



State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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www.epa.state.oh.us

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

11/25/2008

Brent Bowers
SONOCO PHOENIX INC - Brookline Plant
3075 Brookline Rd. NW
North Canton, OH 44720

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1677000223
Permit Number: P0104057
Permit Type: Administrative Modification
County: Summit

Certified Mail

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

Dear Permit Holder:

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

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO 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

If you have any questions regarding this permit, please contact the Akron Regional Air Quality Management District. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: ARAQMD

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 and Operate
for
SONOCO PHOENIX INC - Brookline Plant**

Facility ID: 1677000223
Permit Number: P0104057
Permit Type: Administrative Modification
Issued: 11/25/2008
Effective: 11/25/2008
Expiration: 11/6/2013



Air Pollution Permit-to-Install and Operate
for
SONOCO PHOENIX INC - Brookline Plant

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Division of Air Pollution Control

Final Permit-to-Install and Operate
Permit Number: P0104057
Facility ID: 1677000223
Effective Date: 11/25/2008

Authorization

Facility ID: 677000223
Application Number(s): M0000302
Permit Number: P0104057
Permit Description: Administrative modification to correct formatting errors and to correct any mistakes in PTIO 16-02521 issued final on 11/6/2008.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 11/25/2008
Effective Date: 11/25/2008
Expiration Date: 11/6/2013
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

SONOCO PHOENIX INC - Brookline Plant
3075 BROOKLINE ROAD, N.W.
NORTH CANTON, OH 44720

of a Permit-to-Install and Operate 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:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104057
Permit Description: Administrative modification to correct formatting errors and to correct any mistakes in PTIO 16-02521 issued final on 11/6/2008.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID: K012
Company Equipment ID: Blanked End Liner 107
Superseded Permit Number: 16-02521
General Permit Category and Type: Not Applicable

Emissions Unit ID: K027
Company Equipment ID: Post-Repair Spray 109
Superseded Permit Number: 16-02521
General Permit Category and Type: Not Applicable

Group Name: Group 1

Emissions Unit ID:	K024
Company Equipment ID:	ECoater 104
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K025
Company Equipment ID:	End Liner 109
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable

Group Name: Group 2

Emissions Unit ID:	K001
Company Equipment ID:	Blanked End Liner 101
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K004
Company Equipment ID:	Blanked End Liner 102
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K006
Company Equipment ID:	Blanked End Liner 103
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K008
Company Equipment ID:	Blank End Liner 104
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K010
Company Equipment ID:	Blanked End Liner 105
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable



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Final Permit-to-Install and Operate
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Group Name: Group 3

Emissions Unit ID:	K005
Company Equipment ID:	Conversion Press 102
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K007
Company Equipment ID:	Conversion Press 103
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K009
Company Equipment ID:	Conversion Press 104
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K011
Company Equipment ID:	Conversion Press 105
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K013
Company Equipment ID:	Conversion Press 107
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K015
Company Equipment ID:	Conversion Press 101
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K017
Company Equipment ID:	Conversion Press 106
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K019
Company Equipment ID:	Conversion Press 108
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K026
Company Equipment ID:	Conversion Press 109
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable

Group Name: Group 4

Emissions Unit ID:	K016
Company Equipment ID:	End Liner 106
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K018
Company Equipment ID:	Blanked End Liner 108
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K023
Company Equipment ID:	Blanked End Liner 108C
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable



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Final Permit-to-Install and Operate

Permit Number: P0104057

Facility ID: 1677000223

Effective Date: 11/25/2008

Group Name: Group 5

Emissions Unit ID:	K020
Company Equipment ID:	Post-Repair Spray 105
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K021
Company Equipment ID:	Post-Repair Spray 106
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K022
Company Equipment ID:	Post-Repair Spray 107
Superseded Permit Number:	16-02521
General Permit Category and Type:	Not Applicable



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Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104057

Facility ID: 1677000223

Effective Date: 11/25/2008

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104057

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change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



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Division of Air Pollution Control

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Permit Number: P0104057

Facility ID: 1677000223

Effective Date: 11/25/2008

B. Facility-Wide Terms and Conditions



- 1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

None.

For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

- c)(1)a., c)(2)a., d)(1), d)(2), d)(3), d)(4), d)(5), e)(1), e)(2), e)(3), f)(1), g)(1)a., g)(1)b., and g)(1)c.

Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V	See c)(2)a, and d)(1) through d)(5) below.

(2) Additional Terms and Conditions

The combined annual emissions from the entire facility (K001, K004 through K013, and K015 through K027) shall not exceed the following as rolling, 12-month summations:

- 95.95 tons of VOC;
- 24.0 tons of all hazardous air pollutants (HAP), combined; and
- 9.0 tons of any individual HAP.

Operational Restrictions

The maximum annual VOC materials usage (including coatings and cleanup materials) for emissions units K001, K004, K005, K006, K007, K008, K009, K010, K011, K013, K015, K017, K019, K024, K025, and K026, combined, shall not exceed 35,796 gallons, based upon a rolling, 12-month summation of the monthly VOC material usage rates.

Note: These units are uncontrolled, when applying VOC containing materials.



To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the following VOC materials usage levels for the uncontrolled emissions units listed in d)(1) above:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC Material Usage (includes coatings and cleanup materials)</u>
1	8,949 gallons
1-2	8,949 gallons
1-3	8,949 gallons
1-4	17,898 gallons
1-5	17,898 gallons
1-6	17,898 gallons
1-7	26,847 gallons
1-8	26,847 gallons
1-9	26,847 gallons
1-10	35,796 gallons
1-11	35,796 gallons
1-12	35,796 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC materials usage restriction (including coatings and cleanup materials) shall be based upon a rolling, 12-month summation of the monthly coating materials usage rates.

The maximum annual VOC materials usage restriction (including coatings and cleanup materials) for emissions units K012, K016, K018, K020, K021, K022, K023, and K027, combined, shall not exceed 63,338 gallons, based upon a rolling, 12-month summation of the monthly VOC materials usage rates.

Note: These emissions units are controlled, when applying VOC containing materials.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the following VOC materials usage levels for the controlled emissions units listed in d)(3) above:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC Material Usage (includes coatings and cleanup materials)</u>
1	15,835 gallons
1-2	15,835 gallons
1-3	15,835 gallons
1-4	31,670 gallons
1-5	31,670 gallons
1-6	31,670 gallons
1-7	47,505 gallons
1-8	47,505 gallons
1-9	47,505 gallons
1-10	63,338 gallons
1-11	63,338 gallons
1-12	63,338 gallons



After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC material usage restriction (including coatings and cleanup materials) shall be based upon a rolling, 12-month summation of the monthly VOC material usage rates.

The potential emissions [as defined by OAC rule 3745-77-01(BB)] of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.0* TPY for any single HAP and 24.0* TPY for any combination of HAPs, based upon rolling, 12-month summations.

*The amount of HAPs used are more than the amount of HAPs emitted, because HAPs emissions are controlled by means of a regenerative thermal oxidizer, for emissions units K016, K018, K020, K021, K022, and K023; and by means of a catalytic oxidizer, for emissions units K012 and K027.

By limiting the coatings and cleanup materials usages, in accordance with d)(1) and d)(3) above, the entire facility will emit VOC, individual HAPs and combined HAPs at a level that is below the Title V thresholds. A PTI modification may be required prior to any coating reformulation involving increased VOC or HAP content at the facility.

b) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for the uncontrolled emissions units K001, K004, K005, K006, K007, K008, K009, K010, K011, K013, K015, K017, K019, K024, K025, and K026, combined:

- a. the name and identification number of each coating employed, as applied;
- b. the total VOC content, in pounds of VOC per gallon, of each coating and cleanup material, as applied;
- c. the HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
- d. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from e)(1)c.);
- e. the number of gallons of each coating employed;
- f. the name and identification of each cleanup material employed;
- g. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- h. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from e)(1)g.);
- i. the number of of each cleanup material employed;



- j. the total, individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month (for each HAP, the sum of e)(1)c. times e)(1)e. for all of the coatings plus the sum of e)(1)g. times e)(1)i. for all of the cleanup materials);
- k. the total, combined HAPs emissions from all coatings and cleanup materials employed, in pounds or tons per month (the sum of e)(1)d. times e)(1)e. for all of the coatings plus the sum of e)(1)h. times e)(1)i. for all of the cleanup material);
- l. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per month (the sum of e)(1)b. times e)(1)e. for all of the coatings plus the sum of e)(1)b. times e)(1)i. for all of the cleanup materials);
- m. the rolling, 12-month summation of the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(1)l. for the previous 12 calendar months);
- n. the rolling, 12-month summation of individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(1)j. for the previous 12 calendar months);
- o. the rolling, 12-month summation of the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(1)k. for the previous 12 calendar months);
- p. the total number of gallons of all the coatings and cleanup materials employed, in gallons per month;
- q. during the first 12 calendar months of operation following the issuance of this permit, the cumulative numbers of gallons of the coatings and cleanup materials employed; and
- r. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the number of gallons of coatings and cleanup materials employed.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Akron Regional Air Quality Management District. This information does not have to be kept on a line-by-line basis.

- (2) The permittee shall collect and record the following information each month for the controlled emissions units K012, K016, K018, K020, K021, K022, K023, and K027, combined:
 - a. the name and identification number of each coating employed, as applied;
 - b. the total VOC content, in pounds of VOC per gallon, of each coating and cleanup material, as applied;
 - c. the HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;



- d. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from e)(2)c.);
- e. the number of gallons of each coating employed;
- f. the name and identification of each cleanup material employed;
- g. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- h. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from e)(2)g.);
- i. the number of gallons of each cleanup material employed;
- j. the total controlled, individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month (for each HAP, [(the sum of e)(2)c. times e)(2)e.) * (1 – the overall control efficiency, based on the most recent emissions test that demonstrated compliance) for all of the coatings] plus the sum of e)(2)g. times e)(2)i. for all of the cleanup materials);
- k. the total controlled, combined HAPs emissions from all coatings and cleanup materials employed, in pounds or tons per month ((the sum of e)(2)d. times e)(2)e.) * (1 – the overall control efficiency, based on the most recent emissions test that demonstrated compliance) for all of the coatings] plus the sum of e)(2)h. times e)(2)i. for all of the cleanup material);
- l. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per month ((the sum of e)(2)b. times e)(2)e.) * (1 – the overall control efficiency, based on the most recent emissions test that demonstrated compliance) for all of the coatings] plus the sum of e)(2)b. times e)(2)i. for all of the cleanup materials);
- m. the rolling, 12-month summation of the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(2)l. for the previous 12 calendar months);
- n. the rolling, 12-month summation of individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(2)j. for the previous 12 calendar months);
- o. the rolling, 12-month summation of the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per year (the sum of e)(2)k. for the previous 12 calendar months);
- p. the total number of gallons of all the coatings and cleanup materials employed, in gallons per month;



- q. during the first 12 calendar months of operation following the issuance of this permit, the cumulative numbers of gallons of the coatings and cleanup materials employed; and
 - r. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the number of gallons of coatings and cleanup materials employed.
- (3) The permittee shall collect and record the following information each month for the entire facility (emissions units K001, K004 through K013, K015 through K027, combined):
- a. the rolling, 12-month summation of the total VOC emissions from all coatings and cleanup materials employed [e)(1)m. + e)(2)m.], in pounds or tons per year;
 - b. the rolling, 12-month summation of individual HAP emissions from all coatings and cleanup materials employed [e)(1)n. + e)(2)n.], in pounds or tons per year; and
- the rolling, 12-month summation of the total combined HAP emissions from all coatings and cleanup materials employed [e)(1)o. + e)(2)o.], in pounds or tons per year.

c) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the Standard Terms and Conditions of this permit, that include the following information:
- a. all exceedances of the rolling, 12-month VOC materials usage restrictions (including coatings and cleanup materials) as specified in d)(1) and d)(3) above;
 - b. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative VOC materials usage restriction as specified in d)(2) and d)(4) above; and
 - c. all exceedances of the rolling, 12-month emission limitation for VOCs, individual HAPs, and combined HAPs (for the entire facility).

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

d) Testing Requirements

- (1) Compliance with the emission limitations shall be determined in accordance with the following methods:
- a. Emission Limitation:



The combined annual VOC emissions from the entire facility (K001, K004 through K013, and K015 through K027, combined) shall not exceed 95.95 tons, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated based on the record keeping requirements established in 1.e) above.

Emission Limitation:

The individual and combined HAPs emissions from the entire facility (K001, K004 through K013, and K015 through K027, combined) shall not exceed 9.0 and 24.0 tons as rolling, 12-month summations.

Applicable Compliance Method:

Compliance with the annual allowable individual and combined HAPs emission limitations above shall be demonstrated based on the record keeping requirements established in 1.e) above.

Operational Restriction:

The maximum annual VOC materials usage (including coatings and cleanup materials), based upon rolling, 12-month summations, shall not exceed 35,796 gallons (for the uncontrolled emissions units) and 63,338 gallons (for the controlled emissions units).

The monthly cumulative VOC materials usage (including coatings and cleanup materials) restrictions (for the first 12-calendar months of operations) shall not exceed the limitations as established in 1.d)(2) and 1.d)(4) above.

Applicable Compliance Method:

Compliance with the allowable VOC materials usage (including coatings and cleanup materials) restrictions above shall be demonstrated based on the record keeping requirements established in 1.e) above.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104057

Facility ID: 1677000223

Effective Date: 11/25/2008

e) Miscellaneous Requirements

None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104057

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Effective Date: 11/25/2008

C. Emissions Unit Terms and Conditions



1. K012, Blanked End Liner 107

Operations, Property and/or Equipment Description:

Blanked End Liner 107

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

g)(1).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2) and c)(2) through c)(4) below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(D)(2)(e).
b. OAC rule 3745-21-09(D)(2)(e)	See c)(1) below.

Additional Terms and Conditions

Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.74 pound per hour, nor 3.24 tons per year.

[The hourly and annual VOC emission limitations represent the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these limitations.]

All of the VOC emissions from this emissions unit shall be vented to a catalytic oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.



Operational Restrictions

- (1) The permittee shall not use coatings that are in excess of 7.4 pounds of VOC per gallon of solids in this emissions unit.
- (2) The permittee shall maintain the air flow in the air duct from this emissions unit at a pressure of not less than 0.100 inches of water*, as a one-hour average, at all times while this emissions unit is in operation.

*This pressure value was estimated based on the minimum pressure restriction established for emissions unit K016. The minimum air flow pressure for this emissions unit shall be determined during the compliance test required in f)(3) below, and it shall replace the current value, upon written approval from the Akron Regional Air Quality Management District.

- (3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst, as determined in an annual catalyst activity test, shall be sufficient to meet the destruction efficiency and control efficiency requirements of this permit at a test temperature that is equal to that temperature at which the inlet to the catalyst bed is set. Solvent loading during the catalyst activity test shall be consistent with the test laboratory's normal testing protocol.

The capture and control system of the catalytic oxidizer shall provide not less than an eighty one per cent reduction, by weight, in the overall VOC emissions from the coating line and the control equipment shall have an efficiency of not less than ninety per cent, by weight, for the VOC emissions vented to the control equipment.

Monitoring and/or Recordkeeping Requirements

- (4) The permittee shall collect and record the following information each day for the coating line and maintain the information at the facility for a period of three years:
 - a. The name and identification number of each coating used.
 - b. The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
 - c. The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of all the coatings.
 - d. The calculated, controlled VOC emission rate, in mass of VOC per unit volume of coating solids, as applied. The controlled VOC emission rate shall be calculated using (1) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance d)(1)c. and (2) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance.
- (5) The permittee shall install, calibrate, operate and maintain a monitoring device to continuously measure and record the velocity pressure of the air flow within the air duct from this emissions unit at a location downstream of all individual pick-up point



connections and upstream of where this duct connects to the main inlet duct to the catalytic oxidizer. The velocity pressure monitoring and recording device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations and specifications.

The permittee shall maintain records of any occurrence during which the velocity pressure in the air duct from this emissions unit is less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

- (6) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The acceptable temperature settings shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted and the appropriate range for each parameter is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all three-hour periods of operation during which the average temperature of the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit below the average temperature of the process vent stream during the most recent performance test that demonstrated that the source was in compliance, and all three-hour periods of operation during which the average temperature difference across the catalyst bed is less than eighty per cent of the average temperature differences during the most recent performance test that demonstrated that the source was in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit(s).

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than 3 years.

- (7) The permittee shall perform a preventative maintenance inspection of the catalytic incinerator on an annual basis to evaluate the performance of the catalyst bed. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations, and shall include a physical inspection of the unit and all of the associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment and the catalyst shall be performed as determined by the inspection. During each annual inspection a sample of the catalyst material shall be collected from the catalyst bed and used to perform a catalyst activity test. The permittee shall maintain a record of the results of each annual inspection and the results of each annual catalyst activity test.



The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator. Records shall be maintained of the inspections and the date(s) of catalyst replacement, and if only partial, the amount or percent of the total catalyst replaced.

- (8) Whenever the monitored parameters above deviate from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the temperature range(s) will not



constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

Reporting Requirements

The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying 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 45 days after the exceedance occurs.

- (9) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the catalytic oxidizer during the 12-month reporting period for this emissions unit:
- a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed was outside of the ranges specified by the manufacturer and/or outside of the acceptable ranges following any required compliance demonstration;
 - b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the catalytic incinerator;
 - c. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed into compliance with the acceptable range(s), was determined to be necessary and was not taken;
 - e. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and
 - f. the results of any catalyst activity test(s) along with a summary of the results of the annual inspection of the internal integrity of the catalytic incinerator.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the air duct from this emissions unit: All time periods during which the velocity pressure in the air duct from this emissions unit was less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date



identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

g. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 0.74 pound per hour, nor 3.24 tons per year.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated as follows:

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings, and then by (1-0.81*);

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.

The annual VOC emission limitation above was established by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

*The overall control efficiency was assumed to be 81%.

Emission Limitation:

7.4 pounds of VOC per gallon of coating solids

Applicable Compliance Method:

Compliance with the VOC content limitation above shall be demonstrated based on the record keeping requirements established in d)(1) above.

Operational Restriction:

Not less than eighty one percent reduction, by weight, in the overall VOC emissions from the coating line; control efficiency not less than ninety per cent, by weight



Applicable Compliance Method:

Compliance with the operational restrictions above shall be demonstrated based on the results of emissions testing conducted in accordance with f)(3) below.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

The permittee shall conduct, or have conducted, emission testing for this emissions unit, during the first 12 calendar months of operation following the startup of the new Post Repair Spray Line 109 (emissions unit K027), which is being installed and will be controlled by this catalytic oxidizer concurrently with emissions unit K012, in accordance with the following requirements:

The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A (whichever is appropriate) of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's Guidelines for Determining Capture Efficiency, dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating



parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in this permit. An intent to test notification shall not be required for catalyst activity testing. The procedures for the catalyst activity test shall be conducted in accordance with the manufacturer's recommendations and as required by the appropriate test method.

Miscellaneous Requirements

Modeling to demonstrate compliance with the Ohio EPA's *Air Toxic Policy* was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a *modification* as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



2. K027, Post-Repair Spray 109

Operations, Property and/or Equipment Description:

Post-Repair Spray 109

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

d)(6) and d)(7).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2) and c)(2) through c)(4). The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(a).
b. OAC rule 3745-21-09(U)(1)(a)	See c)(1).
c. ORC 3704.03(F) and OAC rule 3745-114-01	See d)(6) and d)(7).

Additional Terms and Conditions

Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 4.17 pounds per hour, nor 18.26 tons per year.

[The hourly and annual VOC emission limitations represent the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these limitations.]



All of the VOC emissions from this emissions unit shall be vented to a catalytic oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

Operational Restrictions

The permittee shall not permit the use of coatings that are in excess of 10.3 pounds of VOC per gallon of solids.

The permittee shall maintain the air flow in the air duct from this emissions unit at a pressure of not less than 0.100 inches of water*, as a one-hour average, at all times while this emissions unit is in operation.

*This pressure value was estimated based on the minimum pressure restriction in established for emissions unit K016. The minimum air flow pressure for this emissions unit shall be determined during the compliance test required in f)(3) below, and it shall replace the current value, upon written approval from the Akron Regional Air Quality Management District.

The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst, as determined in an annual catalyst activity test, shall be sufficient to meet the destruction efficiency and control efficiency requirements of this permit at a test temperature that is equal to that temperature at which the inlet to the catalyst bed is set. Solvent loading during the catalyst activity test shall be consistent with the test laboratory's normal testing protocol.

The capture and control system of the catalytic oxidizer shall provide not less than an eighty one per cent reduction, by weight, in the overall VOC emissions from the coating line and the control equipment shall have an efficiency of not less than ninety per cent, by weight, for the VOC emissions vented to the control equipment.

Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the coating line and maintain the information at the facility for a period of three years:

- a. The name and identification number of each coating used.
- b. The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
- c. The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of all the coatings.
- d. The calculated, controlled VOC emission rate, in mass of VOC per unit volume of coating solids, as applied. The controlled VOC emission rate shall be calculated using (1) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with d)(1)c. and (2) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance.



- (2) The permittee shall install, calibrate, operate and maintain a monitoring device to continuously measure and record the velocity pressure of the air flow within the air duct from this emissions unit at a location downstream of all individual pick-up point connections and upstream of where this duct connects to the main inlet duct to the catalytic oxidizer. The velocity pressure monitoring and recording device shall be installed, calibrated, operated and maintained in accordance with the manufacturer=s recommendations and specifications.

The permittee shall maintain records of any occurrence during which the velocity pressure in the air duct from this emissions unit is less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

- (3) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the incinerator=s catalyst bed when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and the operating manuals. The acceptable temperature settings shall be based upon the manufacturer=s specifications until such time as any required emission testing is conducted and the appropriate range for each parameter is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all three-hour periods of operation during which the average temperature of the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit below the average temperature of the process vent stream during the most recent performance test that demonstrated that the source was in compliance, and all three-hour periods of operation during which the average temperature difference across the catalyst bed is less than eighty per cent of the average temperature differences during the most recent performance test that demonstrated that the source was in compliance; and
- b. a log or record of the operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit(s).

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than 3 years.

- (4) The permittee shall perform a preventative maintenance inspection of the catalytic incinerator on an annual basis to evaluate the performance of the catalyst bed. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations, and shall include a physical inspection of the unit and all of the associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment and the catalyst shall be performed as determined by the inspection. During each



annual inspection a sample of the catalyst material shall be collected from the catalyst bed and used to perform a catalyst activity test. The permittee shall maintain a record of the results of each annual inspection and the results of each annual catalyst activity test.

The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator. Records shall be maintained of the inspections and the date(s) of catalyst replacement, and if only partial, the amount or percent of the total catalyst replaced.

- (5) Whenever the monitored parameters above deviate from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted



temperature range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the temperature range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

The permit to install for this emissions unit (K027) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the worst case pollutant(s):

Pollutant: xylene

TLV (mg/m³): 434

Maximum Hourly Emission Rate (lbs/hr): 1.11

Predicted 1 Hour Maximum Ground-Level Concentration (ug/m³): 356

MAGLC (ug/m³): 10,333

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- i. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- m. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- n. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a "modification" under other



provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the Air Toxic Policy:

- o. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- p. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and

where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

Reporting Requirements

The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying 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 45 days after the exceedance occurs.

- (6) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the catalytic oxidizer during the 12-month reporting period for this emissions unit:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed was outside of the ranges specified by the manufacturer and/or outside of the acceptable ranges following any required compliance demonstration;
 - b. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the catalytic incinerator;
 - c. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed into compliance with the acceptable range(s), was determined to be necessary and was not taken;
 - e. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and



- f. the results of any catalyst activity test(s) along with a summary of the results of the annual inspection of the internal integrity of the catalytic incinerator.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the air duct from this emissions unit: All time periods during which the velocity pressure in the air duct from this emissions unit was less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

- g. Emission Limitations:

VOC emissions from this emissions unit shall not exceed 4.17 pound per hour, nor 18.26 tons per year.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated as follows:

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings, and then by (1-0.81*);

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.

The annual VOC emission limitation above was established by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

*The overall control efficiency was assumed to be 81%.

Emission Limitation:

10.3 pounds of VOC per gallon of coating solids



Applicable Compliance Method:

Compliance with the VOC content limitation above shall be demonstrated based on the record keeping requirements established in d)(1) above.

Operational Restriction:

Not less than eighty one percent reduction, by weight, in the overall VOC emissions from the coating line; control efficiency not less than ninety per cent, by weight

Applicable Compliance Method:

Compliance with the operational restrictions above shall be demonstrated based on the results of emissions testing conducted in accordance with f)(3) below.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

The permittee shall conduct, or have conducted, emission testing for this emissions unit, during the first 12 calendar months of operation following the startup of this emissions unit in accordance with the following requirements:

The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A (whichever is appropriate) of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's [Guidelines for Determining Capture Efficiency](#), dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be



based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in this permit. An intent to test notification shall not be required for catalyst activity testing. The procedures for the catalyst activity test shall be conducted in accordance with the manufacturer's recommendations and as required by the appropriate test method.

Miscellaneous Requirements

None.



Emissions Unit Group - Group 1: K024, K025,

EU ID	Operations, Property and/or Equipment Description
K024	ECoater 104
K025	End Liner 109

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

g)(1).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)(a)(ii)	See b)(2)a. below.
b.	OAC rule 3745-21-09(D)(2)(e)	See c)(1) below.

Additional Terms and Conditions

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for VOCs is less than ten tons per year.

Operational Restrictions

The permittee shall not employ any coating material in this emissions unit that is in excess of 3.7 pounds of VOC per gallon of coating, excluding water and exempt solvents.

Monitoring and/or Recordkeeping Requirements



The permittee shall maintain monthly records that contain the following information for each emissions unit:

- a. the name and identification number of each coating material employed;
- b. the number of gallons of each coating material employed; and

the total VOC content, in pounds of VOC per gallon, excluding water and exempt solvents, of each coating material employed.

Reporting Requirements

The permittee shall notify the Director (the Akron Regional Air Quality Management District) in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC content) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the Akron Regional Air Quality Management District) within 30 days following the end of the calendar month.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

- c. Emission Limitation:

The permittee shall not permit the use of any coating material that is in excess of 3.7 pounds of VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content limitations above shall be demonstrated based on the record keeping requirements established in d)(1) above.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Miscellaneous Requirements



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Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



Emissions Unit Group - Group 2: K001, K004, K006, K008, K010,

EU ID	Operations, Property and/or Equipment Description
K001	Blanked End Liner 101
K004	Blanked End Liner 102
K006	Blanked End Liner 103
K008	Blanked End Liner 104
K010	Blanked End Liner 105

b) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

g)(1).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2) below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(D)(2)(e).
b.	OAC rule 3745-21-09(D)(2)(e)	See c)(1) below.

Additional Terms and Conditions

- a. For emissions units K001, K004, K006 and K008: Volatile organic compound (VOC) emissions from each emissions unit shall not exceed 3.62 pounds per hour, nor 15.86 tons per year.
- b. For emissions unit K010: VOC emissions from this emissions unit shall not exceed 0.31 pound per hour, nor 1.36 tons per year.



[The hourly and annual VOC emission limitations represent the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these limitations.]

Operational Restrictions

For emissions units K001, K004, K006, K008 and K010: The permittee shall not use coatings that are in excess of 3.7 pounds of VOC per gallon of coating, excluding water and exempt solvents.

For emissions unit K010: The permittee shall not use cleanup materials that are in excess of 6.6 pounds of VOC per gallon of cleanup material, excluding water and exempt solvents.

Monitoring and/or Recordkeeping Requirements

The permittee shall record and maintain monthly records that contain the following information for each coating line:

- c. the name and identification number of each coating and cleanup material employed;
- d. the total VOC content, in pounds of VOC per gallon, excluding water and exempt solvents for each coating material employed;

the total VOC content, in pounds of VOC per gallon, excluding water and exempt solvents for each cleanup material employed (for emissions unit K010 only).

Reporting Requirements

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 noncomplying 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.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

- e. Emission Limitations:

For emissions units K001, K004, K006 and K008: VOC emissions from each emissions unit shall not exceed 3.62 pounds per hour, nor 15.86 tons per year.



For emissions unit K010: VOC emissions from this emissions unit shall not exceed 0.31 pound per hour, nor 1.36 tons per year.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations above shall be demonstrated as follows (for each emissions unit):

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings;

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.

The annual VOC emission limitations above were established by multiplying the hourly limitations by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitations is maintained, compliance with the annual limitations shall be ensured.

Emission Limitations:

For emissions units K001, K004, K006, K008 and K010: The permittee shall not use coatings that are in excess of 3.7 pounds of VOC per gallon of coating, excluding water and exempt solvents.

For emissions unit K010: The permittee shall not use cleanup materials that are in excess of 6.6 pounds of VOC per gallon of cleanup material, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content limitations above shall be demonstrated based on the record keeping requirements established in d)(1) above.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Miscellaneous Requirements

Modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a modification as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of



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any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



Emissions Unit Group - Group 3: K005, K007, K009, K011, K013, K015, K017, K019, K026,

EU ID	Operations, Property and/or Equipment Description
K005	Conversion Press 102
K007	Conversion Press 103
K009	Conversion Press 104
K011	Conversion Press 105
K013	Conversion Press 107
K015	Conversion Press 101
K017	Conversion Press 106
K019	Conversion Press 108
K026	Conversion Press 109

- c) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

g)(1).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2), c)(2), and c)(3) below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e).
b.	OAC rule 3745-21-09(U)(2)(e)	See c)(1) below.



Additional Terms and Conditions

- a. For emissions unit K005: Volatile organic compound emissions (VOC) shall not exceed 0.89 pound per hour, nor 3.90 tons per year.
- b. For emissions units K007, K009 and K015: VOC emissions from each emissions unit shall not exceed 0.58 pound per hour, nor 2.54 tons per year.
- c. For emissions unit K011: VOC emissions shall not exceed 0.52 pound per hour, nor 2.28 tons per year.
- d. For emissions units K013 and K019: VOC emissions from each emissions unit shall not exceed 0.39 pound per hour, nor 1.71 tons per year.
- e. For emissions unit K017: VOC emissions shall not exceed 0.41 pound per hour, nor 1.8 tons per year.
- f. For emissions unit K026: VOC emissions shall not exceed 1.06 pounds per hour, nor 4.64 tons per year.

[The hourly and annual VOC emission limitations above represent each emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these emission limitations.]

Operational Restrictions

The maximum combined daily coatings (tab lubricant and rust inhibitor) usage, for each emissions unit, shall not exceed 3.0 gallons.

For emissions unit K005: The permittee shall not use coatings that are in excess of 6.41 pounds of VOC per gallon of coating, excluding water and exempt solvents.

For emissions units K007, K009, K011, K013, K015, K017, K019 and K026: The permittee shall not use coatings that are in excess of 5.75 pounds of VOC per gallon of coating, excluding water and exempt solvents.

Monitoring and/or Recordkeeping Requirements

The permittee shall record and maintain daily records that include the following information for each coating line:

- g. the name and identification number of each coating employed;
- h. the number of gallons of each coating employed; and
- i. the total volume, in gallons, of all of the coatings employed.

The permittee shall record and maintain monthly records that include the following information for each coating line:

- j. the name and identification number of each coating employed; and



the total VOC content, in pounds per gallon, excluding water and exempt solvents of each coating employed.

Reporting Requirements

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 noncomplying 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.

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 coating line employed more than the applicable maximum daily coating usage restriction. 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.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

k. Emission Limitations:

For emissions unit K005: VOC emissions shall not exceed 0.89 pound per hour, nor 3.90 tons per year.

For emissions units K007, K009 and K015: VOC emissions from each emissions unit shall not exceed 0.58 pound per hour, nor 2.54 tons per year.

For emissions unit K011: VOC emissions shall not exceed 0.52 pound per hour, nor 2.28 tons per year.

For emissions units K013 and K019: VOC emissions from each emissions unit shall not exceed 0.39 pound per hour, nor 1.71 tons per year.

For emissions unit K017: VOC emissions shall not exceed 0.41 pound per hour, nor 1.8 tons per year.

For emissions unit K026: VOC emissions shall not exceed 1.06 pounds per hour, nor 4.64 tons per year.



Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations above shall be demonstrated as follows (for each emissions unit):

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings;

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.

The annual VOC emission limitations above were established by multiplying the hourly limitations by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitations is maintained, compliance with the annual limitations shall be ensured.

I. Emission Limitations:

For emissions unit K005: The permittee shall not use coatings that are in excess of 6.41 pounds of VOC per gallon of coating, excluding water and exempt solvents.

For emissions units K007, K009, K011, K013, K015, K017, K019 and K026: The permittee shall not use coatings that are in excess of 5.75 pounds of VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content limitations above shall be demonstrated based on the record keeping requirements established in d)(2) above.

m. Operational Restriction:

The maximum combined daily coatings (tab lubricant and rust inhibitor) usage, for each emissions unit, shall not exceed 3.0 gallons.

Applicable Compliance Method:

Compliance with the daily gallon usage restriction above shall be demonstrated based on the record keeping requirements established in d)(1) above.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.



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Miscellaneous Requirements

Modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary because each emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a modification as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



Emissions Unit Group - Group 4: K016, K018, K023,

EU ID	Operations, Property and/or Equipment Description
K016	End Liner 106
K018	Blanked End Liner 108
K023	Blanked End Liner 108C

- d) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

g)(1).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2) and c)(2) through c)(4) below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(D)(2)(e).
b.	OAC rule 3745-21-09(D)(2)(e)	See c)(1) below.

Additional Terms and Conditions

- a. For emissions unit K016: Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.61 pound per hour, nor 2.67 tons per year.
- b. For emissions unit K018: VOC emissions from this emissions unit shall not exceed 0.60 pound per hour, nor 2.63 tons per year.
- c. For emissions unit K023: VOC emissions from this emissions unit shall not exceed 1.07 pounds per hour, nor 4.69 tons per year.



[The hourly and annual VOC emission limitations represent the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these limitations.]

All of the VOC emissions from each emissions unit shall be vented to a regenerative thermal oxidizer (RTO) that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation (whenever solvent-based coatings are being employed).

Operational Restrictions

The permittee shall not use coatings that are in excess of 7.4 pounds of VOC per gallon of solids in each emissions unit.

The capture and control system shall provide not less than an eighty one percent reduction, by weight, in the overall VOC emissions from the coating line and the control equipment shall have an efficiency of not less than ninety per cent, by weight, for the VOC emissions vented to the control equipment.

The permittee shall maintain the air flow in the air duct from this emissions unit at a pressure of not less than 0.100 inches of water, as a one-hour average at all times while this emissions unit is in operation.

For emissions units K018 and K023: The permittee shall not operate emissions unit K018 concurrently with emissions unit K023.

Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the coating line and maintain the information at the facility for a period of three years:

- d. The name and identification number of each coating used.
- e. The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
- f. The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of all the coatings.
- g. The calculated, controlled VOC emission rate, in mass of VOC per unit volume of coating solids, as applied. The controlled VOC emission rate shall be calculated using (1) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with d)(1)c. and (2) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance.

The permittee shall install, calibrate, operate and maintain a monitoring device to continuously measure and record the velocity pressure of the air flow within the air duct from this emissions unit at a location downstream of all individual pick-up point connections and upstream of where this duct connects to the main inlet duct to the RTO. The velocity



pressure monitoring and recording device shall be installed, calibrated, operated and maintained in accordance with the manufacturer=s recommendations and specifications.

The permittee shall maintain records of any occurrence during which the velocity pressure in the air duct from this emissions unit is less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

- (2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and the operating manuals. The acceptable temperature setting shall be based upon the manufacturer=s specifications until such time as any required emission testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the RTO was/were in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored average combustion temperature within the RTO deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that



determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a description of the corrective action;
- the date corrective action was completed;
- the date and time the deviation ended;
- f. the total period of time (in minutes) during which there was a deviation;
- g. the temperature readings immediately after the corrective action was implemented; and
- h. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

Reporting Requirements

The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying 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 45 days after the exceedance occurs.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the RTO during the 12-month reporting period for this/these emissions unit(s):

- i. each period of time (start time and date, and end time and date) when the average combustion temperature within the RTO was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
- j. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
- k. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;



- I. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the RTO into compliance with the acceptable range, was determined to be necessary and was not taken; and
- m. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the air duct from this emissions unit: All time periods during which the velocity pressure in the air duct from this emissions unit was less than 0.100 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:

Emission Limitations:

For emissions unit K016: VOC emissions from this emissions unit shall not exceed 0.61 pound per hour, nor 2.67 tons per year.

For emissions unit K018: VOC emissions from this emissions unit shall not exceed 0.60 pound per hour, nor 2.63 tons per year.

For emissions unit K023: VOC emissions from this emissions unit shall not exceed 1.07 pounds per hour, nor 4.69 tons per year.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated as follows (for each emissions unit):

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings, and then by (1-0.81*);

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.



The annual VOC emission limitation above was established by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

*The overall control efficiency was assumed to be 81%.

Emission Limitation:

7.4 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation above shall be demonstrated based on the record keeping requirements established in d)(1) above.

Operational Restriction:

Not less than eighty one percent reduction, by weight, in the overall VOC emissions from the coating line; control efficiency not less than ninety per cent, by weight

Applicable Compliance Method:

Compliance with the operational restrictions above shall be demonstrated based on the results of emissions testing conducted in accordance with f)(3) below.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

The permittee shall conduct, or have conducted, emission testing for this emissions unit, during the first 12 calendar months of operation following the issuance of this permit, in accordance with the following requirements:

The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A (whichever is appropriate) of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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



The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's *Guidelines for Determining Capture Efficiency*, dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

Miscellaneous Requirements

Modeling to demonstrate compliance with the Ohio EPA's *Air Toxic Policy* was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a *modification* as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



Emissions Unit Group - Group 5: K020, K021, K022,

EU ID	Operations, Property and/or Equipment Description
K020	Post-Repair Spray 105
K021	Post-Repair Spray 106
K022	Post-Repair Spray 107

- e) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

d)(5), d)(6), d)(7), and d)(8).

For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

None.

Applicable Emissions Limitations and/or Control Requirements

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)	See b)(2), c)(2) and c)(3) below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(a).
b.	OAC rule 3745-21-09(U)(1)(a)	See c)(1) below.
c.	ORC 3704.03(F) and OAC rule 3745-114-01	See d)(5), d)(6), d)(7), and d)(8).

Additional Terms and Conditions

- a. For emissions unit K020: Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 3.67 pounds per hour, nor 16.07 tons per year.
- b. For emissions unit K021: VOC emissions from this emissions unit shall not exceed 0.97 pound per hour, nor 4.25 tons per year.



- c. For emissions unit K022: VOC emissions from this emissions unit shall not exceed 1.19 pounds per hour, nor 5.21 tons per year.

[The hourly and annual VOC emission limitations represent the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and/or reporting requirements are necessary to ensure compliance with these limitations.]

All of the VOC emissions from each emissions unit shall be vented to a regenerative thermal oxidizer (RTO) that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation (whenever solvent-based coatings are being employed)..

Operational Restrictions

The permittee shall not use coatings that are in excess of 10.3 pounds of VOC per gallon of solids in each emissions unit.

The capture and control system shall provide not less than an eighty one percent reduction, by weight, in the overall VOC emissions from the coating line and the control equipment shall have an efficiency of not less than ninety per cent, by weight, for the VOC emissions vented to the control equipment.

The permittee shall maintain the air flow in the air duct from this emissions unit at a pressure of not less than 0.250 inches of water, as a one-hour average at all times while this emissions unit is in operation.

Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the coating line and maintain the information at the facility for a period of three years:

- d. The name and identification number of each coating used.
- e. The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating.
- f. The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of all the coatings.
- g. The calculated, controlled VOC emission rate, in mass of VOC per unit volume of coating solids, as applied. The controlled VOC emission rate shall be calculated using (a) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with paragraph (B)(3)(j)(iii) of OAC rule 3745-21-09 and (b) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

The permittee shall install, calibrate, operate and maintain a monitoring device to continuously measure and record the velocity pressure of the air flow within the air duct from this emissions unit at a location downstream of all individual pick-up point connections and upstream of where this duct connects to the main inlet duct to the RTO. The velocity



pressure monitoring and recording device shall be installed, calibrated, operated and maintained in accordance with the manufacturer=s recommendations and specifications.

The permittee shall maintain records of any occurrence during which the velocity pressure in the air duct from this emissions unit is less than 0.250 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and the operating manuals. The acceptable temperature setting shall be based upon the manufacturer=s specifications until such time as any required emission testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:

- h. all 3-hour blocks of time, when the emissions unit(s) controlled by the RTO was/were in operation, during which the average combustion temperature within the RTO was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance; and
- i. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

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

(2) Whenever the monitored average combustion temperature within the RTO deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee



determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

The permit to install for emissions unit K020 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's [Review of New Sources of Air Toxic Emissions](#) policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the [worst case](#) pollutant(s):

Pollutant: xylene

TLV (mg/m³): 434

Maximum Hourly Emission Rate (lbs/hr): 1.11

Predicted 1 Hour Maximum Ground-Level Concentration (ug/m³): 356

MAGLC (ug/m³): 10,333

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the [Air Toxic Policy](#) is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the



ΔAir Toxic Policy@ will still be satisfied. If, upon evaluation, the permittee determines that the ΔAir Toxic Policy@ will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the ΔAir Toxic Policy@ include the following:

- l. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- m. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- n. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the ΔAir Toxic Policy@ will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a Δmodification@ under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the ΔAir Toxic Policy:@

- o. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- p. documentation of its evaluation and determination that the changed emissions unit still satisfies the ΔAir Toxic Policy@; and
- q. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the ΔAir Toxic Policy@ for the change.

The permit to install for emissions units K021 and K022 was evaluated (for each individually) based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's ΔReview of New Sources of Air Toxic Emissions@ policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the Δworst case@ pollutant(s):



Pollutant: MIBK
TLV (mg/m3): 205
Maximum Hourly Emission Rate (lbs/hr): 2.02
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 964
MAGLC (ug/m3): 4,881

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the Air Toxic Policy is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the Air Toxic Policy will still be satisfied. If, upon evaluation, the permittee determines that the Air Toxic Policy will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the Air Toxic Policy include the following:

- r. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- s. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- t. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Air Toxic Policy will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a modification under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the Air Toxic Policy:

- u. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- v. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and

where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.



Reporting Requirements

The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying 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 45 days after the exceedance occurs.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the RTO during the 12-month reporting period for this/these emissions unit(s):

- w. each period of time (start time and date, and end time and date) when the average combustion temperature within the RTO was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
- x. each period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
- y. an identification of each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
- z. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the RTO into compliance with the acceptable range, was determined to be necessary and was not taken; and
- aa. an identification of each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the air duct from this emissions unit: All time periods during which the velocity pressure in the air duct from this emissions unit was less than 0.250 inches of water as a one-hour average and the operation of the emissions unit was not discontinued within one hour of the occurrence.

Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

Testing Requirements

Compliance with the emission limitations shall be determined in accordance with the following methods:



Emission Limitations:

For emissions unit K020: VOC emissions from this emissions unit shall not exceed 3.67 pound per hour, nor 16.07 tons per year.

For emissions unit K021: VOC emissions from this emissions unit shall not exceed 0.97 pound per hour, nor 4.25 tons per year.

For emissions unit K022: VOC emissions from this emissions unit shall not exceed 1.19 pounds per hour, nor 5.21 tons per year.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated as follows (for each emissions unit):

multiply the maximum VOC content (lbs/gallon) of the coatings by the maximum hourly number of gallons of coatings, and then by (1-0.81*);

multiply the maximum VOC content (lbs/gallon) of the cleanup materials by the maximum hourly number of gallons of cleanup materials; and

add i + ii.

The annual VOC emission limitation above was established by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured.

*The overall control efficiency was assumed to be 81%.

Emission Limitation:

10.3 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation above shall be demonstrated based on the record keeping requirements established in d)(1) above.

Operational Restriction:

Not less than eighty one percent reduction, by weight, in the overall VOC emissions from the coating line; control efficiency not less than ninety per cent, by weight

Applicable Compliance Method:



Compliance with the operational restrictions above shall be demonstrated based on the results of emissions testing conducted in accordance with f)(3) below.

The VOC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

The permittee shall conduct, or have conducted, emission testing for this emissions unit, during the first 12 calendar months of operation following the issuance of this permit, in accordance with the following requirements:

The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A (whichever is appropriate) of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's Guidelines for Determining Capture Efficiency, dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104057

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Effective Date: 11/25/2008

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

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

Miscellaneous Requirements

None.