pounds of VOC per gallon of coating solids, as applied) or the daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings.
  - d. The calculated, controlled  $\text{VOC}_{\text{coat}}$  emission rate, in pounds of VOC per gallon of coating solids, as applied. The controlled  $\text{VOC}_{\text{coat}}$  emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with paragraph (c) above and (ii) the overall control

efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

- e. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
  - f. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
3. For purposes of compliance with the requirements in OAC rule 3745-21-09(E) thru OAC rule 3745-21-09(B)(6), the permittee shall collect and record the following information each day for the thermal oxidizer:
    - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
    - b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
  4. For purposes of determining annual VOC emissions, the permittee shall calculate the mass of VOC<sub>cs</sub>'s used in solvent cleanup activities ( $M_{cs}$ ) on K002 during each calendar month by the following equation:

$$M_{cs} = \sum_{i=1}^n L_{csi} D_{csi} W_{csi}$$

where:

$n$  = the number of different VOC containing cleanup solvents used during the calendar month,

$D_{cs}$  = density of each VOC containing cleanup solvent used (pounds per gallon),

$L_{cs}$  = the volume of each VOC containing cleanup solvent used (gallons),

$M_{cs}$  = the mass of VOC containing cleanup solvent used (pounds),

$W_{cs}$  = the proportion of VOC's in each cleanup solvent (fraction by weight).

5. The permittee shall compute and record the average VOC content of coatings applied during each calendar month, using the following equations per 40 CFR 60.464(a), 40 CFR 60.463(c)(2)(ii), and 40 CFR 60.463(c)(1)(i)(A) - (C) as specified:
  - a. When determining compliance with 40 CFR Part 60, Subpart TT for either Option A or B, the permittee shall calculate the mass of VOC's used ( $M_o + M_d$ ) on K002 during each calendar month by the following equation:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj}$$

( $\sum L_{dj} D_{dj}$  will be 0 if no VOC solvent is added to the coatings, as received)

where:

n = the number of different coatings used during the calendar month,

m = the number of different VOC solvents added to coatings used during the calendar month,

$D_c$  = density of each coating, as received (kilograms per liter),

$D_d$  = density of each VOC-solvent added to coatings (kilograms per liter),

$L_c$  = the volume of each coating consumed, as received (liters),

$L_d$  = the volume of each VOC-solvent added to coatings (liters),

$M_d$  = the mass of VOC-solvent added to coatings (kilograms),

$M_o$  = the mass of VOC's in coatings consumed, as received (kilograms), and

$W_o$  = the proportion of VOC's in each coating, as received (fraction by weight).

6. When determining compliance with 40 CFR Part 60, Subpart TT using either Option A or B, the permittee shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance per 40 CFR 60.464(c) as described below:
- a. The temperature monitoring device shall have an accuracy of  $\pm 2.5^\circ\text{C}$  or  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius, whichever is greater.
  - b. Each owner or operator shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the thermal oxidizer used to control emissions from an affected facility remains more than  $28^\circ\text{C}$  ( $50^\circ\text{F}$ ) below the temperature at which compliance with 40 CFR Part 60, Subpart TT was demonstrated during the most recent measurement of oxidizer efficiency required by 40 CFR 60.8. The records required by 40 CFR 60.7 shall identify each such occurrence and its duration.
  - c. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the total volume of coating solids used ( $L_s$ ) on K002 in each calendar month by the following equation:

$$L_s = \sum_{i=1}^n V_{si} L_{ci}$$

where:

$n$  = the number of different coatings used during the calendar month,  
 $V_{si}$  = the proportion of solids in each coating, as received (fraction by volume), and  
 $L_{ci}$  = the volume of each coating consumed, as received (liter) .

- d. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the volume-weighted average mass of VOC's used per unit volume of coating solids applied ( $G$ ) on K002 during the calendar month by the following equation:

$$G = \frac{M_o + M_d}{L_s}$$

- e. When determining compliance with 40 CFR Part 60, Subpart TT, the permittee shall calculate the volume-weighted average of VOC emissions to the atmosphere ( $N$ ) from K002 during the calendar month by the following equation:

$$N = G(1 - R)$$

where:

$R$  = overall organic VOC control efficiency as calculated using Equation 7 of 40 CFR 60.463.

- f. When determining compliance with 40 CFR Part 60, Subpart TT using Option A, K002 shall be, if the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month ( $N$ ) is less than or equal to 0.14 kg/l of coating solids applied, in compliance.
- g. When determining compliance with 40 CFR Part 60, Subpart TT using Option B, the permittee shall determine overall reduction efficiency ( $R$ ) using the following formula:

$$R = EF$$

where:

$F$  = the fraction of total VOC's emitted by K002 that enter the control device using Equation 5 in 40 CFR 60.463, and

$E$  = the destruction efficiency of the control device using Equation 6 in 40 CFR 60.463.

7. Pursuant to 40 CFR 63.5190(a)(1), the permittee shall maintain records on which compliance option was used and the time periods (beginning and ending dates and times) each option was used on K002 .

8. When determining compliance with 40 CFR 63, Subpart SSSS using Option A, the permittee shall calculate the organic HAP emission rate based on solids applied for the 12-month compliance period,  $L_{\text{ANNUAL}}$ , using Equation 6 of 40 CFR 63.5170 and included below:

$$L_{\text{annual}} = \frac{\sum_{y=1}^{12} H_e}{\sum_{y=1}^{12} \left[ \sum_{i=1}^p C_{si} M_i \right]}$$

where:

p = the number of different coatings applied.

y = identifier for months.

$H_e$  = total monthly organic HAP emitted, in kg, as calculated using Equation 8 of 40 CFR 63.5170.

$M_i$  = the mass of each coating material applied on all work stations (K001 and K002) in kg.

The permittee shall collect and record the following information for K002 during each month in order to support calculation of the organic HAP emission rate based on solids applied for the 12-month compliance period,  $L_{\text{ANNUAL}}$ , as described above:

- a. The solids content of each coating material applied on K001, expressed as liters of solids/kg of material,  $C_{si}$ .
9. When determining compliance with 40 CFR Part 63, Subpart SSSS using Option A, the permittee shall calculate the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 and included below:

$$H_e = \sum_{A=1}^w \left[ \left( 1 - \left( DRE_K CE_A \right) \left( \sum_{i=1}^p \left( C_{hi} M_{Ai} + \sum_{j=1}^q C_{hij} M_{Aij} \right) \right) \right) \right]$$

where:

p = the number of different coatings applied,

q = the number of different solvent, thinner, reducer, diluent, or other non-solids-containing materials applied,

w = the number of always-controlled work stations (w = 2 for K001 and K002),

$DRE_K$  = the organic volatile matter destruction or removal efficiency of the thermal oxidizer, in percent, determined using the procedure in 40 CFR 63.5160(d) as described in section A.V.2.h, and

$CE_A$  = the organic volatile matter capture efficiency of the capture system for each work station, in percent, determined in accordance with 40 CFR 63.5160(e) as described in section A.V.2.i.

The permittee shall collect and record the following information for K002 at this facility during each month in order to support calculation of the organic HAP emitted, ( $H_e$ ) using equation 8 in 40 CFR 63.5170:

- a. The organic hazardous air pollutant(s) HAP content of each coating material applied in K002, expressed as a weight fraction, kg/kg ( $C_{hi}$ ).
  - b. The organic hazardous air pollutant(s) HAP content of each solvent applied in K002, expressed as a weight fraction, kg/kg ( $C_{hij}$ ).
10. When determining compliance with 40 CFR 63, Subpart SSSS using Option A, the permittee shall follow the procedures included below per 40 CFR 63.5170(d)(2) and 40 CFR 63.5170(f)(1):
- a. Determine the thermal oxidizer destruction or removal efficiency, DRE, using the procedure in 40 CFR 63.5160(d).
  - b. Whenever K002 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(3).
  - c. Determine the capture system capture efficiency, CE, for K002 in accordance with 40 CFR 63.5160(e).
  - d. Whenever K002 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(4).
  - e. Calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of 40 CFR 63.5170.
  - f. Measure the mass of each coating material applied on K002 during the month.
  - g. Determine the organic HAP content of each coating material applied on K002 during the month following the procedure in 40 CFR 63.5160(b).
  - h. Determine the solids content of each coating material applied on K002 during the month following the procedure in 40 CFR 63.5160(c).
  - i. Calculate the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 as described in section A.III.9. For periods when the oxidizer has not operated within its established operating limit, the control device efficiency is determined to be zero.
  - j. Calculate the organic HAP emission rate based on solids applied,  $L_{ANNUAL}$ , for the 12-month compliance period using Equation 6 of 40 CFR 63.5170.
  - k. The affected source is in compliance if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value

established in 40 CFR 63.5150(a)(3) for each 3-hour block period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in 40 CFR 63.5150(a)(4) for each 3-hour block period; and the organic HAP emission rate based on solids applied,  $L_{\text{ANNUAL}}$ , is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period.

11. When determining compliance with 40 CFR Part 63, Subpart SSSS upon using Option B, the permittee shall calculate the overall organic HAP control efficiency, R, achieved each month using equation number 7 in 40 CFR 63.5170:

$$R = 100 \frac{\sum_{A=1}^w \left[ (DRE_K CE_A) \left( \sum_{i=1}^p M_{Ai} C_{vi} + \sum_{j=1}^q M_{Aj} \right) \right]}{\sum_{i=1}^p M_i C_{vi} + \sum_{j=1}^q M_j}$$

where:

p = the number of different coatings applied,

q = the number of different solvent, thinner, reducer, diluent, or other non-solids-containing materials applied,

w = the number of always-controlled work stations (w = 2 for K001 and K002),

$DRE_K$  = the organic volatile matter destruction or removal efficiency of the thermal oxidizer, in percent, determined using the procedure in 40 CFR 63.5160(d); and

$CE_A$  = the organic volatile matter capture efficiency of the capture system for each work station, in percent, determined in accordance with 40 CFR 63.5160(e).

$M_i$  = the mass of each coating material applied on all work stations (K001 and K002) in kg

$M_j$  = the mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding  $H_2O$ ) applied on all work stations (K001 and K002) in kg

The permittee shall collect and record the following information for K002 during each month in order to support the calculation of the overall organic HAP control efficiency, R, as described above:

- The name and identification number for each coating material employed in K002 .
- The name and identification number for each solvent, thinner, reducer, diluent, or other non-solids-containing material (including  $H_2O$ ) applied on K002 .
- The mass of coating material applied in K002 in kg, ( $M_{Ai}$ ).
- The volatile matter content of each coating material applied in K002 , expressed as a weight fraction, kg/kg ( $C_{vi}$ ).
- The mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (including  $H_2O$ ) applied in K002 in kg ( $M_{Aj}$ ).

- f. The mass of solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding H<sub>2</sub>O), applied in kg(M<sub>j</sub>).
12. When determining compliance with 40 CFR 63, Subpart SSSS using Option B, the permittee shall follow the procedures included below per 40 CFR 63.5170(c)(2) and 40 CFR 63.5170(f)(1):
  - a. determine the thermal oxidizer destruction or removal efficiency, DRE, using the procedure in 40 CFR 63.5160(d);
  - b. whenever K002 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(3);
  - c. determine the capture system capture efficiency, CE, for K002 in accordance with 40 CFR 63.5160(e);
  - d. whenever K002 is operated, continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(4);
  - e. calculate the overall organic HAP control efficiency, R, achieved using Equation 7 of 40 CFR 63.5170; and
  - f. K002 is in compliance if each oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in 40 CFR 63.5150(a)(3) for each 3-hour block period, and each capture system operating parameter average value is greater than or less than (as appropriate) the operating parameter value established in 40 CFR 63.5150(a)(4) for each 3-hour block period; and the overall organic HAP control efficiency, R, is 98 percent or greater.
13. Pursuant to 40 CFR 60.465(e), the permittee shall maintain the following records for a period of at least two years:
  - a. all data and calculations used to determine monthly VOC emissions;
  - b. all data and calculations used to determine the monthly VOC emissions limit, where applicable; and,
  - c. daily records of the thermal oxidizer combustion temperature.

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. For purposes of compliance with both OAC rules 3745-21-09(B)(3)(m) and (E)

requirements, the permittee shall submit quarterly summaries of the following records:

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

3. When determining compliance with 40 CFR Part 60, Subpart TT using Option A:
  - a. the permittee shall, following the initial performance test, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462(a)(2). If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually; and
  - b. the permittee shall include in the initial compliance report required by 40 CFR 60.8 the weighted average of the VOC content of coatings used during a period of one calendar month for each affected facility per 40 CFR 60.465(a).
4. When determining compliance with 40 CFR Part 60, Subpart TT using either Option A and B:
  - a. the permittee shall include the following data in the initial compliance report required by 40 CFR 60.8 per 40 CFR 60.465(b):
    - i. the overall VOC destruction rate used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and
    - ii. the combustion temperature of the thermal incinerator used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and,
  - b. the permittee shall submit reports semiannually as specified in 40 CFR 60.7(c) (or more frequently if the Administrator, on a case-by-case basis, has determined that more frequent reporting is necessary to accurately assess the compliance status of the source) when the thermal oxidizer temperature drops as defined under 40 CFR 60.464(c). If no such periods occur, the owner or operator shall state this in the report.

5. The permittee shall submit the reports specified in the following paragraphs to the Ohio EPA, Central District Office and U.S. EPA Region V per 40 CFR 63.5180(a) - (f):
  - a. The permittee shall submit an initial notification required in 40 CFR 63.9(b) and 40 CFR 63.5180(b).
  - b. The permittee shall submit a Notification of Performance Test as specified in 40 CFR 63.7 and 63.9(e) if the permittee is complying with the emission standard using a control device. This notification and the site-specific test plan required under 40 CFR 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The permittee may consider the operating parameter identified in the site-specific test plan to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
  - c. The permittee shall submit a Notification of Compliance Status as specified in 40 CFR 63.9(h). The permittee shall submit the Notification of Compliance Status no later than 30 calendar days following the end of the initial 12-month compliance period described in 40 CFR 63.5130.
  - d. The permittee shall submit start-up, shutdown, and malfunction reports as specified in 40 CFR 63.10(d)(5) if a control device is used to comply with 40 CFR 63, Subpart SSSS.
    - i. If actions during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the permittee shall state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator.
    - ii. Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph A.IV.2.
6. The permittee shall submit semi-annual compliance reports in the following manner:
  - a. Compliance report due dates are as follows per 40 CFR 63.5130(a) and 63.5180(g)(1):
    - i. The first semiannual reporting period begins on July 1, 2006 and ends on December 31, 2006.
    - ii. The first semiannual compliance report shall cover the first semiannual reporting period and be postmarked or delivered no later than January 31, 2006.

- iii. Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
  - iv. Each subsequent compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  - v. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or part 71, and the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (i) through (iv) of term A.IV.2(a).
- b. The semi-annual compliance report shall contain the following information per 40 CFR 63.5180(g)(2) and 63.5180(h):
- i. Company name and address.
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
  - iv. Identification of the compliance option(s) specified in Table 1 of 40 CFR 63.5170 that the permittee used on each coating operation during the reporting period. If the permittee switched between SSSS-Option A and SSSS-Option B during the reporting period, the permittee must report the beginning dates for each compliance option.
  - v. A statement that there were no deviations from the standards during the reporting period.
  - vi. The total operating time of each affected source during the reporting period.
  - vii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
  - viii. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable).

7. The permittee shall submit annual reports which specify the total organic compound emissions from this emissions unit. Annual emission reports may be satisfied by including this emissions unit in the submission of the annual Fee Emission Report.
8. The permittee shall submit performance test reports as specified in term A.V.3.

## **V. Testing Requirements**

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

- a. Emissions Limitation:

PE from oven natural gas combustion shall not exceed 0.06 pound per hour and 0.26 ton per year and PE from the natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.07 pound per hour and 0.33 ton per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for total particulates in natural gas combustion (7.6 lbs of particulates/mmft<sup>3</sup>). The maximum capacity of the oven is 7,843 ft<sup>3</sup>/hr and 68,705,900 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- b. Emission Limitation:

NO<sub>x</sub> emissions from oven natural gas combustion shall not exceed 0.78 pound per hour and 3.44 tons per year and NO<sub>x</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.98 pound per hour and 4.29 tons per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-1 (7/98) for uncontrolled NO<sub>x</sub> in natural gas combustion (100 lbs of NO<sub>x</sub>/mmft<sup>3</sup>). The maximum capacity of the oven is 7,843 ft<sup>3</sup>/hr and 68,705,900 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- c. Emission Limitation:  
SO<sub>2</sub> emissions from oven natural gas combustion shall not exceed 0.01 pound per hour and 0.02 ton per year and SO<sub>2</sub> emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.01 pound per hour and 0.03 ton per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for sulfur dioxide in natural gas combustion (0.6 lb of SO<sub>2</sub>/mmft<sup>3</sup>). The maximum capacity of the oven is 7,843 ft<sup>3</sup>/hr and 68,705,900 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- d. Emission Limitation:  
CO emissions from oven natural gas combustion shall not exceed 0.66 pound per hour and 2.89 tons per year and CO emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.82 pounds per hour and 3.61 tons per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-1 (7/98) for carbon monoxide in natural gas combustion (84 lbs of CO/mmft<sup>3</sup>). The maximum capacity of the oven is 7,843 ft<sup>3</sup>/hr and 68,705,900 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- e. Emission Limitation:  
OC emissions from oven natural gas combustion from natural gas combustion shall not exceed 0.04 pound per hour and 0.19 ton per year and OC emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 emissions shall not exceed 0.05 pound per hour and 0.24 ton per year.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for volatile organic compounds (VOC) in natural gas combustion (5.5

lbs of VOC/mmft<sup>3</sup>). The maximum capacity of the oven is 7,843 ft<sup>3</sup>/hr and 68,705,900 ft<sup>3</sup>/yr and the maximum capacity of the thermal oxidizer is 9,804 cu ft/hr and 85,882,400 cu ft/yr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

f. Emission Limitation:

Visible particulate emissions from thermal incinerator stack shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

g. Emission Limitation:

VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 45.3 tons per year.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the sum total of the VOC emissions from the coating operations ( $VOC_{coat}$ ) and the solvent cleanup activities ( $VOC_{cs}$ ).  $VOC_{coat}$  is determined by summing the results of the 12 most recent monthly calculations required pursuant to section A.III and multiplying the results of that summation by the overall VOC control efficiency, R, as determined by the most recent performance test required by section A.V.2.  $VOC_{cs}$  is determined by summing the results of the 12 most recent monthly calculations required pursuant to section A.III.

h. Emission Limitation:

VOC emissions shall not exceed 0.14 kg/liter (1.17 lbs/gallon) of coating solids.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to sections A.III, and the performance testing required by section A.V.2.

i. Emission Limitation:

VOC emissions shall not exceed 10 percent of the VOC's applied for each calendar month (90 percent reduction).

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to sections A.III and the performance testing required by section A.V.2.

- j. Emission Limitation:  
The permittee shall limit organic HAP emissions, to no more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction).

Applicable Compliance Methods:

Calculation of the overall organic HAP control efficiency, R, shall be achieved in accordance with 40 CFR 63.5170, Equation 7 and the performance testing required by section A.V.2.

- k. Emission Limitation:  
The permittee shall limit organic HAP emissions to no more than 0.046 kg/liter (0.38 lbs/gallon) of solids applied during each 12-month compliance period.

Applicable Compliance Method:

Calculation of the organic HAP emitted during the month,  $H_e$ , for each month using Equation 8 of 40 CFR 63.5170 and the performance testing required by section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. Consistent with U.S. EPA streamlining policy, the permittee may elect to utilize the applicable performance test methods and procedures per 40 CFR Part 63, Subpart SSSS in lieu of the performance test methods and procedures contained in 40 CFR Part 60, Subpart TT. 40 CFR Part 63, Subpart SSSS performance test methods and procedures are generally more stringent than the performance test methods and procedures of 40 CFR Part 60, Subpart TT.
  - b. The emission testing shall be conducted within 3 to 6 months after start up. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.
  - c. The test(s) shall be conducted while the emissions units are operating at or near the maximum capacities for collected emissions from this emissions unit (K002) and K001, unless otherwise specified or approved by the Ohio EPA, Central District Office.
  - d. The permittee shall conduct a performance test for each capture and control system to determine the destruction or removal efficiency of each control device according to 40 CFR 63.5160(d) as described in section A.V.2.h, and the capture efficiency of each capture system according to 40 CFR 63.5160(e) as described in section A.V.2.i, while burning natural gas in the curing ovens and collecting emissions from this emissions unit (K002) and K001.
  - e. The permittee shall determine the organic HAP weight fraction of each coating material applied by following one of the procedures:

- i. Method 311. The permittee may test the material in accordance with Method 311 of appendix A of 40 CFR 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the permittee.. The organic HAP content shall be calculated according to the following criteria and procedures:
  - (a) Count only those organic HAP that are measured to be present at greater than or equal to 0.1 weight percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds.
  - (b) Express the weight fraction of each organic HAP counted according to subparagraph (2). of this section as a value truncated to four places after the decimal point (for example, 0.3791).
  - (c) Calculate the total weight fraction of organic HAP in the tested material by summing the counted individual organic HAP weight fractions and truncating the result to three places after the decimal point (for example, 0.763).
- ii. Method 24. For coatings, the permittee may determine the total volatile matter content as weight fraction of nonaqueous volatile matter and use it as a substitute for organic HAP, using Method 24 of 40 CFR 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee.
- iii. Alternative method. The permittee may use an alternative test method for determining the organic HAP weight fraction once the Administrator has approved it. The permittee shall follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval.
- iv. Formulation data. The permittee may use formulation data provided that the information represents each organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, weighted by the mass fraction of each raw material used in the material. Formulation data may be provided by the manufacturer of the coating material. In the event of any inconsistency between test data obtained with the test methods specified in paragraphs (i) through (iii) of term A.V.2.e and formulation data, the test data will govern.
- f. The permittee shall determine the VOC weight fraction of each coating material applied by following Method 24. For coatings, the permittee may determine the total volatile matter content as weight fraction of nonaqueous volatile matter using Method 24 of 40 CFR 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the

permittee. Results of Method 24 testing on water-borne coatings shall be adjusted as described in section 12.6 of Method 24.

- g. The permittee shall determine the solids content of each coating material applied. The permittee may determine the volume solids content using ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 (incorporated by reference, see 40 CFR 63.14), or an EPA approved alternative method. The ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 determination may be performed by the manufacturer of the material and the results provided to the permittee. Alternatively, the permittee may rely on formulation data provided by material providers to determine the volume solids.
- h. The permittee shall conduct a performance test to establish the destruction or removal efficiency of the control device or the outlet VOC concentration achieved by the oxidizer, according to the methods and procedures in Methods 1 through 4 and 25 or 25A, 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- i. The permittee shall determine the capture efficiency of the enclosure on the coating operation by one of the following procedures:
  - i. For an enclosure that meets the criteria for a PTE, the permittee may assume it achieves 100 percent capture efficiency. The permittee must confirm that the capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR 51, Appendix M (or an EPA approved alternative method), and that all exhaust gases from the enclosure are delivered to a control device.
  - ii. The permittee may determine capture efficiency, CE, according to the protocols for testing with temporary total enclosures that are specified in Method 204A through F of 40 CFR 51, Appendix M. The permittee may exclude never-controlled work stations from such capture efficiency determinations.
  - iii. As an alternative to the procedures specified in paragraphs (i)(i) and (ii) of this section, if a capture efficiency test is required, the permittee may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in Appendix A to 40 CFR 63, Subpart KK. The permittee may exclude never-controlled work stations from such capture efficiency determinations
- j. During the performance test specified in paragraph (h) of this section, the permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The permittee shall use the data collected during the performance test to calculate and record the average combustion

temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 63, Subpart SSSS. This average combustion temperature minus 50 degrees Fahrenheit is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 60, Subpart TT.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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 Ohio EPA, Central District Office.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K002) - Strip paint line finish coater room and curing oven controlled with a thermal incinerator.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	none

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None