



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

11/20/2015

Anthony Klapac
 Aleris Rolled Products, Inc.
 1 REYNOLDS ROAD
 ASHVILLE, OH 43103-0197

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0165000045
 Permit Number: P0118691
 Permit Type: Administrative Modification
 County: Pickaway

Certified Mail

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

Dear Permit Holder:

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

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

How to appeal this permit

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

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

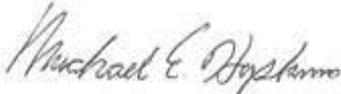
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: U.S. EPA
Ohio EPA-CDO; Kentucky



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Aleris Rolled Products, Inc.**

Facility ID:	0165000045
Permit Number:	P0118691
Permit Type:	Administrative Modification
Issued:	11/20/2015
Effective:	11/20/2015



Division of Air Pollution Control
Permit-to-Install
for
Aleris Rolled Products, Inc.

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Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

Authorization

Facility ID: 0165000045
Facility Description: Architectural metal work
Application Number(s): M0003309, M0003310
Permit Number: P0118691
Permit Description: Administrative modification to remove OAC rule 3745-17-10 and OAC rule 3745-17-07 limitations that are not applicable.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 11/20/2015
Effective Date: 11/20/2015

This document constitutes issuance to:

Aleris Rolled Products, Inc.
1 REYNOLDS ROAD
Ashville, OH 43103-0197

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

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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install
 Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

Authorization (continued)

Permit Number: P0118691

Permit Description: Administrative modification to remove OAC rule 3745-17-10 and OAC rule 3745-17-07 limitations that are not applicable.

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

Group Name: K001 & K002

Emissions Unit ID:	K001
Company Equipment ID:	COIL PRIMER COATING LINE
Superseded Permit Number:	01-08785
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	COIL FINISH COATING LINE
Superseded Permit Number:	01-08785
General Permit Category and Type:	Not Applicable

Group Name: K004 & K005

Emissions Unit ID:	K004
Company Equipment ID:	Primer Coating Line
Superseded Permit Number:	P0115180
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K005
Company Equipment ID:	Finishing Coating Line
Superseded Permit Number:	P0115180
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Central District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Central District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

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

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

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

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

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

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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



Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following emissions units contained in this permit are subject to MACT Subpart SSSS: K001, K002, K004, and K005. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Central District Office.
3. The following emissions units contained in this permit are subject to NSPS Subpart TT: K001, K002, K004, and K005. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Central District Office.



Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
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C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -K001 & K002: K001,K002,

EU ID	Operations, Property and/or Equipment Description
K001	Strip paint line primer coater room and curing oven controlled with a thermal incinerator.
K002	Strip paint line finish coater room and curing oven controlled with a thermal incinerator.

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05	<p><u>Emissions from K001 shall not exceed the following:</u></p> <p>Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities shall not exceed 21.3 tons per rolling, 12-month period.</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_x) 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 (SO₂) 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>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<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><u>Emissions from K002 shall not exceed the following:</u></p> <p>VOC emissions from the coating operation, including solvent cleanup activities shall not exceed 45.7 tons per rolling, 12-month period.</p> <p>PE from the oven natural gas combustion shall not exceed 0.06 pound per hour and 0.26 ton per year.</p> <p>NO_x emissions from the oven natural gas combustion shall not exceed 0.78 pound per hour and 3.44 ton per year.</p> <p>SO₂ emissions from the oven natural gas combustion shall not exceed 0.01 pound per hour and 0.02 ton per year.</p> <p>CO emissions from the oven natural gas combustion shall not exceed 0.66 pound per hour and 2.89 tons per year.</p> <p>OC emissions from the oven natural gas combustion shall not exceed 0.04 pound per hour and 0.19 ton per year.</p> <p><u>Emissions from natural gas combustion associated with the thermal oxidizer controlling K001 and K002 shall not exceed the following:</u></p> <p>PE shall not exceed 0.07 pound per hour and 0.33 ton per year.</p> <p>NO_x emissions shall not exceed 0.98 pound per hour and 4.29 tons per year.</p> <p>SO₂ emissions shall not exceed 0.01 pound per hour and 0.03 ton per year.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>CO emissions shall not exceed 0.82 pounds per hour and 3.61 tons per year.</p> <p>OC emissions shall not exceed 0.05 pound per hour and 0.24 ton per year.</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-21-09(E)	<p>VOC emissions shall not exceed 4.0 lb/gallon of solids when using the thermal oxidizer.</p> <p>See b)(2)b. and c)(1)</p>
c.	<p>40 CFR Part 60, Subpart TT (40 CFR 60.460 - 466)</p> <p>[In accordance with 40 CFR 60.460(a) and (b) this emissions unit is a metal coil coating line at an existing surface coating facility subject to the emissions limitations and control measures specified in this section]</p>	<p>Compliance Option A: 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>or</p> <p>Compliance Option B: VOC emissions (stack and fugitive) shall not exceed 10 percent of the VOCs applied for each calendar month (90 percent reduction with the use of the thermal oxidizer).</p> <p>See b)(2)c., b)(2)e., and b)(2)f.</p>
d.	<p>40 CFR Part 63, Subpart SSSS (40 CFR 63.5080 - 5209)</p> <p>[In accordance with 40 CFR 63.5090(a), this emissions unit is a metal coil coating line at an existing surface coating facility subject to the emissions limitations and control measures specified in this section]</p>	<p>Compliance Option A: 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>or</p> <p>Compliance Option B: 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 b)(2)d., b)(2)e., and b)(2)g.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR Part 60, Subpart A (60.1 - 60.19)	The permittee shall demonstrate compliance with the applicable provisions identified in 40 CFR Part 60, Subpart TT in accordance with the applicable provisions of 40 CFR Part 60, Subpart A and as referenced in 60.462, 60.463, 60.464, 60.465, and 60.466.
f.	40 CFR Part 63, Subpart A (63.1 - 63.16)	Table 2 to Subpart SSSS of 40 CFR Part 63 - Applicability of General Provisions to Subpart SSSS identifies which parts of the General Provisions in 40 CFR 63.1 - 16 apply.

(2) Additional Terms and Conditions

- a. 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.
- 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).
- 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.
- 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).
- e. 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, recordkeeping, 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.

- f. 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.
- g. 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.

c) 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).

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information on a monthly basis:
 - a. the name and identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material, in percent by weight;
 - d. the name and identification of each coating employed;
 - e. the number of gallons of each coating employed;
 - f. the VOC content of each coating, in percent by weight;
 - g. the total controlled VOC emissions from all the coatings and cleanup materials employed, in pounds or tons [i.e., the total VOC corrected to account for the control efficiency observed during the most recent performance tests that demonstrated compliance]; and

- (4) For purposes of determining annual VOC emissions, the permittee shall calculate the mass of VOC_{cs} used in solvent cleanup activities (M_{cs}) on the emissions unit 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 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 used (M_o+M_d) on the emissions unit 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 ± 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°C (50°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 the emissions unit 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 used per unit volume of coating solids applied (G) on the emissions unit 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 the emissions unit 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, the emissions unit 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 emitted by the emissions unit 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 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.
- (8) 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 the emissions unit.
- (9) 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 ± 1 percent of the temperature being monitored in degrees Celsius, or ± 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. 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 b)(1)d. 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.
- (10) 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_{annual} , using Equation 6 of 40 CFR 63.5170 and included below:

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

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 in kg.

The permittee shall collect and record the following information for the emissions unit 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_{annual} , as described above:

- a. The solids content of each coating material applied on the emissions unit, expressed as liters of solids/kg of material, C_{si} .
- (11) 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:

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

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,
- M_{Ai} = the mass of each coating material applied in the emissions unit, in kg,
- M_{Aij} = the mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material added to each solids-containing material in the emissions unit, in kg,
- 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 f)(2)g., 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 f)(2)h.

The permittee shall collect and record the following information for the emissions unit 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 the emissions unit, expressed as a weight fraction, kg/kg (C_{hi}).
 - b. The organic hazardous air pollutant(s) HAP content of each solvent applied in the emissions unit, expressed as a weight fraction, kg/kg (C_{hij}).
- (12) 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 the emissions unit 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 the emissions unit in accordance with 40 CFR 63.5160(e).
 - d. Whenever the emissions unit 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 the emissions unit during the month.
 - g. Determine the organic HAP content of each coating material applied on the emissions unit during the month following the procedure in 40 CFR 63.5160(b).
 - h. Determine the solids content of each coating material applied on the emissions unit 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 d)(11). 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_{annual} , is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period.
- (13) 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:

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

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,

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 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 in kg.

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

- a. The name and identification number for each coating material employed in the emissions unit.
 - b. The name and identification number for each solvent, thinner, reducer, diluent, or other non-solids-containing material (including H₂O) applied on the emissions unit.
 - c. The mass of coating material applied in the emissions unit, in kg, (M_{Ai}).
 - d. The volatile matter content of each coating material applied in the emissions unit, expressed as a weight fraction, kg/kg (C_{vi}).
 - e. The mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (including H₂O) applied in the emissions unit, in kg (M_{Aj}).
 - f. The mass of solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding H₂O), applied, in kg (M_j).
- (14) 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 the emissions unit 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 the emissions unit in accordance with 40 CFR 63.5160(e);
 - d. whenever the emissions unit 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. the emissions unit 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall notify the Director (Ohio EPA Central District Office) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA Central District Office) within 45 days after the exceedance occurs.
- (3) 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.

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

- (4) 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
- (5) When determining compliance with 40 CFR Part 60, Subpart TT using either Option A and B:
 - a. 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.
- (6) 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 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 startup, 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 e)(7).
- (7) 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. Each 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.
 - ii. Each 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.
 - iii. 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 compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs i. and ii. above.
 - 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, or:
 - vi. If deviations occurred, the total operating time of each affected source during the reporting period.
 - vii. If deviations occurred, information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
 - viii. If deviations occurred, 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).
- (8) 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations:

For emissions unit **K001**, VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 21.3 tons per rolling, 12-month period.

For emissions unit **K002**, VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 45.7 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with these emissions limitations shall be demonstrated in accordance with the monitoring and recordkeeping required by d)(1) and the performance testing required by f)(2).
 - b. Emissions Limitations:

For emissions unit **K001**, PE from the oven natural gas combustion shall not exceed 0.04 pound per hour and 0.2 ton per year.

For emissions unit **K002**, PE from the oven natural gas combustion shall not exceed 0.06 pound per hour and 0.26 ton per year.

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 emissions 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/MMft³). The maximum capacity of the oven associated with K001 is 5,882 ft³/hr and 51,529,400 ft³/yr. The maximum capacity of the oven associated with K002 is 7,843 ft³/hr and 68,705,900 ft³/yr. The maximum capacity of the thermal oxidizer is 9,804 ft³/hr and 85,882,400 ft³/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.

c. Emissions Limitations:

For emissions unit **K001**, NO_x emissions from the oven natural gas combustion shall not exceed 0.6 pound per hour and 2.6 ton per year.

For emissions unit **K002**, NO_x emissions from the oven natural gas combustion shall not exceed 0.78 pound per hour and 3.44 ton per year.

NO_x 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 emissions 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_x in natural gas combustion (100 lbs of NO_x /mmft³). The maximum capacity of the oven associated with K001 is 5,882 ft³/hr and 51,529,400 ft³/yr. The maximum capacity of the oven associated with K002 is 7,843 ft³/hr and 68,705,900 ft³/yr. The maximum capacity of the thermal oxidizer is 9,804 ft³/hr and 85,882,400 ft³/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.

d. Emissions Limitations:

For emissions unit **K001**, SO₂ emissions from the oven natural gas combustion shall not exceed 0.004 pound per hour and 0.02 ton per year.

For emissions unit **K002**, SO₂ emissions from the oven natural gas combustion shall not exceed 0.01 pound per hour and 0.02 ton per year.

SO₂ 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 emissions 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 SO₂ in natural gas combustion (0.6 lb of SO₂/mmft³). The maximum capacity of the oven associated with K001 is 5,882 ft³/hr and 51,529,400 ft³/yr. The maximum capacity of the oven associated with K002 is 7,843 ft³/hr and 68,705,900 ft³/yr. The maximum capacity of the thermal oxidizer is 9,804 ft³/hr and 85,882,400 ft³/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.

e. Emissions Limitations:

For emissions unit **K001**, CO emissions from the oven natural gas combustion shall not exceed 0.5 pound per hour and 2.2 tons per year.

For emissions unit **K002**, CO emissions from the oven natural gas combustion shall not exceed 0.66 pound per hour and 2.89 tons per year.

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 emissions 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/mmft³). The maximum capacity of the oven associated with K001 is 5,882 ft³/hr and 51,529,400 ft³/yr. The maximum capacity of the oven associated with K002 is 7,843 ft³/hr and 68,705,900 ft³/yr. The maximum capacity of the thermal oxidizer is 9,804 ft³/hr and 85,882,400 ft³/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.

f. Emissions Limitations:

For emissions unit **K001**, OC emissions from the oven natural gas combustion shall not exceed 0.03 pound per hour and 0.14 ton per year.

For emissions unit **K002**, OC emissions from the oven natural gas combustion shall not exceed 0.04 pound per hour and 0.19 ton per year.

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 emissions 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/mmft³). The maximum capacity of the oven associated with K001 is 5,882 ft³/hr and 51,529,400 ft³/yr. The maximum capacity of the oven associated with K002 is 7,843 ft³/hr and 68,705,900 ft³/yr. The maximum capacity of the thermal oxidizer is 9,804 ft³/hr and 85,882,400 ft³/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 or 25A, as appropriate.

g. Emissions Limitations:

VOC emissions shall not exceed 4.0 lb/gallon of solids when using the thermal oxidizer;

Or

The capture and control system shall provide not less than an 81 percent reduction, by weight, in the overall VOC emissions from the coating line and the reduction efficiency of the thermal oxidizer shall not be less than 90 percent, by weight, for the VOC emissions vented to it.

Applicable Compliance Method:

Compliance with these emissions limitations shall be demonstrated in accordance with the monitoring and recordkeeping required by d)(2) and d)(3) and the performance testing required by f)(2).

h. Emissions Limitations:

Option A: 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 by d)(4) thru d)(7) and the performance testing required by f)(2).

Or

Option B: 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 by d)(4) thru d)(7) and the performance testing required by f)(2).

i. Emissions Limitations:

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

Applicable Compliance Method:

Calculation of the organic HAP emitted during the month, for each calendar month, using Equation 8 of 40 CFR 63.5170 and the performance testing required by f)(2).

Or

Option B: 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 Method:

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 f)(2).

(2) If required, 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 test(s) shall be conducted while the emissions units are operating at or near the maximum capacities for collected emissions from emissions units K001 and K002, unless otherwise specified or approved by the Ohio EPA, Central District Office.
- c. 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 f)(2)g., and the capture efficiency of each capture system according to 40 CFR 63.5160(e) as described in section f)(2)h., while burning natural gas in the curing ovens and collecting emissions from emissions units K001 and K002.
- d. 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:
 - (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 f)(2)d.i.(a) above as a value truncated to four places after the decimal point (for example, 0.3791); and
 - (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. 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 f)(2)d.i. through f)(2)d.iii. and formulation data, the test data will govern.

- e. 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.
- f. 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.
- g. 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 U.S. EPA Methods 1 through 4 and 25 or 25A, 40 CFR Part 60, Appendix A or U.S. EPA Method 320, 40 CFR Part 63, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- h. 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 U.S. EPA Method 204 of 40 CFR 51, Appendix M (or a U.S. 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 U.S. EPA Methods 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 f)(2)h.i. and f)(2)h.ii., 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.

During the performance test specified in paragraph f)(2)g. 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.

The average combustion temperature is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 63, Subpart SSSS.

The 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.

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.



Final Permit-to-Install
Aleris Rolled Products, Inc.
Permit Number: P0118691
Facility ID: 0165000045
Effective Date: 11/20/2015

g) Miscellaneous Requirements

- (1) None.

2. Emissions Unit Group -K004 & K005: K004,K005,

EU ID	Operations, Property and/or Equipment Description
K004	Primer Coating Line
K005	Finishing Coating Line

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) <i>June 30, 2008</i>	<p>Emissions Unit K004: Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities shall not exceed 22.41 tons per rolling, 12-month period.</p> <p>Emissions Unit K005: VOC emissions from the coating operation, including solvent cleanup activities shall not exceed 69.62 tons per rolling, 12-month period.</p> <p>Particulate emissions (PE) from the oven natural gas combustion shall not exceed 0.0075 pound per million British thermal units (lb/MMBtu).</p> <p>Nitrogen oxide (NO_x) emissions from the oven natural gas combustion shall not exceed 0.098 lb/MMBtu.</p> <p>Sulfur dioxide (SO₂) emissions from the oven natural gas combustion shall not exceed 0.0006 lb/MMBtu.</p> <p>Carbon monoxide (CO) emissions from the oven natural gas combustion shall not exceed 0.082 lb/MMBtu.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Organic compound (OC) emissions from the oven natural gas combustion shall not exceed 4.0 lb/MMBtu.</p> <p><u>Emissions from the combustion of natural gas used to heat the Recuperative Thermal Oxidizer (RTO) serving the Primer Coating Line #2 (K004) and the Finishing Coating Line #2 (K005) shall not exceed the following:</u></p> <p>PE shall not exceed 0.0075 pound per MMBtu and 0.79 ton per year.</p> <p>NO_x emissions shall not exceed 0.098 pound per MMBtu and 10.31 tons per year.</p> <p>SO₂ emissions shall not exceed 0.0006 pound per MMBtu and 0.06 ton per year.</p> <p>CO emissions shall not exceed 0.082 pound per MMBtu and 8.66 tons per year.</p> <p>VOC emissions shall not exceed 0.0054 pound per MMBtu and 0.57 ton per year.</p> <p>See b)(2)a., b)(2)b., and b)(2)c.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii) <i>June 30, 2008</i>	See b)(2)b.
c.	OAC rule 3745-21-09(E)	<p>VOC emissions shall not exceed 4.0 lb/gallon of solids when using the thermal oxidizer.</p> <p>See b)(2)d. and c)(1)</p>
d.	<p>40 CFR Part 60, Subpart TT (40 CFR 60.460 - 466)</p> <p>[In accordance with 40 CFR 60.460(a) and (b) this emissions unit is a metal coil coating line at an existing surface coating facility subject to the emissions limitations and control measures specified in this section]</p>	<p>Compliance Option A:</p> <p>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>or</p> <p>Compliance Option B:</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		VOC emissions (stack and fugitive) shall not exceed 10 percent of the VOCs applied for each calendar month (90 percent reduction with the use of the thermal oxidizer). See b)(2)e., b)(2)g., and b)(2)h.
e.	40 CFR Part 63, Subpart SSSS (40 CFR 63.5080 - 5209) [In accordance with 40 CFR 63.5090(a), this emissions unit is a metal coil coating line at an existing surface coating facility subject to the emissions limitations and control measures specified in this section]	Compliance Option A: 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. or Compliance Option B: 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 b)(2)f., b)(2)g., and b)(2)i.
f.	40 CFR Part 60, Subpart A (60.1 - 60.19)	The permittee shall demonstrate compliance with the applicable provisions identified in 40 CFR Part 60, Subpart TT in accordance with the applicable provisions of 40 CFR Part 60, Subpart A and as referenced in 60.462, 60.463, 60.464, 60.465, and 60.466.
g.	40 CFR Part 63, Subpart A (63.1 - 63.16)	Table 2 to Subpart SSSS of 40 CFR Part 63 - Applicability of General Provisions to Subpart SSSS identifies which parts of the General Provisions in 40 CFR 63.1 - 16 apply.

(2) Additional Terms and Conditions

- a. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that Best Available Technology (BAT) is no longer required by state regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, paragraph

(A)(3)(a)(ii) of OAC rule 3745-31-05 (the less than 10 tons per year BAT exemption) has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-31-05(A)(3)(a)(ii), the requirement to satisfy BAT for pollutant(s) less than 10 tons per year still exists as part of the federally-approved SIP.

- b. The following rule paragraph will apply when U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the SIP:
 - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC, PE, NO_x, SO₂, and CO emissions from the oven natural gas combustion since the uncontrolled potential to emit for each pollutant is less than 10 tons/yr.
- c. The lb/MMBtu emission limitations from natural gas combustion in the coating process oven and 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.
- d. 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).
- e. 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.
- f. 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 or 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).
- g. The permittee shall elect to use one of the following combinations of Compliance Options from 40 CFR Part 60, Subpart TT and 40 CFR Part 63, Subpart SSSS on a monthly basis:
 - i. Compliance Option A for 40 CFR Part 60, Subpart TT; along with either:
 - (a) Compliance Option A for 40 CFR Part 63, Subpart SSSS; or
 - (b) Compliance Option B for 40 CFR Part 63, Subpart SSSS.
 - ii. Compliance Option B for 40 CFR Part 60, Subpart TT; along with either:

- (a) Compliance Option A for 40 CFR Part 63, Subpart SSSS; or
- (b) Compliance Option B for 40 CFR Part 63, Subpart SSSS.

The permittee shall employ all of the associated monitoring, recordkeeping, 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.

- h. 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.
 - i. 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.
- c) 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).
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information on a monthly basis:
 - a. the name and identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material, in percent by weight;
 - d. the name and identification of each coating employed;
 - e. the number of gallons of each coating employed;
 - f. the VOC content of each coating, in percent by weight;
 - g. the total controlled VOC emissions from all the coatings and cleanup materials employed, in pounds or tons [i.e., the total VOC corrected to account for the control efficiency observed during the most recent performance tests that demonstrated compliance]; and

- (4) For purposes of determining annual VOC emissions, the permittee shall calculate the mass of VOC_{cs} used in solvent cleanup activities (M_{cs}) on the emissions unit 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 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 used (M_o+M_d) on the emissions unit 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 ± 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°C (50°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 the emissions unit 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 used per unit volume of coating solids applied (G) on the emissions unit 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 the emissions unit 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, the emissions unit 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 emitted by the emissions unit 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 60.465(e), the permittee shall maintain the following records for a period of at least two years:
- all data and calculations used to determine monthly VOC emissions;
 - all data and calculations used to determine the monthly VOC emissions limit, where applicable; and
 - daily records of the thermal oxidizer combustion temperature.
- (8) 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 the emissions unit.
- (9) 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:
- 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:
 - 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 ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 degrees Celsius, whichever is greater;
 - 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 b)(1)e. 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.
- (10) 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_{annual} , using Equation 6 of 40 CFR 63.5170 and included below:

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

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 in kg.

The permittee shall collect and record the following information for the emissions unit 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_{annual} , as described above:

- a. The solids content of each coating material applied on the emissions unit, expressed as liters of solids/kg of material, C_{si} .
- (11) 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:

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

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,
- M_{Ai} = the mass of each coating material applied in the emissions unit, in kg,
- M_{Aij} = the mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material added to each solids-containing material in the emissions unit, in kg,
- 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 f)(2)g., 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 f)(2)h.

The permittee shall collect and record the following information for the emissions unit 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 the emissions unit, expressed as a weight fraction, kg/kg (C_{hi}).
 - b. The organic hazardous air pollutant(s) HAP content of each solvent applied in the emissions unit, expressed as a weight fraction, kg/kg (C_{hij}).
- (12) 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 the emissions unit 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 the emissions unit in accordance with 40 CFR 63.5160(e).
 - d. Whenever the emissions unit 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 the emissions unit during the month.
 - g. Determine the organic HAP content of each coating material applied on the emissions unit during the month following the procedure in 40 CFR 63.5160(b).
 - h. Determine the solids content of each coating material applied on the emissions unit 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 d)(11). 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_{annual} , is 0.046 kg organic HAP per liter solids applied or less for the 12-month compliance period.
- (13) 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:

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

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,

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 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 in kg.

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

- a. The name and identification number for each coating material employed in the emissions unit.
 - b. The name and identification number for each solvent, thinner, reducer, diluent, or other non-solids-containing material (including H_2O) applied on the emissions unit.
 - c. The mass of coating material applied in the emissions unit, in kg, (M_{Ai}).
 - d. The volatile matter content of each coating material applied in the emissions unit, expressed as a weight fraction, kg/kg (C_{vi}).
 - e. The mass of each solvent, thinner, reducer, diluent, or other non-solids-containing material (including H_2O) applied in the emissions unit, in kg (M_{Aj}).
 - f. The mass of solvent, thinner, reducer, diluent, or other non-solids-containing material (excluding H_2O), applied, in kg (M_j).
- (14) 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 the emissions unit 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 the emissions unit in accordance with 40 CFR 63.5160(e);
 - d. whenever the emissions unit 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. the emissions unit 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall notify Ohio EPA Central District Office in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. This notification shall include a copy of such record and shall be sent to Ohio EPA Central District Office no later than 45 days after the exceedance occurs.
- (3) 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.

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

- (4) 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
- (5) When determining compliance with 40 CFR Part 60, Subpart TT using either Option A and B:
 - a. 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.
- (6) 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 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 startup, 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 e)(7).
- (7) 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. Each 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.
 - ii. Each 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.
 - iii. 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 compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs i. and ii. above.
 - 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, or:
 - vi. If deviations occurred, the total operating time of each affected source during the reporting period.
 - vii. If deviations occurred, information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
 - viii. If deviations occurred, 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).
- (8) 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.
- f) **Testing Requirements**
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations:

PE from oven natural gas combustion shall not exceed 0.0075 lb/MMBtu [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly natural 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 filterable PE in natural gas combustion (1.9 lbs of PE /MM ft³), and total condensable PE in natural gas combustion (5.7 lbs of PE/MM ft³).

The maximum capacity of the oven is 20,600 ft³/hr and 180,456,000 ft³/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 and 202.

b. Emissions Limitations:

NO_x emissions from the oven natural gas combustion shall not exceed 0.098 lb/MMBtu [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly natural 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_x in natural gas combustion (100 lbs of NO_x/MMft³).

The maximum capacity of the oven is 20,600 ft³/hr and 180,456,000 ft³/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. Emissions Limitations:

SO₂ emissions from the oven natural gas combustion shall not exceed 0.0006 lb/MMBtu [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly natural 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 SO₂ in natural gas combustion (0.6 lb of SO₂/MMft³).

The maximum capacity of the oven is 20,600 ft³/hr and 180,456,000 ft³/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. Emissions Limitations:

CO emissions from the oven natural gas combustion shall not exceed 0.082 lb/MMBtu [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly natural 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/MMft³).

The maximum capacity of the oven is 20,600 ft³/hr and 180,456,000 ft³/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. Emissions Limitations:

OC emissions from the oven natural gas combustion shall not exceed 4.0 lb/MMBtu [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum hourly natural 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/MMft³).

The maximum capacity of the oven is 20,600 ft³/hr and 180,456,000 ft³/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 or 25A, as appropriate.

f. Emissions Limitation:

Emissions Unit K004: VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 22.41 tons per rolling, 12-month period.

Emissions Unit K005: VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 69.62 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with these emissions limitations shall be based upon the sum total of VOC emissions from the coating operations and solvent cleanup activities for each emissions unit. VOC emissions from coating operations are determined by summing the results of the 12 previous recent monthly calculations required pursuant to d)(1) and multiplying the results of that summation by the overall VOC control efficiency, as determined by the most recent performance test that demonstrated that the emissions unit was in compliance.

g. Emissions Limitations:

VOC emissions shall not exceed 4.0 lb/gallon of solids when using the thermal oxidizer;

Or

The capture and control system shall provide not less than an 81 percent reduction, by weight, in the overall VOC emissions from the coating line and the reduction efficiency of the thermal oxidizer shall not be less than 90 percent, by weight, for the VOC emissions vented to it.

Applicable Compliance Method:

Compliance with these emissions limitations shall be demonstrated in accordance with the monitoring and recordkeeping required by d)(2) and d)(3) and the performance testing required by f)(2).

h. Emissions Limitations:

Option A: 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 by d)(4) thru d)(7) and the performance testing required by f)(2).

Or

Option B: 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 by d)(4) thru d)(7) and the performance testing required by f)(2).

i. Emissions Limitations:

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

Applicable Compliance Method:

Calculation of the organic HAP emitted during the month, for each calendar month, using Equation 8 of 40 CFR 63.5170 and the performance testing required by f)(2).

Or

Option B: 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 Method:

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 f)(2).

j. Emissions Limitations:

Emissions from the combustion of natural gas used to heat the RTO serving the Primer Coating Line #2 (K004) and the Finishing Coating Line #2 (K005) shall not exceed the following:

- PE shall not exceed 0.0075 pound per MMBtu and 0.79 ton per year.
- NO_x emissions shall not exceed 0.098 pound per MMBtu and 10.31 tons per year.
- SO₂ emissions shall not exceed 0.0006 pound per MMBtu and 0.06 ton per year.
- CO emissions shall not exceed 0.082 pound per MMBtu and 8.66 tons per year.
- VOC emissions shall not exceed 0.0054 pound per MMBtu and 0.57 ton per year.

Applicable Compliance Method:

Compliance with these emissions limitations may be demonstrated by multiplying the maximum hourly and maximum annual gas burning capacity of the units by the following emission factors from AP-42 "Compilation of Air Pollutant Emission Factors", Tables 1.4-1 and 1.4-2 (7/98):

<u>Pollutant</u>	<u>Emissions Factor</u>
total PE	7.6 lb of PE /MMft ³
NO _x	100 lb of NO _x /MMft ³
SO ₂	0.6 lb of SO ₂ /MMft ³
CO	84 lbs of CO/MMft ³
VOC	5.5 lbs of VOC/MMft ³

(2) If required, 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 test(s) shall be conducted while the emissions units are operating at or near the maximum capacities for collected emissions from emissions units K004 and K005, unless otherwise specified or approved by the Ohio EPA, Central District Office.
- c. 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 f)(2)g., and the capture efficiency of each capture system according to 40 CFR 63.5160(e) as described in f)(2)h., while burning natural gas in the curing ovens and collecting emissions from emissions units K004 and K005.
- d. The permittee shall determine the organic HAP weight fraction of each coating material applied by following one of the following procedures:
 - i. the permittee may determine the coating material organic HAP content in accordance with U.S. EPA Method 311 of appendix A of 40 CFR 63. U.S. EPA 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 f)(2)d.i.(a) above as a value truncated to four places after the decimal point (for example, 0.3791); and
 - (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. the permittee may determine the total volatile matter content of a coating as weight fraction of nonaqueous volatile matter and use it as a substitute for organic HAP, using U.S. EPA Method 24 of 40 CFR 60, appendix A. The U.S. EPA 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 of a coating 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 coating 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. Coating 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 f)(2)d.i. through f)(2)d.iii. and formulation data, the test data will govern.

- e. The permittee shall determine the VOC weight fraction of each coating material applied using U.S. EPA Method 24. For coatings, the permittee may determine the total volatile matter content as weight fraction of nonaqueous volatile matter using U.S. EPA Method 24 of 40 CFR 60, appendix A. The U.S. Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee. Results of U.S. EPA Method 24 testing on water-borne coatings shall be adjusted as described in section 12.6 of U.S. EPA Method 24.
- f. 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.
- g. 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 U.S. EPA Methods 1 through 4 and 25 or 25A, 40 CFR Part 60, Appendix A or U.S. EPA Method 320, 40 CFR Part 63, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- h. 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 U.S. EPA Method 204 of 40 CFR 51, Appendix M (or a U.S. 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 U.S. EPA Methods 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 f)(2)h.i. and f)(2)h.ii., 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.

During the performance test specified in paragraph f)(2)g. 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.

The average combustion temperature is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 63, Subpart SSSS.

The 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.

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.

- g) Miscellaneous Requirements
 - (1) None.