



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/12/2012

Mr. Brian Bokovoy
Emerald Performance Materials, LLC
2235 Langdon Farm Rd.
Cincinnati, OH 45237-4712

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 1431070039
Permit Number: P0111037
Permit Type: Initial Installation
County: Hamilton

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Cincinnati Enquirer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification
SWOAQA; Indiana; Kentucky

Certified Mail

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



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Emerald Performance Materials, LLC (Emerald) proposes to install a 63.0 MMBtu/hr gas/oil fired boiler (Emissions unit B013) to replace the existing coal fired boiler (Emissions unit B009). The proposed boiler would be limited to using fuel oil only during periods of gas curtailment, gas supply emergencies, or for periodic testing not to exceed 48 hours during any calendar year. This allows the new unit to avoid requirements of the area source boiler MACT.

Emissions unit B013 would have a No. 2 fuel oil usage limitation of 400,000 gallons per 12-month rolling period, and a fuel oil sulfur content limitation of 0.5% to limit SO₂ emissions. Low NO_x burners will be fitted.

The original application included netting of actual emissions available from the shutdown of Emissions unit B009; these netting emissions were not required in light of the fuel oil usage limitations and compliance with OAC rule 3745-110-03(C) requirements.

3. Facility Emissions and Attainment Status:

Emerald is a Title V facility located in Hamilton County and a major source for SO₂ for federal NSR purposes. This facility is also a synthetic minor for Hazardous Air Pollutants (HAPs). Hamilton County is in attainment for PM₁₀, PM_{2.5}, SO₂, NO_x and CO. Hamilton County is non-attainment for ozone.

4. Source Emissions:

The annual emissions from the proposed source (139 TPY potential) would exceed the 40 ton per year SO₂ threshold for Federal new source review. This permit would impose federally enforceable limits on SO₂ emissions to create a synthetic minor. Other emissions are summarized in the table below.

5. Conclusion:

Approval of a permit to install for the proposed emission unit is recommended. Permit fee is \$200 (the regular fee is halved for use of only natural gas and distillate fuels).

6. Please provide additional notes or comments as necessary:

None



7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	2.55
PM10	2.55
PM2.5	2.55
SO2	14.35
NOx	28.15
CO	23.18
VOC	1.52

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
Emerald Performance Materials, LLC

Issue Date: 12/12/2012

Permit Number: P0111037

Permit Type: Initial Installation

Permit Description: Initial installation of a 63 MMBtu/hr natural gas boiler (B013) with option of burning No. 2 Fuel Oil during periods of gas curtailment, gas supply emergencies, or for periodic testing, thereby exempting this emissions unit from 40 CFR Part 63 Subpart JJJJJJ .

Facility ID: 1431070039

Facility Location: Emerald Performance Materials, LLC
2235 Langdon Farm Rd.,
Cincinnati, OH 45237-4712

Facility Description: Petrochemical Manufacturing

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the permit # or: Bonnie Pray, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777



DRAFT

**Division of Air Pollution Control
Permit-to-Install
for
Emerald Performance Materials, LLC**

Facility ID:	1431070039
Permit Number:	P0111037
Permit Type:	Initial Installation
Issued:	12/12/2012
Effective:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
Emerald Performance Materials, LLC

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. Federally Enforceable Standard Terms and Conditions	4
2. Severability Clause	4
3. General Requirements	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting	6
6. Compliance Requirements	6
7. Best Available Technology	7
8. Air Pollution Nuisance	7
9. Reporting Requirements	7
10. Applicability	8
11. Construction of New Sources(s) and Authorization to Install	8
12. Permit-To-Operate Application	9
13. Construction Compliance Certification	9
14. Public Disclosure	9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	10
16. Fees.....	10
17. Permit Transfers	10
18. Risk Management Plans	10
19. Title IV Provisions	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions	15
1. B013, Boiler 8	16



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039
Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1431070039
Facility Description: Manufacturer of Dyes and Pigments
Application Number(s): A0045203
Permit Number: P0111037
Permit Description: Initial installation of a 63 MMBtu/hr natural gas boiler (B013) with option of burning No. 2 Fuel Oil during periods of gas curtailment, gas supply emergencies, or for periodic testing, thereby exempting this emissions unit from 40 CFR Part 63 Subpart JJJJJJ .
Permit Type: Initial Installation
Permit Fee: \$200.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 12/12/2012
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Emerald Performance Materials, LLC
2235 Langdon Farm Rd.
Cincinnati, OH 45237-4712

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

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

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0111037

Permit Description: Initial installation of a 63 MMBtu/hr natural gas boiler (B013) with option of burning No. 2 Fuel Oil during periods of gas curtailment, gas supply emergencies, or for periodic testing, thereby exempting this emissions unit from 40 CFR Part 63 Subpart JJJJJJ .

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

Emissions Unit ID:	B013
Company Equipment ID:	Boiler 8
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

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

2. Severability Clause

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

3. General Requirements

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



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

4. Monitoring and Related Record Keeping and Reporting Requirements

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



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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.



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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Southwest Ohio Air Quality Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have



been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Southwest Ohio Air Quality Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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



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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

14. Public Disclosure

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



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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



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

2. The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units B001 (Dow Therm Heaters), F001 (Coal Handling 09-I), F002 (Fly Ash Handling 09-I), B007 (37.2 MMBtu/hr natural gas-fired boiler), B009 (90 MMBtu/hr traveling grate coal-fired boiler controlled with a multiclone), B010 (119.4 MMBtu/hr Natural Gas Fired Boiler with Backup Fuel Oil), B013 (63 MMBtu/hr Natural Gas fired Boiler with Backup Fuel Oil), P154 (wastewater pretreatment (plantwide) controlled with Carbon adsorption system), P159 (Wastewater Pretreatment 52-II), P160 (Packout 41-I), P168 (Packout 41-II), P172 (Sizing, Packing Food Colors 01-I), P173 (Sizing, Packing Food Colors 02-II), P174 (Packout 10-I), P175 (Dye Reaction 06-I), P177 (Pigment Packout 08-I), P178 (Pigment Packout 08-II), P179 (Boiler 40-I), P180 (Food Color Packaging 40-I), P181 ((Dye Filtration 36-I), P184 (Granularizing Food Colors 01-I), P187 (Pigment Flushing 39-I), P188 (Dye Drying 21-II), P189 (Pigment Salt Milling 39-I), P190 (Dye Blending 10-I), P193 (Dye Material Handling and Packout 14-I), P194 (Pigment Flushing 10-V), P200 (Dye Drying 41-I), P207 (Dye Drying 41-II), P208 (Dye Drying 41-III), P209 (Seal Water Cooling 41-I), P215 (Dye Drying 21-I), P222 (Dye Grinding and Blending 41-I), P223 (Dye Reaction 36-I), P224 (Dye Reaction 36-II), P225 (Dye Reaction 36-III), P226 (Dye Reaction 36-IV), P227 (Condensate Recovery 36-I), P228 (Mother Liquor Handling 36-I), P229 (Wash Preparation 36-I), P230 (Dye Reaction 36-VI), P231 (Dye Reaction 36-VII), P232 (Dye Reaction 36-X), P233 (Dye Salting 36-I), P234 (Dye Slurry Holding 36-I), P237 (Dye Mixing and Milling 36-II), P238 (Dye Blending 36-I), P240 (Dye Reaction 36-IX), P241 (Dye Reaction 36-V), P242 (Condensate Recovery 36-II), P243 (Dye Reaction 36-VIII), P245 (Dye Reaction 20-I), P246 (Tray Drying 10-I), P249 (Tray Drying 10-II), P250 (Dye Reaction 10-I), P251 (Dye Clarification 20-I), P261 (Tray Drying 10-III), P263 (Tray Drying 10-IV), P266 (Tray Drying 10-V), P282 (Packout 21-I), P284 (Dye Drying 14-I), P295 (Dye Mfg. 12-I), P296 (Dye Reaction 12-I), P297 (Tray Drying 08-I), P313 (Dye Reaction 12-II), P314 (Dye Reaction 12-III), P315 (Separation/Filtration 12-I), P316 (Dry Reaction 12-IV), P317 (Dye Sulfonation 12-XIV), P318 (Dye Sulfonation 12-XV), P319 (Dye Sulfonation 12-I), P320 (Dye Sulfonation 12-II), P321 (Dye Sulfonation 12-III), P322 (Dye Sulfonation 12-IV), P323 (Dye Sulfonation 12-V), P324 (Dye Sulfonation 12-VI), P325 (Dye Sulfonation 12-VII), P326 (Dye Sulfonation 12-VIII), P327 (Dye Sulfonation 12-IX), P328 (Dye Sulfonation 12-X), P329 (Dye Sulfonation 12-XI), P330 (Dye Sulfonation 12-XII), P331 (Dye Sulfonation 12-XIII), P332 (Separation/Filtration 12-II), P333 (Separation/Filtration 12-IV), P334 (Separation/Filtration 12-V), P335 (Pigment Mfg. 12-II), P336 (Separation/Filtration 12-VII), P337 (Separation/Filtration 12-VIII), P338 (Pigment Mfg. 12-I), P339 (Dye Mfg. 12-II), P340 (Dye Mfg. 12-V), P341 (Dye Mfg. 12-VI), P342 (Dye Reaction 12-III), P343 (Dye Mfg. 12-III), P344 (Dye Mfg. 12-IV), P345 (Dye Mfg. 12-V), P346 (Dye Mfg. 12-VI), P347 (Dye Mfg. 12-VII), P348 (Dye Mfg. 12-VIII), P349 (Dye Mfg. 12-IX), P350 (Pigment Milling 12-I), P351 (Dye Reaction 12-VIII), P352 (Dye Mfg. XI), P353 (Separation/Filtration 12-X), P354 (Separation/Filtration 12-XI), P355 (Separation/Filtration 12 XII), P356 (Pigment Milling 12-II), P357 (Separation/Filtration 12-XIV), P358 (Dye Mfg. 12-XIII), P359 (Separation/Filtration 12-12-XV), P360 (Dye Mfg. 12-XIII), P361 (Dye Mfg. 12 XIV), P362 (Dye Mfg. 12-XV), P363 (Tray Drying 08-II), P364 (Tray Drying 08-III), P365 (Tray Drying 08-V), P366 (Vacuum Drying 08-I), P367 (Pigment Mfg. 08-I), P368 (Pigment Mfg. 08-II), P369 (Pigment Mfg. 08-III), P370 (Pigment Mfg. 08-IV), P371 (Diazo Pigment Reaction 08-II), P372 (Diazo Pigment Reaction 08-I), P373 (Grinding Blending), Packing Dyes 08-I), P374 (Grinding Blending), Packing Dyes 08-II), P379 (Varnish and Misc. Reaction 12-I), P380 (Varnish Mfg. 12-I), P381 (Varnish and Misc. Reaction 13-II), P382 (Varnish and Misc. Reaction 13-III), P383 (Packout 01-I), P384 (Packout 02-I), P385 (Tray Drying 02-I), P386 (Tray Drying 02-II), P387 (Food Color Mfg.



02-I), P388 (Tray Drying 01-I), P389 (Vacuum Drying 01-I), P390 (Spray Drying 02-I), P391 (Drum Drying Food Colors 020I), P392 (Liquid Color Solutions 02-I), P393 (Pilot Plant Reaction 35-I), P394 (Pilot Plant Reaction 35-II), P395 (Pilot Plant Vacuum Tray Drying 35-I), P396 (Pilot Plant Reaction 35-VI), P397 (Pilot Plant Vacuum Drying 35-I), P398 (Pilot Plant Tray Drying 35-I), P399 (Sizing, Packing Food Colors 02-III), P400 (Sizing, Packing Food Colors 02-II), P401 (Varnish and Misc. Reaction 13-IV), P402 (Pilot Plant Reaction 35-VIII), P403 (Pilot Plant Reaction 35-IX), P404 (Pilot Plant Reaction 35-X), P405 (Grinding, Blending, Packing Dyes 08-I), P406 (Grinding, Blending, Packing Dyes 08-II), P407 (Grinding, Packing Pigments 08-I), P408 (Pigment Filtration 08-I), P409 (Pigment Flushing 10-I), P410 (Pigment Flushing 10-II), P411 (Pigment Flushing 10-III), P412 (Pigment Flushing 10-IV), P413 (Pigment Flushing 10-VI), P414 (Pigment Flushing 10-VII), P415 (Pigment Flushing 10-VIII), P416 (Pigment Flushing 10-IX), P417 (Pigment Flushing 10-X), P418 (Pigment Flushing 10-XI), P419 (Pigment Flushing 10-XII), P420 (Pigment Flushing 10-XIII), P421 (Pigment Flushing 10-V), P422 (Spray Drying Food Colors), P423 (Pigment Dispersing 10-I), P424 (Pigment Milling 12-III), P425 (Separation/Filtration 12-XVII), P426 (Separation/Filtration 12-IX), P427 (Dye Mfg. 12-XVII), P428 (Dye Mfg. 12-XVIII), P429 (Dye Mfg. 12-XIX), P430 (Pigment Mfg. 08-VI), P431 (Pigment Mfg. 08-VII), P432 (Pigment Mfg. 08-VIII), P433 (Pigment Mfg. 08-IX), P434 (Pigment Mfg. 08-X), P435 (Pigment Mfg. 08-XI), P436 (Pigment Mfg. 08-XII), P437 (Pigment Mfg. 08-XIII), P438 (Pigment Mfg. 08-XIV), P439 (Pigment Mfg. 08-XV), P441 (Pigment Mfg. 12-III), P442 (Pigment Mfg. 12-IV), P443 (Pigment Mfg. 12-V), P444 (Pigment Mfg. 12-VI), P445 (Pigment Mfg. 12-VII), P446 (Pigment Mfg. 12-VIII), P447 (Pigment Mfg. 12-IX), P448 (Pigment Mfg. 12-X), P449 (Pigment Mfg. 12-XI), P450 (Pigment Mfg. 12-XII), P451 (Pigment Mfg. 12-XIII), P452 (Pigment Mixing 12-III), P453 (Pigment Mixing 12-1), P454 (Pigment Mixing 12-II), P455 (Pigment Dispersion 12-I), P456 (Pigment Dispersion 12- II), P457 (Liquid Color Solutions 02-II), P459 (Tank TF-XXV), P460 (Tank 14-VIII), P461 (Pigment Dispersion 12-IV), P462 (Milled Pigments), P466 (Grinding/ Blending 21-I), P467 (Pigment Mfg. 12-XV), P468 ((Pigment Mfg. 12-XVI), P469 (Solvent Storage 12-I), P470 (FD&C Lakes Blending), P473 (Pigment Mfg. 12-XVII), P474 (Pigment Mfg. 12-XVIII), P475 (Pigment Mfg. 12-XIX), P476 (Ball Mill A), P477 (Ball Mill B), P478 (Ball Mill C), P479 (Ball Mill D), P480 (Ball Mill E), P481 (Ball Mill F), P482 (Ball Mill G), P483 (Ball Mill L), P484 (High Speed Disperser 1), P485 (High Speed Disperser 2), P486 (High Speed Disperser 3), P487 (High Speed Disperser 4), P488 (High Speed Disperser 5), P489 (High Speed Disperser 6), P490 (High Speed Disperser 7), P491 (High Speed Disperser 8), P492 (High Speed Disperser 9), P493 (High Speed Disperser 10), P494 (High Speed Disperser 11), P495 (Drais Mill 1 DR), P496 (Drais Mill 2 DR), P497 (Drais Mill 3 DR), P498 (Drais Mill 4 DR), P499 (Pony Mixer 1), P500 (Double Post Mixer), P501 (Pony Mixer 3), P502 (Roll Mill 1), P503 (Roll Mill 2), P504 (Roll Mill 3), P505 (Roll Mill 4), P506 (Roll Mill 5), P507 (Roll Mill 6), P512 (Oil-based carbon dispersion process), P513 (Water-based carbon dispersion train), P514 (Mulch colorant dispersion media), T002 (Tank 14-III), T006 (Tank 54-I), T013 (Tank 12-IV), T014 (Tank 12-III), T015 (Tank 03-I), T020 (Tank 41-VI), T023 (Tank 13-I), T024 (Tank 13-II), T025 (Tank 13-III), T026 (Tank 13-IV), T027 (Tank 13-V), T028 (Tank 13-IX), T029 (Tank 13-VII), T030 (Tank 13-VIII), T035 (Tank 20-XIII), T037 (Tank 20-XV), T038 (Tank 20-X), T039 (Tank 20-XII), T042 (Tank 54-II), T047 (Tank 21-IV), T055Tank TF-XX), T056Tank TF-XXI), T061Tank TF-VIII), T066Tank TF-XIII), T067 (Tank 21-II), T069 (Tank 36-VII), T070 (Tank 36-V), T073 (Tank 36-VI), T077 (Tank 24-1), T078 (Tank 09-I), T079 (Tank TF-II), T080 (Tank TF-V), T081 (Tank TF-VI), T082 (Tank TF-VII), T085 (Tank 21-VI), T087 (Tank TF-I), T088 (Tank TF-IX), T089 (Tank TF-X), T090 (Tank TF-XII), T091 (Tank 21-III), T092 (Tank 14-V), T093 (Tank 21-I), T094 (Tank 14-I), T095 (Tank 54-III), T096 (Tank 14-IV), T097 (Tank 20-V), T098 (Tank 41-II), T099 (Tank 41-III), T100 (Tank 41-IV), T101 (Tank 41-V), T102 (Tank 41-VII), T103 (Tank 41-VIII), T104 (Tank 41-IX), T105 (Tank TF-XXIV), T106 (Tank TF-XXVI), T107 (Tank TF-XXVII), T108 (Tank 20-XVII), T109 (Tank 54-IV), T110 (Tank 14-VI), T111 (Tank 14-VII), T112 (Tank 20-I), T113 (Tank TF-XVIII), T114 (Tank 20-II), T115 (Tank TF-XXII), T116 (Tank 36-I), T117 (Tank 21-V), T118 (Tank 41-V), T119(Tank 36-IV), including any de



minimum air contaminant sources, as defined in OAC rule 3745-15-05, and permanent exemption air contaminant sources shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with the rolling, 12-month emissions limitation upon issuance of the permit.

3. The permittee shall collect and record the following information each month:
 - a) The monthly single HAP emissions from all facility emissions units contained in 2. combined, in pounds, for each single HAP.
 - b) The rolling, 12-month summation of single HAP emissions, in tons, from all facility emissions units contained in 2. combined calculated as below for each single HAP:

The rolling, 12-month summation of single HAP emissions = (monthly single HAP emissions from (a) + sum of monthly single HAP emissions from previous 11 calendar months)/2000.
 - c) The monthly total HAPs (sum of all single HAPs) emissions from all facility emissions units contained in 2. combined, in pounds.
 - d) The rolling, 12-month summation of total HAP (sum of all single HAP) emissions, in tons, from all facility emissions units contained in 2. combined calculated as below:

The rolling, 12-month summation of total HAP [sum of all single HAP emissions = (monthly total HAP emissions from (c) + sum of monthly total HAP emissions from previous 11 calendar months)/2000].
4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in 2. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
5. Emission Limitations:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs, based on a rolling 12-month summation for the emissions units listed in 2.

Applicable Compliance Method:
6. Compliance with the HAP emission limitations shall be demonstrated by the record keeping requirements specified in 3.



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. B013, Boiler 8

Operations, Property and/or Equipment Description:

63 MMBtu/hr Natural Gas Fired Boiler with Backup Fuel Oil

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	<p>Particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), and Particulate Matter 2.5 microns and less in diameter (PM2.5) shall not exceed 2.55 tons per year (TPY).</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 1.52 TPY.</p> <p>See b)(2)a., b)(2)c., b)(2)d. and b)(2)f.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1), OAC rule 3745-18-06(A), OAC rule 3745-18-06(D), OAC rule 3745-31-05(D), OAC rule 3745-110-03, and 40 CFR Part 60 Subpart Dc.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See b)(2)b.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	ORC 3704.03(T) Best Available Technology (BAT) under the Revised Code applies to nitrogen oxides (NOx), sulfur dioxide (SO ₂) and carbon monoxide (CO).	See b)(2)c. and b)(2)d. for SO ₂ , NOx and CO emission limitations.
d.	OAC rule 3745-31-05(D) (Avoiding PSD for SO ₂)	Combined Emissions from Natural Gas and #2 Fuel Oil Use: Sulfur dioxide (SO ₂) emissions shall not exceed 14.35 tpy, based upon a rolling, 12-month summation. See c)(1) and c(2).
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). PE shall not exceed 0.020 pound per million Btu actual heat input.
g.	OAC rule 3745-18-06(A)	Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06, and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.
h.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T) and 40 CFR 60 Subpart Dc.
i.	OAC rule 3745-110-03(C)	See b)(2)c. and b)(2)d. for applicable NOx emission limits.
j.	40 CFR Part 60 Subpart Dc	Emissions of SO ₂ shall not exceed 0.50 lb. of SO ₂ /MMBtu of actual heat input when combusting No. 2 fuel, or as an alternative, comply with c)(2).



Effective Date: To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.</p> <p>This opacity limitation does not apply during periods of start-up, shutdown or malfunction.</p> <p>See b)(2)e.</p>
k.	40 CFR part 63, Subpart JJJJJJ	<p>The permittee is exempt from the area source MACT requirements pursuant to 40 CFR Part 63.11195(e) of Subpart JJJJJJ as long this emissions unit complies with the following requirements: gas-fired boiler as defined in 63.11237 which states a boiler that primarily burns gas is still considered a gas-fired boiler even if it also burns oil or other liquid fuel during periods of gas curtailment, gas supply emergencies, or for periodic testing not to exceed 48 hours during any calendar year.</p> <p>See c)(5).</p>

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.



- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, PM₁₀, PM_{2.5} and VOC emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM₁₀, PM_{2.5} and VOC emissions is less than ten tons per year.

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

- c. The following emission limitations shall not be exceeded when burning natural gas:

Particulate emissions (PE), Particulate Matter 10 microns or less in diameter (PM₁₀) and Particulate Matter 2.5 microns or less in diameter (PM_{2.5}) shall not exceed 0.0076 lb./MMBtu of actual heat input*.

Sulfur Dioxide (SO₂) emissions shall not exceed 0.006 lb./MMBtu of actual heat input*.

Nitrogen Oxide (NO_x) emissions shall not exceed 0.10 lb./MMBtu of actual heat input*.

Carbon Monoxide (CO) emissions shall not exceed 0.084 lb./MMBtu of actual heat input*.

Volatile Organic Compound (VOC) emissions shall not exceed 0.0055 lb./MMBtu of actual heat input*.

*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

- d. The following emission limitations shall not be exceeded when burning No. 2 fuel oil:

PE/PM₁₀/PM_{2.5} emissions shall not exceed 0.026 lb./MMBtu of actual heat input*.

SO₂ emissions shall not exceed 0.50 lb./MMBtu of actual heat input.

NO_x emissions shall not exceed 0.12 lb./MMBtu of actual heat input*.

CO emissions shall not exceed 0.04 lb./MMBtu of actual heat input*.

VOC emissions shall not exceed 0.002 lb./MMBtu of actual heat input*.

*The emission limitations outlined above for PE/PM₁₀/PM_{2.5}, NO_x, CO, and VOC are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.



Effective Date: To be entered upon final issuance

- e. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- f. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, an annual No. 2 fuel oil usage limitation, the fuel oil sulfur content limitation, the use of low-NOx burners, the visible emission limitation, and compliance with the mass emission limitations.

c) Operational Restrictions

- (1) The maximum annual fuel oil usage for this emissions unit shall not exceed 400,000 gallons, based upon a rolling, 12-month summation of fuel oil usage.
 - a. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum allowable cumulative usage of fuel oil, gallons
1	339,636
1-2	400,000
1-3	400,000
1-4	400,000
1-5	400,000
1-6	400,000
1-7	400,000
1-8	400,000
1-9	400,000
1-10	400,000
1-11	400,000
1-12	400,000



After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for fuel oil shall be based upon a rolling, 12-month summation of the monthly fuel oil usage.

- (2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit, and shall not exceed a maximum sulfur content of 0.5 percent by weight.
 - (3) The permittee shall operate and maintain low-NOx burners, at all times when operating this emissions unit, for the combustion of natural gas and No. 2 fuel oil, that comply with the NOx heat input emission limitations listed in b)(2)c. and b)(2)d.
 - (4) The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
 - (5) For emissions unit B013, the permittee shall burn only natural gas except during periods of gas curtailment, natural gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain records of the oil burned in this emissions unit, in accordance with either Alternative 1 or Alternative 2 described below:

Alternative 1:

For each shipment of oil received for burning in this emission, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit, for each day when the emissions unit is in operation. If additional diesel fuel is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the diesel fuel burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit, is only operated for the purpose of "test-firing." The permittee shall



maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

- (2) The permittee shall maintain monthly records of the following information:
 - a. the fuel oil usage for each month; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the fuel oil usage figures.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative fuel oil usage for each calendar month.

- (3) The permittee shall calculate and maintain monthly records of the SO₂ emissions and the rolling, 12-month emissions of SO₂.
 - (4) The permittee shall log any fuel use other than natural gas in B013. The log shall include the time, in hours, and date of the period when an alternate fuel was used as well as the identification and quantity of the fuel consumed during this time frame. The log shall also include the reason why the alternate fuel was used.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation on fuel oil usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel oil usage levels for this emissions unit.

These reports are due by the date described in Section A - Standard Terms and Conditions of this permit.



- (2) The permittee shall notify the director (the appropriate District Office or local air agency) in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates for shipment of oil, calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.
- (3) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the operational restriction in c)(4) and the limitation outlined in c)(5). The notification shall include a copy of such record and shall be sent the Southwest Ohio Air Quality Agency within 30 days after the deviation occurs.
- (4) Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. construction date (no later than 30 days after such date);
 - b. actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
 - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Southwest Ohio Air Quality Agency
250 William Howard Taft Road
Cincinnati, Ohio 45219

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

allexceedances of the rolling, 12-month emission limitation for SO₂.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
 - (6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

b. Emission Limitations:

Particulate emissions (PE), particulate matter 10 microns and less in diameter (PM₁₀), and Particulate Matter 2.5 microns and less in diameter (PM_{2.5}) shall not exceed 0.0076 lb./MMBtu of actual heat input when burning natural gas; and

PE/PM₁₀/PM_{2.5} emissions shall not exceed 0.026 lb./MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas:

Compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (63 thousand cubic feet per hour) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs. of PE/PM₁₀/PM_{2.5} per million cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

Applicable Compliance Method when burning No. 2 fuel oil:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (456.5 gallons/hr.) by the AP-42, Fifth Edition, Section 1.3, Tables 1.3-1 and 1.3-2 (revised 5/10) emission factor of 3.3 lbs. of PE/PM₁₀/PM_{2.5} per 1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

If required the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 1-5 of 40 CFR, Part 60, Appendix A.

c. Emission Limitations:

SO₂ emissions shall not exceed 0.0006 lb/MMBtu of actual heat input when burning natural gas; and

SO₂ emissions shall not exceed 0.50 lb/MMBtu of actual heat input when burning No. 2 fuel oil.



Applicable Compliance Method when burning natural gas:

Compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (63 thousand cubic feet per hour) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb. of SO₂/million cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

Applicable Compliance Method when burning No. 2 fuel oil:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each shipment of oil received during each calendar month meets the sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6C, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

d. Emission Limitations:

NO_x emissions shall not exceed 0.10 lb./MMBtu of actual heat input when burning natural gas; and

NO_x emissions shall not exceed 0.12 lb./MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas:

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (63 thousand cubic feet per hour) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 100 lbs. of NO_x/ million cubic feet of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

Applicable Compliance Method when burning No. 2 fuel oil:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (456.5 gallons/hr.) by the vendor provided as submitted with permit application A0045203 emission factor equivalent of 16.6 lbs. of NO_x/1000 gallons of fuel oil and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

If required, the permittee shall demonstrate compliance with the lb./MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

e. Emission Limitations:

CO emissions shall not exceed 0.084 lb./MMBtu of actual heat input when burning natural gas; and



CO emissions shall not exceed 0.040 lb./MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas:

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (63 thousand cubic feet per hour) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs. of CO/ million cubic feet of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

Applicable Compliance Method when burning No. 2 fuel oil:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (456.5 gallons/hr.) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 5 lbs. of CO/1000 gallons of fuel oil and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

If required, the permittee shall demonstrate compliance with the lb./MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

f. Emission Limitations:

VOC emissions shall not exceed 0.0055 lb./MMBtu of actual heat input when burning natural gas; and

VOC emissions shall not exceed 0.002 lb. of VOC/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas:

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (63 thousand cubic feet per hour) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 5.50 lbs. of VOC/million cubic feet of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

Applicable Compliance Method when burning No. 2 fuel oil:

Compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (456.5 gallons/hr.) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 5/10) emission factor of 0.252 lb. of VOC/1000 gallons of fuel oil and then dividing by the maximum hourly heat input capacity of the emissions unit (63 MMBtu/hr.).

If required, the permittee shall demonstrate compliance with the lb./MMBtu limitations in accordance with Method 25, 40 CFR, Part 60, Appendix A.



g. Emission Limitations:

Particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), and particulate matter 2.5 microns and less in diameter (PM2.5) shall not exceed 2.55 tons per year (TPY).

Volatile Organic Compound (VOC) emissions shall not exceed 1.52 TPY.

Applicable Compliance Method:

For PE/PM10/PM2.5:

Compliance with the annual emission limitation may be demonstrated by multiplying the lb. of PE/PM10/PM2.5 per MMBtu value by the maximum rated heat input capacity of the emissions unit (in MMBtu/hr.), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

For VOC:

Compliance with the annual emission limitation may be demonstrated by multiplying the lb. of VOC/MMBtu value by the maximum rated heat input capacity of the emissions unit (in MMBtu/hr.), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

h. Emission Limitation:

The emissions of SO₂ from this emissions unit shall not exceed 14.35 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance shall be determined by the record keeping requirements specified in d)(3).

i. Emission Limitation:

The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 400,000 gallons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the No. 2 fuel oil usage restriction shall be determined by the record keeping requirements specified in d)(2).

(2) Compliance with the sulfur content limitation for No. 2 fuel oil specified in c)(2) shall be determined by the record keeping requirements specified in d)(1).

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



- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for NO_x, while burning natural gas in the appropriate averaging period(s),
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 7 from 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. 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).
- f. 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.
- g. 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.

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee 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



Draft Permit-to-Install
Emerald Performance Materials, LLC
Permit Number: P0111037
Facility ID: 1431070039

Effective Date: To be entered upon final issuance

of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit-to-install.