



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

3/9/2009

Certified Mail

Jesse Aiken
Alcoa Home Exteriors, Inc.
2615 Campbell Road
Sidney, OH 45365

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0575010103
Permit Number: 05-14417
Permit Type: Initial Installation
County: Shelby

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,

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

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

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



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

FINAL

**Air Pollution Permit-to-Install
for
Alcoa Home Exteriors, Inc.**

Facility ID: 0575010103
Permit Number: 05-14417
Permit Type: Initial Installation
Issued: 3/9/2009
Effective: 3/9/2009



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install
 for
 Alcoa Home Exteriors, Inc.

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

 1. Federally Enforceable Standard Terms and Conditions 4

 2. Severability Clause 4

 3. General Requirements 4

 4. Monitoring and Related Record Keeping and Reporting Requirements 5

 5. Scheduled Maintenance/Malfunction Reporting 6

 6. Compliance Requirements 6

 7. Best Available Technology 7

 8. Air Pollution Nuisance 7

 9. Reporting Requirements 7

 10. Applicability 8

 11. Construction of New Sources(s) and Authorization to Install 8

 12. Permit-To-Operate Application 9

 13. Construction Compliance Certification 9

 14. Public Disclosure 9

 15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission
 Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 9

 16. Fees 9

 17. Permit Transfers 10

 18. Risk Management Plans 10

 19. Title IV Provisions 10

B. Facility-Wide Terms and Conditions 11

C. Emissions Unit Terms and Conditions 13

 1. K002, 54" Coil Coating Line 14



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

Authorization

Facility ID: 0575010103
Facility Description: Coating of metal coils
Application Number(s): A0006047
Permit Number: 05-14417
Permit Description: Modifications to and existing Coil Coating Line K002.
Permit Type: Initial Installation
Permit Fee: \$250.00
Issue Date: 3/9/2009
Effective Date: 3/9/2009

This document constitutes issuance to:

Alcoa Home Exteriors, Inc.
2615 Campbell Road
Sidney, OH 45365

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

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

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

Authorization (continued)

Permit Number: 05-14417
 Permit Description: Modifications to and existing Coil Coating Line K002.

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

Emissions Unit ID:	K002
Company Equipment ID:	54" Coil Coating Line
Superseded Permit Number:	05-14417
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

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

2. Severability Clause

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

3. General Requirements

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



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

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southwest 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, Southwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southwest 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, Southwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

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

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:



- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Southwest 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, Southwest 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, Southwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted



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

10. Applicability

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

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

14. Public Disclosure

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

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

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

16. Fees

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Southwest District Office must be notified in writing of any transfer of this permit.

18. Risk Management Plans

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

19. Title IV Provisions

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 05-14417
Facility ID: 0575010103
Effective Date: 3/9/2009

C. Emissions Unit Terms and Conditions



1. K002, 54" Coil Coating Line

Operations, Property and/or Equipment Description:

54" Coil 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Emissions from natural gas and/or propane combustion in the air make-up units, oven burners, pretreat oven burners, and thermal oxidizer shall not exceed 3.27 lbs NO_x/hr and 5.14 lbs CO/hr.</p> <p>Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities, shall not exceed 425.51 tons per rolling 12-month period.</p> <p>Carbon monoxide (CO) emissions from from this emissions unit, shall not exceed 27.71 tons per rolling 12-month period, including the CO generated by the combustion of the VOC's generated in the coating operations and combusted in the thermal incinerator.</p> <p>Nitrogen Oxide (NO_x) emissions from this emissions unit, shall not exceed 78.39 tons per rolling 12-month period, including the NO_x generated by the combustion of the VOC's generated in the coating operations and combusted in the thermal incinerator.</p> <p>This emissions unit shall be equipped with a thermal oxidizer that can be</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>employed in order to assure compliance with applicable State and Federal air pollution rules and regulations, which constitutes BAT for this emissions unit.</p> <p>b)(2)a, below.</p>
b.	OAC rule 3745-21-09(E) and OAC rule 3745-21-09(B)(6)	<p>When the capture and control system is not employed, VOC emissions shall not exceed 2.6 lbs/gallon of coating excluding water and exempt solvents, as the maximum VOC content of each coating or as a daily volume-weighted average;</p> <p>or</p> <p>when the capture and control system is employed, VOC emissions shall not exceed 4.0 lbs/gallon of solids as the maximum VOC emission rate of each coating, or as a daily volume-weighted average;</p> <p>or</p> <p>in lieu of OAC rule 3745-21-09(E) requirements, 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.</p>
c.	40 CFR Part 60, Subpart TT	<p>Compliance Option TT_n:</p> <p>VOC emissions shall not exceed 0.28 kg/liter (2.34 lb/gal) of coating solids applied for each calendar month without the use of the thermal oxidizer</p> <p>Compliance Option TT_c:</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>Compliance Option TT_{ce}:</p> <p>VOC emissions (stack and fugitive) shall</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>not exceed 10 percent of the VOC's applied for each calendar month.</p> <p>Compliance Option TT_i:</p> <p>VOC emissions shall not exceed a value between 0.14 (or a 90-percent emission reduction) and 0.28 kg/liter (between 1.17 and 2.34 lb/gal) of coating solids applied for each calendar month with intermittent use of the thermal oxidizer.</p> <p>b)(2)b, below</p>
d.	40 CFR Part 63, Subpart SSSS	<p>Compliance Option SSSS_e:</p> <p>Organic HAP emissions shall not exceed 0.046 kg/liter (0.38 lbs/gallon) of solids applied during each rolling 12-month compliance period.</p> <p>Compliance Option SSSS_{ce}: 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>b)(2).b through (d), below.</p>
e.	OAC rule 3745-31-05(A)(3)(a)(ii)	b)(2)e, below.
f.	OAC rule 3745-17-10	b)(2)f, below.
g.	OAC rule 3745-17-07(A)	b)(2)h, below.
h.	OAC rule 3745-17-11	b)(2)g, below.

(2) Additional Terms and Conditions

- a. The emission limitations for hourly NO_x and CO from natural gas and propane combustion in the air make-up units, oven burners, pretreat oven burners, and thermal oxidizer were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, establishing record keeping and reporting requirements to ensure compliance with these limitations is not necessary.
- b. The permittee shall employ all of the associated monitoring, record keeping, reporting and testing methods required by this permit at all times for the compliance options that are being used to determine compliance for 40 CFR 60, Subpart TT, and 40 CFR 63, Subpart SSSS.
- c. Compliance with the compliance options established pursuant to 40 CFR Part 63, Subpart SSSS may be demonstrated for each individual coating line, to multiple lines as a group, or to the entire affected source.



- d. Compliance with 40 CFR 63, Subpart SSSS, Option SSSS_e, shall be demonstrated by use of
 - i. "as purchased" compliant coatings;
 - ii. "as applied" compliant coatings;
 - iii. using only always-controlled work stations vented to the thermal oxidizer;
or
 - iv. combination of compliant coatings and use of the thermal oxidizer and maintaining an acceptable equivalent emission rate
 - e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) and SO₂ emissions from this emissions unit since the potential emissions are less than ten tons per year.
 - f. OAC rule 3745-17-10 regulates in-direct heat transfer fuel burning equipment. Since this emissions unit is direct heat transfer fuel burning equipment, the requirements of OAC rule 3745-17-10 do not apply.
 - g. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11, does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14), means the total weight of all materials introduced into the source operation, including solid fuels, but excluding gaseous fuels and liquid fuels when they are used solely as fuels, and excluding air introduced for the purpose of combustion.
 - * The burning of natural gas or propane is the only source of PE from this emissions unit.
 - h. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rules 3745-17-08, 3745-17-09, 3745-17-10, or 3745-17-11.
- c) Operational Restrictions
- (1) Per 40 CFR 60.464(c), when the emission unit is operating and the thermal oxidizer is used to demonstrate compliance with compliance options TT_c, TT_{ce}, or TT_i, the permittee shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance. This device shall have an accuracy of + or - 2.5 degrees C. or + or - 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater
 - (2) When the emission unit is operating and the thermal oxidizer is used to demonstrate compliance with compliance options SSSS_e or SSSS_{ce}, the emission capture system



shall be operated and maintained according to the capture system monitoring plan required under 40 CFR 63.5150(a)(4).

- (3) Per Table 1 to 40 CFR Part 63, Subpart SSSS, when the emission unit is operating and the thermal oxidizer is used to demonstrate compliance with compliance options SSSS_e or SSSS_{ce}, the 3-hour block 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
- (4) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSS_e, using only always-controlled work stations vented the thermal oxidizer, the permittee shall continuously monitor the operating parameter established in accordance with 40 CFR 63.5150(a)(3).
- (5) When a control device is employed to demonstrate compliance with the emissions limitations of 40 CFR Part 63, Subpart SSSS, the permittee shall maintain a monitoring system, including any applicable records, that would demonstrate continuous compliance with the average operating parameter values as established in 40 CFR 63.5150(a)(3) for each 3-hour block period, each capture system operating parameter value as established in 40 CFR 63.5150(a)(4) for each 3-hour block period; and the appropriate organic HAP emission rate based on solids applied, as required by 40 CFR Part 63, Subpart SSSS.
- (6) When determining compliance with OAC rule 3745-21-09(E) by the use of the option provided in OAC rule 3745-21-09(B)(6), the permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the coating line is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

d) Monitoring and/or Recordkeeping Requirements

- (1) For the purpose of determining rolling 12-month VOC emissions, the permittee shall maintain the following monthly records on all materials employed in this emissions unit that are not captured and routed to the thermal oxidizer:
 - a. the name and identification number of each cleanup solvent employed;
 - b. the volume, in gallons, of each cleanup solvent;
 - c. the VOC content for each cleanup solvent, in pounds per gallon;
 - d. the volume of waste cleanup solvents disposed of or reclaimed, in gallons;
 - e. the VOC content of the waste cleanup solvents disposed of or reclaimed, in pounds per gallon; and



- f. the VOC emissions from the use of cleanup solvents, in tons per month, (the summation of: $\{[("b" \times "c") - ("d" \times "e")]/ 2000 \text{ lbs/ton}\}$).
 - g. the name and identification number of each coating employed;
 - h. the volume of each coating employed, in gallons;
 - i. the VOC content for each coating, in pounds per gallon; and
 - j. the VOC emissions from the use of coatings that are not captured and routed to the thermal oxidizer, in tons per month, (the combined total of all: $\{["h" \times "i"]/ 2000 \text{ lbs/ton}\}$).
- (2) For the purpose of determining rolling 12-month VOC emissions, the permittee shall maintain the following monthly records on all materials employed in this emissions unit that are captured and routed to the thermal oxidizer:
- a. the name and identification number of each VOC containing cleanup solvent employed;
 - b. the volume of each ~~VOC containing~~ cleanup solvent employed, in gallons;
 - c. the VOC content for each ~~VOC containing~~ cleanup solvent, in pounds per gallon;
 - d. the volume of waste ~~VOC containing~~ cleanup solvents disposed of or reclaimed, in gallons;
 - e. the VOC content of the waste ~~VOC containing~~ cleanup solvents disposed of or reclaimed, in pounds per gallon;
 - f. the total VOC generated from the use of ~~VOC containing~~ cleanup solvents that are captured and routed to the thermal oxidizer, in tons per month (the combined total of all: $\{[("b" \times "c") - ("d" \times "e")]/ 2000 \text{ lbs/ton}\}$);
 - g. the overall capture and control efficiency, in percent by weight (based on the results from the most recent stack test results);
 - h. the total controlled VOC emissions from the use of VOC containing cleanup solvents that are captured and routed to the thermal oxidizer, in tons per month, ($"f" \times [1-(\text{"g"}/100)]$).
 - i. the name and identification number of each coating employed;
 - j. the volume of each coating employed, in gallons;
 - k. the VOC content for each coating, in pounds per gallon;
 - l. the total VOC generated from the use of coatings that are captured and routed to the thermal oxidizer, in tons per month, (the combined total of all: $\{["j" \times "k"]/ 2000 \text{ lbs/ton}\}$); and



- m. the total controlled VOC emissions from the use of coatings that are captured and routed to the thermal oxidizer, in tons per month, ~~(the combined total of all:~~ ("l" x [1-(“g”/100)]).
- (3) For the purpose of determining rolling 12-month VOC emissions, the permittee shall maintain the following monthly information.
- a. the total amount of VOC emissions from the use of cleanup solvents that are not captured and routed to the thermal oxidizer, in tons per month, (d)(1)f, above);
 - b. the total amount of VOC emissions from the coatings employed that are not captured and routed to the thermal oxidizer, in tons per month, (d)(1)j, above);
 - c. the total amount of VOC emissions from the use of cleanup solvents that are captured and routed to the thermal oxidizer, in tons per month, (d)(2)h, above);
 - d. the total amount of VOC emissions from the coatings employed that are captured and routed to the thermal oxidizer, in tons per month (d)(2)m, above);
 - e. the total VOC emissions, in tons per month ("a" + "b" + "c" + "d");
 - f. the VOC emissions, in tons per rolling 12-month period (The summation of : the VOC emissions for the current month (“e”) plus the total VOC emissions "e" for each of the 11 previous calendar months).
- (4) When complying with the 2.6 lbs/gallon, excluding water and exempt solvents, VOC emission limit per OAC rule 3745-21-09(E) through the use of complying coatings, the permittee shall collect and record the following daily information:
- a. the date the specific coating process was operated and not vented to the control device;
 - b. the specific coating process that was operated without being vented to the control device;
 - c. the name and identification number of each coating , employed in the specific coating process; and
 - d. the VOC content of each coating employed in the specific coating process, in pounds per gallon of coating, excluding water and exempt solvents.
- (5) When complying with the 2.6 lbs/gallon, excluding water and exempt solvents, VOC emission limit per OAC 3745 21-09(E) as a daily volume-weighted average:
- a. the date the specific coating process was operated and not vented to the control device;
 - b. the specific coating process that was operated without being vented to the control device;
 - c. the name and identification number of each coating, employed in the specific coating process;



- d. the VOC content of each coating employed in the specific coating process, in pounds per gallon of coating, excluding water and exempt solvents, as applied;
 - e. the total amount of each coating employed in the specific coating process, in gallons per day, excluding water and exempt solvents, as applied;
 - f. the total amount of all coatings employed, in gallons per day, excluding water and exempt solvents, (the summation of: [{ the total of each coating employed ("e")]).
 - g. the total amount of VOC emitted from the coatings employed, in pounds per day, (the summation of: [{ the total of each ("d" x "e")]); and
 - h. the daily volume weighted average VOC discharged from the coatings employed, in pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, ("g"/"f").
- (6) When complying with the 4.0 lbs/gallon of solids VOC emission limit per OAC 3745-21-09(E), permittee shall collect and record the following monthly information:
- a. A log or record 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.
 - c. the date the specific coating process was operated and vented to the control device;
 - d. the specific coating process that was operated and vented to the control device;
 - e. the name and identification number of each coating employed in the specific coating process;
 - f. the VOC content of each coating employed in the specific coating process, in pounds per gallon of coating, as applied;
 - g. the solids content of the each coating, in percent by volume;
 - h. the total amount of each coating employed in the specific coating process, in gallons per day, as applied;
 - i. the amount of solids applied from each coating employed, in gallons per day, ("g" x "h");
 - j. the total amount of solids applied, in gallons per day, (the summation of: (all "i"));
 - k. if demonstrating compliance based on the maximum VOC content of all coatings employed, in pounds per gallon of coating solids, as applied;



- i. maximum VOC content of all coatings employed, in pounds per gallon of coating solids, as applied (the maximum of all "f");
 - ii. the amount of VOC generated from the coatings employed, in pounds per day (the combined total of all "h" x "k.i");
 - iii. the amount of VOC emitted from the coatings employed, in pounds per day ("k.ii" x {1- [overall removal efficiency of capture and control system]}); and
 - iv. the calculated, controlled VOC emission rate, in pounds per gallon of coating solids, as applied ("k.iii"/ "j").
 - I. When demonstrating compliance based on the daily volume weighted average VOC content of all coating employed, in pounds per gallon of coating solids, as applied;
 - i. the total amount of VOC's generated from each coating employed, in pounds per day, ("f" x "h");
 - ii. the total amount of VOC's generated, in pounds per day (the summation of:(all "l.i");
 - iii. the total amount of VOC discharged, in pounds per day, (the summation of: ("l.i" x (1- Overall removal efficiency of the capture and control system *)); and
 - iv. the daily volume weighted average VOC discharged from the coatings employed, in pounds of VOC per gallon of solids applied, ("l.iii"/"j").
- (7) When determining compliance with OAC rule 3745-21-09(E) by the use of the 81% overall capture and control and 90% destruction efficiency requirements of OAC rule 3745-21-09(B)(6), the permittee shall collect and record the following information for each day:
 - a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the oven associated with this emissions unit is processing units, was more than 50 degrees Fahrenheit (28 degrees C) below the average temperature during the most recent emissions test that demonstrated that the emission unit was in compliance;
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- (8) Until ten years after this emissions unit resumes regular operations following completion of the modifications that are covered under PTI # 05-14417, the permittee shall maintain the following monthly records on the overall volatile organic compound (VOC) emissions changes due to the specific modifications within this permit to this emissions unit and all secondary affected emissions units:



- a. the name and Ohio EPA identification of each affected emissions unit (affected emissions units are those emissions units that are modified as part of this permit to install or effectively "debottlenecked" to increase emissions);
- b. the physical change or change in the method of operation, due to the modifications in this permit to install (example: increased 30 hours of operations of a 10 MMBTU/hr natural gas-fired boiler per month (0.3 MM standard cubic feet of natural gas usage increase per month));
- c. the emissions factor employed and basis (example: 5.5 lbs of VOC/ MM standard cubic feet of natural gas fired, AP-42, Table 1.4-2);
- d. the calculated VOC emissions for each emissions unit affected by this permit to install, in tons per month, (example:[(Actual Utilization x Emission Factor) / 2000 pounds per ton]);
- e. the actual VOC emissions from all emissions units affected by this permit to install, in tons per month (summation of all "d");
- f. the total VOC emissions from all emissions units affected by this permit to install, in tons per rolling 12-month period (the summation of (total VOC emissions for the current month ("e") plus the total VOC emission ("e") for the 11 previous calendar months)); and
- g. the overall VOC emission increase resulting from this permit to install (("f" - [actual baseline emissions for 1998 and 1999]*).

* The VOC baseline emissions are established on the 24 month operational period of Jan.1, 1998 through Dec. 31, 1999. Based on this facilities Title V emission fee report, the overall combined 24 month VOC emissions from emissions units B009, B010, K001, K002, and P010, was 485.37 tons, which gives an annualized based line VOC emission of 242.69 tons. With the permittee's requested 37.65 tons of VOC per rolling 12-month period, Actual Projected Maximum Increase, the OAC rule 3745-31-10(C)(3) allowable VOC for the ten years following the return to normal operations will be 280.34 tons per roling12monthperiod.

- (9) Until ten years after this emissions unit resumes regular operations following the completion of the modifications that are covered under PTI #05-14417, the permittee shall maintain the following monthly records on the overall nitrogen oxides (NOx) emissions changes due to the specific modifications within this permit to this emissions unit and all secondary affected emissions units:
- a. the name and Ohio EPA identification of each affected emissions unit (affected emissions units are those emissions units that are modified as part of this permit to install or effectively "debottlenecked" to increase emissions);
 - b. the physical change or change in the method of operation, due to the modifications in this permit to install (example: increased 30 hours of operations of a 10 MMBTU/hr natural gas-fired boiler per month (0.3 MM standard cubic feet of natural gas usage increase per month));



- c. the emissions factor employed and basis (example: 100 lbs of NOx/ MM standard cubic feet of natural gas fired, AP-42, Table 1.4-1);
- d. the calculated NOx emissions for each emissions unit affected by this permit to install, in tons per month (example: [Actual Utilization x Emission Factor] / 2000 pounds per ton);
- e. the calculated NOx emissions resulting from combustion of VOC's in the thermal incinerator(s) associated with each emissions unit affected by this permit to install, in tons per month;
- f. the actual NOx emissions from all emissions units affected by this permit to install, in tons per month (summation of all ("d") + ("e"));
- g. the total NOx emissions from all emissions units affected by this permit to install, in tons per rolling 12-month period (the summation of (total NOx emissions for the current month ("f") plus the total NOx emissions ("f") for the 11 previous calendar months)); and
- h. the overall NOx emission increase resulting from this permit to install ("g") - [actual baseline emissions for 1998 and 1999]*).

* The NOx baseline emissions are established on the 24 month operational period of Jan.1, 1998 through Dec. 31, 1999. Based on this facilities Title V emission fee report, the overall combined 24 month NOx emissions from emissions units B009, B010, K001, K002, and P010, was 37.85 tons, which gives an annualized based line NOx emissions of 18.93 tons. With the permittee's requested 21.50 tons of NOx per rolling 12-month period, Actual Projected Maximum Increase, the OAC rule 3745-31-10(C)(3) allowable NOx for the ten years following the return to normal operations will be 40.43 tons per rolling 12-month period.

- (10) When complying with 40 CFR 60, Subpart TT, Option TT_n or TT_c, the permittee shall collect and record the following monthly information:
- a. the name and identification number of each coating and VOC solvent employed in the specific coating process;
 - b. density of each coating and VOC solvent, as received, in kilograms per liter;
 - c. the proportion of VOC's in each coating and VOC solvent, as received, in percent by weight;
 - d. the solids content of each coating employed, as received, in percent by volume;
 - e. the volume of each coating and VOC solvent applied, as received, in liters;
 - f. the total VOC generated from the use of coating and VOC solvent in kilograms per month (the combined total of all {"b" x "c" x "e"});
 - g. the total amount of solids applied, in liters (the combined total of all {"d" x "e"})



- h. ;if the control device was not employed during the month, the monthly volume weighted average VOC content of the coating employed, in kilograms per liter of applied solids ("f" / "g"); and
 - i. if the control device was employed during the month, i
 - i. the overall capture and control efficiency, in percent by weight (based on the results from the most recent stack test results);
 - ii. the monthly volume weighted average VOC emissions of the coating employed, in kilograms per liter of applied solids, ("h" x {1 - "i.i"/100}).
- (11) When complying with 40 CFR 60, Subpart TT, Option TT_i, the permittee shall collect and record the following monthly information:
- a. the name and identification number of each coating and VOC solvent employed in the specific coating process;
 - b. density of each coating and VOC solvent, as received, in kilograms per liter;
 - c. the proportion of VOC's in each coating and VOC solvent, as received, in percent by weight;
 - d. the solids content of each coating employed, as received, in percent by volume;
 - e. the volume of each coating and VOC solvent applied when the control device was not employed, as received, in liters;
 - f. the volume of each coating and VOC solvent applied when the control device was employed, as received, in liters;
 - g. the total VOC generated from the use of coating and VOC solvent when the control device was not employed, in kilograms per month (the combined total of all {"b" x "c" x "e"});
 - h. the total VOC generated from the use of coating and VOC solvent when the control device was employed, in kilograms per month (the combined total of all {"b" x "c" x "f"});
 - i. the total amount of solids applied with the control device was not employed, in liters (the combined total of all {"d" x "e"});
 - j. the total amount of solids applied with the control device was employed, in liters (the combined total of all {"d" x "f"});
 - k. the monthly volume weighted average VOC content of the coating employed when the control device was not employed, in kilograms per liter of applied solids ("g" / "i");
 - l. the monthly volume weighted average VOC content of the coating employed when the control device was employed, in kilograms per liter of applied solids ("h" / "j");



- m. the overall capture and control efficiency, in percent by weight (based on the results from the most recent stack test results);
- n. the total overall monthly volume weighted average VOC emission of all coatings employed, in kilograms per liter of applied solids ($[(\text{"g"} + \text{"h"}) \times (1 - \text{"m"} / 100)] / [\text{"i"} + \text{"j"}]$); and
- o. the total overall monthly volume weighted average VOC emission limit(s) for all coatings employed, in kilograms per liter of applied solids (S)

Where:

$$S = (\{0.28 \times \text{"i"}\} + \{0.1 \times \text{"h"}\}) / (\text{"i"} + \text{"j"}), \text{ or}$$

$$S = (\{0.28 \times \text{"i"}\} + \{0.14 \times \text{"j"}\}) / (\text{"i"} + \text{"j"})$$

whichever is greater.

- (12) When complying with 40 CFR 60, Subpart TT, Option TT_{ce}, the permittee shall collect and record the following monthly information:
 - a. the fraction of total VOC's emitted that enter the control device using Equation 5 in 40 CFR 60.463;
 - b. the destruction efficiency of the control device using Equation 6 in 40 CFR 60.463; and
 - c. the overall reduction efficiency ("a" x "b").
- (13) When determining compliance with 40 CFR Part 60, Subpart TT using continuous or intermittent use of the thermal oxidizer, the permittee shall 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
- (14) 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, where compliance is achieved through the use of the thermal oxidizer.
- (15) When determining compliance with 40 CFR Part 63, Subpart SSSS using continuous or intermittent use of the thermal oxidizer, 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 $\nabla 1$ percent of the temperature being monitored in degrees Celsius, or $\nabla 1$ 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~~ the data to 3-hour block averages.
 - b. Capture system monitoring per 40 CFR 63.5150(a)(4). The permittee shall develop a capture system monitoring plan containing the information specified in paragraphs (i.) and (ii.) of this section. The permittee shall monitor the capture system in accordance with paragraph (iii.) of this section. The permittee shall make the monitoring plan available for inspection by the permitting authority upon request.
 - i. The monitoring plan shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures.
 - ii. The plan also shall specify operating limits at the capture system operating parameter value, or range of values, that demonstrates compliance with the standards in sections A.I.1 and A.I.2. The operating limits shall represent the conditions indicative of proper operation and maintenance of the capture system.
 - iii. The permittee shall conduct monitoring in accordance with the plan.
- (16) Pursuant to 40 CFR 63.5190(a)(1), the permittee shall maintain records on which 40 CFR Part 63, Subpart SSSS compliance option was used and the time periods (beginning and ending dates and times) each option was used on K002.
- (17) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSSe, using coatings that individually meet the organic HAP emission limits as-purchased, to which the permittee will not add HAP during distribution or application, the permittee shall calculate the following:
- a. The as-purchased, organic HAP to solids ratio of coating material for each coating material applied (Hp) during the 12-month period using the following equation:



$$H_p = (C_{hi} \times D_i) / V_{si}$$

Where:

H_p = the hazardous air pollutant to solids ratio of the coating materials, as purchased;

C_{hi} = organic HAP content of coating material (kg/kg); D_i = density of coating material (kg/l); and

V_{si} = volume fraction of solids in coating (l/l).

- b. The affected source is in compliance if the as-purchased organic HAP to solids ratio of coating material for each coating material applied on K002 (H_p) during the 12-month period is less than or equal to 0.046 kg/l of solids applied.
- (18) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSSe, using "as-applied" compliant coatings, based on the average organic HAP content on the basis of solids applied of all coating material applied, the permittee shall calculate the organic HAP emission rate according to the requirement of 40 CFR Part 63, Subpart SSSS and shall maintain the following monthly information:
- a. the name and identification number of each coating and any added solvent(s) applied;
 - b. the organic HAP content of each coating and any added solvent(s), in pounds per gallon of coating, as applied;
 - c. the total amount of each coating and added solvent(s) applied, in gallons per month;
 - d. the monthly organic HAP emissions from each coating and any added solvent(s) applied, in pounds per month, (" b " x " c ");
 - e. the combined total organic HAP emissions from all coatings and any added solvent(s) applied, in pounds per month (the summation of: (all " d 's"));
 - f. the solids content of each coating and any added solvent(s), in percent by volume;
 - g. the amount of solids applied from each coating and any added solvent(s), in gallons per month, (" c " x " f ");
 - h. the total solids applied from all coating and any added solvent(s), in gallons per month, (the summation of: (all " g 's"));
 - i. the rolling, 12-month total organic HAP emissions, in pounds per rolling 12-month period, (the summation of: (total combined organic HAP emitted, in pounds, for the current month (" e ") plus the total amount of organic HAP emissions (" e ") for the 11 previous calendar months));
 - j. the rolling, 12-month total solids applied, in gallons per rolling 12-month period, (the summation of: (total solids applied, in gallons, for the current month (" h "))



- plus the total amount of solids applied ("h") for the 11 previous calendar months));
- k. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in pounds per gallon, ("i" / "j") ; and
 - l. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in kilograms per liter, ("k" x 0.1198).
- (19) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSSe, using "as-applied" compliant coatings, based on the average organic HAP content on the basis of solids applied of all coating materials applied, the permittee shall calculate the organic HAP emission rate according to the requirement of 40 CFR Part 63, Subpart SSSS and shall maintain the following monthly information:
- a. the name and identification number of each coating and any added solvent(s) applied;
 - b. the organic HAP content of each coating and any added solvent(s) , in pounds per gallon of coating, as applied;
 - c. the total amount of each coating and added solvent(s) applied, in gallons per month;
 - d. the monthly organic HAP emissions from each coating and any added solvent(s) applied , in pounds per month, ("b" x "c");
 - e. the total organic HAP emissions from all coatings and any added solvent(s) applied , in pounds per month (the summation of: (all "d"));
 - f. the solids content of each coating and any added solvent(s) , in percent by volume;
 - g. the amount of solids applied from each coating and any added solvent(s) , in gallons per month, ("c" x "f") ;
 - h. the total solids applied from all coatings and any added solvent(s) , in gallons per month, (the summation of: (all "g" 's "));
 - i. the total organic HAP emissions, in pounds per rolling 12-month period, (the summation of: (total organic HAP emitted, for the current month ("e") plus the total amount of organic HAP emissions ("e") for the 11 previous calendar months));
 - j. the solids applied, in gallons per rolling 12-month period, (the summation of: (total solids applied, for the current month ("h") plus the total amount of solids applied ("h") for the 11 previous calendar months));
 - k. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in pounds per gallon, ("i" / "j") ; and
 - l. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in kilograms per liter, ("k" x 0.1198)



- (20) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSSe, using only always-controlled work stations vented to the thermal oxidizer, the permittee shall calculate the organic HAP emission rate according to the requirement of 40 CFR Part 63, Subpart SSSS and shall maintain the following monthly information::
- a. the identification of each work station employed;
 - b. the name and identification number of each coating and any added solvent(s) applied τ in each work station;
 - c. the organic HAP content of each coating and any added solvent(s) , in pounds per gallon of coating, as applied;
 - d. the total amount of each coating and any added solvent(s) applied τ in each work station, in gallons per month;
 - e. the monthly organic HAP generated from all coatings and any added solvent(s) applied at each work station, in pounds per month, (the summation of: ("c" x d));
 - f. the overall capture and control reduction for each employed work station, in percent reduced, ((Percent capture for the specific work station) x(Percent reduced of the employed control device on the specific work station) / 100);
 - g. the controlled organic HAP emissions from each work station, in pounds per month, ("e" x [1-"f"/100]);
 - h. the total controlled organic HAP emissions from all ~~employed~~ work stations, in pounds per month, (the summation of: (all "g"));
 - i. the solids content of each coating and any added solvent(s) , in percent by volume;
 - j. the amount of solids applied from each coating and any added solvent(s) , in gallons per month, (the summation of: ("d" x "i"));
 - k. the total solids applied from all coatings and any added solvent(s) , in gallons per month, (the summation of: (all "j"));
 - l. the total organic HAP emissions, in pounds per rolling 12-month period, (the summation of: (total organic HAP emitted, for the current month ("h") plus the total amount of organic HAP emissions ("h") for the 11 previous calendar months));
 - m. the total solids applied, in gallons per rolling 12-month period, (the summation of: (total solids applied, for the current month ("k") plus the total amount of solids applied ("k") for the 11 previous calendar months));
 - n. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in pounds per gallon, ("l" / "m") ; and
 - o. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in kilograms per liter, ("n" x 0.1198) .



- (21) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSS_e, using a combination of compliant coatings and use of the thermal oxidizer and maintaining an acceptable equivalent emission rate, the permittee shall calculate the organic HAP emission rate according to the requirement of 40 CFR Part 63, Subpart SSSS and shall maintain the following monthly information:
- a. the total organic HAP emissions from the use of coatings and any added solvent(s) without the use of the control device to reduce the emissions, in pounds per month, (See section. d)(19)e);
 - b. the total solids applied from the use of coatings and any added solvent(s) without the use of the control device to reduce the emissions, in gallons per month, (See section d)(19)h);
 - c. the total organic HAP emissions from the use of coatings and any added solvent(s) with the use of the control device to reduce the emissions, in pounds per month, (See section A.III.20.h.);
 - d. the combined total solids applied from the use of coatings and any added solvent(s) without the use of the control device to reduce the emissions, in gallons per month, (See section A.III.20.k.);
 - e. the total organic HAP emitted from all coatings and any added solvent(s) applied employed, in pounds per month, ("a" + "c");
 - f. the total solids applied from all coatings and any added solvent(s), in gallons per month, ("b" + "d");
 - g. the total organic HAP emissions, in pounds per rolling 12-month period, (the summation of: (total organic HAP emitted, for the current month ("e") plus the total amount of organic HAP emissions ("e") for the 11 previous calendar months));
 - h. the total solids applied, in gallons per rolling 12-month period, (the summation of: (total solids applied, for the current month ("f") plus the total amount of solids applied ("f") for the 11 previous calendar months));
 - i. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in pounds per gallon, ("g" / "h") ; and
 - j. the rolling, 12-month volume weighted organic HAP emissions per volume of applied solids, in kilograms per liter, (("i" x 0.1198)).
- (22) When determining compliance with 40 CFR 63, Subpart SSSS, Option SSSS_{ce}, the permittee shall ~~the~~ calculate the overall organic HAP reduction efficiency according to the requirements of 40 CFR Part 63, Subpart SSSS, and shall maintain the following monthly information:
- a. the identification of each work station employed;
 - b. the name and identification number of each coating and any added solvent(s) applied in each work station;



- c. the organic HAP content of each coating and any added solvent(s) , in kilograms per liter of coating, as applied;
 - d. the total amount of each coating and any added solvent(s) applied in each work station, in liters per month;
 - e. the monthly organic HAP generated from all coating and any added solvent(s) applied τ at each work station, in kilograms per month, (the summation of all {"c" x "d"});
 - f. the overall capture and control reduction for each work station, in percent reduced, ((Percent capture for the specific work station) x (Percent reduced of the control device on the specific work station) / 100);
 - g. the monthly organic HAP destroyed by the control device at each work station employed, in kilograms per month, ("e" x ("f" / 100));
 - h. the monthly organic HAP destroyed by all control devices included in this determination, in kilograms per month (the combined total of all "g");
 - i. the monthly organic HAP generated at all work station included in this determination, in kilograms per month, (the total of all "e"); and
 - j. the overall HAP reduction efficiency for all work stations included in this determination ($100 \times ["h" / "i"]$).
- (23) The permittee shall maintain the following monthly information on the amount of NOx emitted from this emissions unit including emissions from combustion of fuel and VOC:
- a. the amount of natural gas/propane employed in the air make τ up unit ξ , oven burners, pretreat oven burners, and the thermal oxidizer, each;
 - b. the calculated monthly emissions of NOx from the fuel combusted in the air make τ up unit ξ , oven burners, pretreat oven burners, and the thermal oxidizer, based on the appropriate emission factors from AP-42 or other established and verifiable sources*;
 - c. the total VOC combusted in the thermal oxidizer, in pounds;
 - d. the emissions of NOx generated by the combustion of VOCs ("c" x Gross Heat Value of VOCs (btu/lb) x NOx emission factor from AP-42, Chapter 1.4, "*Natural Gas Combustion*", Table 1.4-1, for uncontrolled small boilers;
 - e. the emissions of NOx generated by the conversion of nitrogen in the VOCs combusted ("c" x weight fraction of nitrogen in the formulation (lbs N per pound VOC) x 3.285 (lbs NOx generated per pound of N combusted));
 - f. the monthly emissions of NOx from the combustion of fuels and VOC's, in tons per month; [(b+d+e)/ 2000] and
 - g. the total emissions of NOx, in tons per rolling 12-month period, (the summation of: (amount emitted, , for the current month ("f") plus the total amount NOx emitted ("f") in the 11 previous calendar months)).



* Note: the NO_x from fuel combustion is based on the following emission factors: for the Air Makeup unit, 100 lbs/MM scf of natural gas burned or 19 lbs/ 1,000 gallons of propane burned; each Drying oven, 0.024 lbs/MM BTU of heat input; Pretreat Oven, 0.1 lbs/MM BTU heat input; and Thermal Oxidizer, 0.08 lbs/MM BTU of heat input.

- (24) The permittee shall maintain the following monthly information on the amount of CO emitted from this emissions unit including emissions from combustion of fuel and VOC:
- a. the amount of natural gas/propane employed in the air make up unit s, oven burners, pretreat oven burners, and the thermal oxidizer, each;
 - b. the calculated monthly emissions of CO from the fuel combusted in the air make up unit, oven burners, pretreat oven burners, and the thermal oxidizer, based on the appropriate emission factors from AP-42 or other established and verifiable sources*;
 - c. the amount of VOC combusted in the thermal oxidizer, in pounds per month;
 - d. the gross heat value of the VOC's combusted in the thermal oxidizer the thermal incinerator, in British thermal units (BTU's) per lb of VOC;
 - e. the calculated monthly emissions of CO, based on the total amount of VOC combusted in the thermal oxidizer, the gross heating value, and the emissions factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1, for uncontrolled small boilers, and Table 1.4-2 ("c" x "d" x "emission factor");
 - f. the monthly emissions of CO from the combustion of fuels and VOC's, in tons per month ($["b" + "e"] / 2000$ pounds per ton); and
 - g. the total emissions of CO, in tons per rolling 12-month period, (the summation of: (amount emitted, for the current month ("f") plus the total amount CO emitted ("f") in the 11 previous calendar months)).

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
- a. Volatile organic compound (VOC) emissions from the coating operation, including solvent cleanup activities, exceed 425.51 tons per rolling 12-month period;
 - b. Carbon monoxide (CO) emissions from this emissions unit exceed 27.71 tons per rolling 12-month period; and
 - c. Nitrogen oxides (NO_x) emissions from this emissions unit exceed 78.39 tons per rolling 12-month period.
- (2) Pursuant to OAC rules 3745-21-09(B)(3)(i) and (B)(3)(k), when demonstrating compliance with the daily volume-weighted average VOC limits according to OAC rule 3745-21-09(E), the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The



notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

- (3) Pursuant to OAC rules 3745-21-09(B)(3)(g), when demonstrating compliance through the use of complying coatings according to OAC rule 3745-21-09(E), the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- (4) Until ten years after this emissions unit ~~is modified and~~ resumes regular operations, following completion of the modifications covered under this PTI, the permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
 - a. A NO_x emissions increase from all affected emissions units that equals or exceeds 40.00 tons per rolling 12-month period, as compared to the baseline NO_x emissions as established during the 1998 and 1999 operational years.
 - b. A VOC emissions increase from all affected emissions units that equals or exceeds 40.00 tons per rolling 12-month period, as compared to the baseline VOC emissions as established during the 1998 and 1999 operational years.
- (5) Pursuant to OAC rule 3745-21-09(B)(3)(m), the permittee shall submit summaries of the following records for all times when the thermal oxidizer is used to demonstrate compliance:
 - a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

These reports shall be submitted as specified by this permit.

- (6) When determining compliance with 40 CFR Part 60, Subpart TT using Option TT_n, Option TT_c, or Option TT_i:
 - a. the permittee shall, following the initial performance test, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462(a)(2). If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually; and



- b. the permittee shall include in the initial compliance report required by 40 CFR 60.8 the weighted average of the VOC content of coatings used during a period of one calendar month for each affected facility per 40 CFR 60.465(a).
- (7) When determining compliance with 40 CFR Part 60, Subpart TT using Option TT_c, Option TT_{ce}, or Option TT_i:
- a. The permittee shall include the following data in the initial compliance report required by 40 CFR 60.8 per 40 CFR 60.465(b):
 - i. the overall VOC destruction rate used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and
 - ii. the combustion temperature of the thermal incinerator used to attain compliance with 40 CFR 60.462(a)(2) or (a)(3); and,
 - b. the permittee shall submit reports semiannually as specified in 40 CFR 60.7(c) (or more frequently if the Administrator, on a case-by-case basis, has determined that more frequent reporting is necessary to accurately assess the compliance status of the source) when the thermal oxidizer temperature drops as defined under 40 CFR 60.464(c). If no such periods occur, the owner or operator shall state this in the report.
- (8) The permittee shall submit the reports specified in the following paragraphs to the Ohio EPA, Southwest District Office and U.S. EPA Region V per 40 CFR 63.5180 :
- a. The permittee shall submit a Notification of Performance Test as specified in 40 CFR 63.7 and 63.9(e) if the permittee is complying with the emission standard using a control device. This notification and the site-specific test plan required under 40 CFR 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The permittee may consider the operating parameter identified in the site-specific test plan to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - b. The permittee shall submit performance test reports as specified in 40 CFR 63.10(d)(2) if a control device is used to comply with 40 CFR 63 Subpart SSSS.
 - c. The permittee shall submit start-up, shutdown, and malfunction reports as specified in 40 CFR 63.10(d)(5) if a control device is used to comply with 40 CFR 63, Subpart SSSS.
 - i. If actions during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the permittee shall state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator.



- ii. Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph A.IV.8.(d).
 - d. The permittee shall submit semi-annual compliance reports that cover the reporting period from January 1 through June 30 or from July 1 through December 31, as appropriate. Each report shall be postmarked or delivered no later than July 31 or January 31, whichever date is first date following the end of the semiannual reporting period. The report shall contain the following information per 40 CFR 63.5180(g)(2) and 63.5180(h):
 - i. Company name and address.
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
 - iv. Identification of the compliance option(s) specified in Table 1 of 40 CFR 63.5170 that the permittee used on each coating operation during the reporting period. If the permittee switched between SSSS-Option A and SSSS-Option B during the reporting period, the permittee must report the beginning dates for each compliance option.
 - v. A statement that there were no deviations from the standards during the reporting period.
 - vi. The total operating time of each affected source during the reporting period.
 - vii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken.
 - viii. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable).
- (9) The permittee shall submit annual reports which specify the total organic compound, carbon monoxide, and nitrogen oxide 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 emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:



- a. Emission Limitations: 5.14 lbs of CO/hr, from the combustion of natural gas and/or propane.

The hourly allowable emission limitation for CO was established by multiplying the combined maximum natural gas usage rate (61,176 cu.ft/hr) by the CO emission factor from AP-42, Table 1.4-1, revised 7/98 (84 lbs CO/mm cu. ft);

Applicable Compliance:

Compliance with the above limitations is based on the maximum BTU value of each combustion unit and the emission rates as provided by Alcoa Home Exteriors in their PTI Application and Emissions Activity Category forms.

If required, compliance shall be determined through in accordance with 40 CFR Part 60, Appendix A, Method 1-4 and 10 for demonstrating compliance with the above CO emission rates.

- b. Emission Limitations: 27.7 tons of CO per rolling 12-month period, from the combustion of natural gas, propane, and VOC's.

The annual allowable emission limitation for CO was established by multiplying the maximum hourly emissions rate (5.14 lbs/hr) multiplied by 8760 hrs of operation. The CO created by the combustion of the VOC's vented to the thermal incinerator was also included. *for the CO created by natural gas, propane, and VOC's combusted in this emissions unit see Section d)(24). Applicable Compliance:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections A.III.24, of this permit.

- c. Emission Limitations: 3.27 lbs of NOx per hour, from the combustion of natural gas and/or propane.

The hourly allowable emission limitation for NOx was established as follows:

- i. for the air make-up units unit, 19 lbs NOx/ 10x 3 gals of Propane from AP-42, Table 1.5-1, dated 10-96;
- ii. for the oven burners, 24.5 lbs NOx/mm cu. ft. of natural gas from the vendor guarantee of 0.024 lbs NOx/MMBtu of actual heat input;
- iii. for the pretreat oven burners, 102 lbs NOx/mm cu. ft. of natural gas from the vendor guarantee of 0.1 lbs NOx/MMBtu of actual heat input, and
- iv. for the thermal oxidizer, 83.7 lbs NOx/mm cu. ft. of natural gas from the vendor guarantee of 0.08 lbs NOx/MMBtu of actual heat input.

The hourly NOx limitation from the combustion of fuel was established by the following equation:

$$HER = (Au \times 19 \text{ lbs of NOx} / 1,000 \text{ gals of propane}) + (Oh \times 8 \times 0.024 \text{ lbs of NOx/MMBTU}) + (Ph \times 0.1 \text{ lbs of NOx/MMBTU}) + (Th \times 0.08 \text{ lbs of NOx/MMBTU})$$



Where:

HER = Hourly NOx Emission Rate, in lbs/hr;

Au = Maximum amount of propane usage, in 1000 gals/hr, (0.0552);

Oh = Maximum heat input of each oven, in MMBTU's/hr, (5.8, each, note there are a total of 8 burners in the prime and finish ovens);

Ph = Maximum heat input for the pretreat oven burner, in MMBTU/hr, (6.0); and

Th = Maximum heat input for the thermal oxidizer, in MMBTU/hr, (5.0).

Applicable Compliance:

Compliance with the above limitations is based on the maximum BTU value of each combustion unit and the emission rates as provided by Alcoa Home Exteriors in their PTI Application and Emissions Activity Category forms.

If required, compliance shall be determined through in accordance with 40 CFR Part 60, Appendix A, Method 1-4 and 7 for demonstrating compliance with the above NOx emission rates.

- d. Emission Limitations:78.39 tons of NOx per rolling 12-month period, from the combustion of natural gas, propane, and VOC's.

The annual allowable emission limitation for NOX from combustion of natural gas and propane was established by multiplying the maximum hourly emissions rate (3.27 lbs/hr) by 8760 hrs of operation. The NOx created by the combustion of the VOC's vented to the thermal incinerator was also included. The NOx emissions from the VOC combustion were established by:

- i. The projected total VOC combusted in the thermal oxidizer, in pounds;
- ii. The emissions of NOx generated by the combustion of VOCs ("i" x Gross Heat Value of VOCs (btu/lb) x NOx emission factor from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1, for uncontrolled small boilers; and
- iii. The emissions of NOx generated by the conversion of nitrogen in the VOCs combusted ("i" x weight fraction of nitrogen in the formulation (lbs N per pound VOC) x 3.285 (lbs NOx generated per pound of N combusted)).

Applicable Compliance:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Section d)(23), of this permit.

- e. Emission Limitation:

VOC emissions from the coating operation, including solvent cleanup activities, shall not exceed 425.51 tons per year.



Applicable Compliance Method:

Compliance with the allowable VOC emission limitations shall be determined through the record keeping requirements established in Section d)(3), of these terms and conditions.

f. Emission Limitation:

VOC emissions shall not exceed 2.6 lbs/gallon of coating excluding water and exempt solvents, as the maximum VOC content of each coating or as a daily volume-weighted average; or 4.0 lbs/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 the allowable VOC emission limitations shall be determined through the record keeping requirements established in Sections d)(4), (5), (6), & (7), of these terms and condition.

g. Emission Limitation:

VOC emissions shall not exceed 0.28 kg/liter (2.34 lb/gal) of coating solids applied for each calender month without the use of the thermal oxidizer or 0.14 kg/liter (1.17 lbs/gal) of coating solids applied for each calendar month with the use of the thermal oxidizer.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to sections d)(10), (13), and (14), of these terms and conditions.

h. Emission Limitation:

VOC emissions shall not exceed a value between 0.14 (or a 90-percent emission reduction) and 0.28 kg/liter (between 1.17 and 2.34 lb/gal) of coating solids applied for each calender month with intermittent use of the thermal oxidizer.

Applicable Compliance Method:

Compliance with the allowable VOC emission limitations shall be determined through the record keeping requirements established in sections d)(11), (13), and (14).

i. Emission Limitation:\

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



Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records required pursuant to section d)(12) , (13), and 14.

j. Emission Limitation:

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

Applicable Compliance Method:

Compliance with this emission limitations shall be determined through the record keeping requirements based on the appropriate compliance protocol established in sections d)(15) –(21).

k. Emission Limitation:

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

Applicable Compliance Methods:

Compliance with this emission limitation shall be based upon the records required pursuant to sections d)(15), (16), & (22).

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

- a. Consistent with U.S. EPA streamlining policy, the permittee may elect upon approval of Ohio EPA to utilize the applicable performance test methods and procedures per 40 CFR Part 63, Subpart SSSS in lieu of the performance test methods and procedures contained in 40 CFR Part 60, Subpart TT. Subpart SSSS performance test methods and procedures are generally more stringent than the performance test methods and procedures of Subpart TT;
- b. The emission testing shall be conducted within 6 months prior to the expiration of this facility's Title V permit.
- c. The test(s) shall be conducted while the emissions units are operating at or near the maximum capacities for collected emissions from this emissions unit (K002), unless otherwise specified or approved by the Ohio EPA, Southwest District Office.
- d. The permittee shall conduct, or have conducted, 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)h, and the capture efficiency of each capture system according to 40 CFR 63.5160(e) as described in section f)(2)i, while burning natural gas in the curing ovens and collecting emissions from this emissions unit (K002).



- e. The permittee shall determine the organic HAP weight fraction of each coating material applied by following one of the procedures in accordance with 40 CFR 63.5160(b):

- 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 subparagraph (2). of this section 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 non-aqueous volatile matter and use it as a substitute for organic HAP, using Method 24 of 40 CFR 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee;
- iii. the permittee may use an alternative test method for determining the organic HAP weight fraction once the Administrator has approved it. The permittee shall follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval; and
- iv. the permittee may use formulation data provided that the information represents each organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, weighted by the mass fraction of each raw material used in the material.

Formulation data may be provided by the manufacturer of the coating material. In the event of any inconsistency between test data obtained with the test methods specified in paragraphs (i) through (iii) of term f)(2)e and formulation data, the test data will govern.

- f. Formulation data or USEPA Method 24 (for coatings) shall be used to determine the organic compound contents of the coatings.



- g. In accordance with 40 CFR 63.5160(c), the permittee shall determine the solids content of each coating material applied. The permittee may determine the volume solids content using ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 (incorporated by reference, see 40 CFR 63.14), or an EPA approved alternative method. The ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97 determination may be performed by the manufacturer of the material and the results provided to the permittee. Alternatively, the permittee may rely on formulation data provided by material providers to determine the volume solids.
- h. The permittee shall conduct, or have conducted, a performance test to establish the destruction or removal efficiency of the control device or the outlet VOC concentration achieved by the oxidizer, according to the methods and procedures in Methods 1 through 4 and 25 or 25A, 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- i. The permittee shall determine the capture efficiency of the enclosure on the coating operation by one of the following procedures:
 - i. for an enclosure that meets the criteria for a PTE, the permittee may assume it achieves 100 percent capture efficiency. The permittee must confirm that the capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR 51, Appendix M (or an EPA approved alternative method), and that all exhaust gases from the enclosure are delivered to a control device;
 - ii. the permittee may determine capture efficiency, CE, according to the protocols for testing with temporary total enclosures that are specified in Method 204A through F of 40 CFR 51, Appendix M. The permittee may exclude never-controlled work stations from such capture efficiency determinations; and
 - iii. as an alternative to the procedures specified in paragraphs (i)(i) and (ii) of this section, if a capture efficiency test is required, the permittee may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in Appendix A to 40 CFR 63, Subpart KK. The permittee may exclude never-controlled work stations from such capture efficiency determinations.
- j. During the performance test specified in paragraph (i) of this section, the permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 63, Subpart SSSS. This average combustion temperature minus 50 degrees Fahrenheit is the minimum operating limit for the thermal oxidizer for purposes of 40 CFR Part 60, Subpart TT.



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

Personnel from the Ohio EPA, Southwest 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, Southwest 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, Southwest District Office.

g) Miscellaneous Requirements

- (1) None.