



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

9/22/2010

Certified Mail

Mr. Ted Slavik
General Mills Cereals Properties, LLC
704 West Washington St.
Chicago, IL 60185

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1431400175
Permit Number: P0106715
Permit Type: Administrative Modification
County: Hamilton

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

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 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 "Issued Air Pollution Control Permits" link. 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
122 South Front Street
Columbus, Ohio 43215

and Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

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 Hamilton County Dept. of Environmental Services 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*
HCDOES; Indiana; Kentucky



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

General Mills is a Title V facility located in Hamilton County, Ohio which is located in a non-attainment area for particulate matter 2.5 microns and less in diameter (PM_{2.5}). This permit-to-install (PTI) permitting action is an administrative modification to permit #14-04653 issued on March 31, 1999. The modification was initiated by the permittee to make the sulfur limitation term in the PTI match the sulfur limitation term found in the Title V permit. There will be no increase in emissions due to this permit action.

3. Facility Emissions and Attainment Status:

Facility wide emissions are as follows: particulate emissions/particulate matter 10 microns and less in diameter (PE/PM₁₀) are 6.45 tons per year (TPY); sulfur dioxide (SO₂) are 40.54 TPY; nitrogen oxide (NO_x) are 37.79 TPY; carbon monoxide (CO) are 37.98 TPY; and organic compounds (OC) are 4.71 TPY.

Hamilton County, Ohio is currently designated as a non-attainment area for particulate matter 2.5 microns and less in diameter (PM_{2.5}), but attainment for the rest of the criteria pollutants. Note that since this is an administrative modification, we have chosen not to add PM_{2.5} allowable. But have as stated above changed the sulfur content to match what is listed in the current Title V. It is also noted and assumed that PE/PM₁₀ and PM_{2.5} are the same amounts in terms of mass emission levels.

4. Source Emissions:

Emissions from air contaminant sources (emissions units) B002 and B003 were derived using emission factors found in AP-42, Fifth Edition, Section 1.3, Table 1.3-1 when burning No. 2 fuel oil and AP-42, Fifth Edition, Section 1.4, Table 1.4-2 when burning natural gas.

Annual mass proposed allowable emission limitations from B002 and B003 combined are the following: CO = 37.98 TPY; NO_x = 37.79 TPY; PE/PM₁₀ = 6.45 TPY; SO₂ = 40.54 TPY; and OC = 4.71 TPY and will remain to validate both the synthetic minor and netting process outlined in the following permitting action: permit #14-04653 issued on March 31, 1999.

5. Conclusion:

The federally enforceable terms and conditions of this PTI will assure that General Mills Operations, Inc.'s facility remains in compliance with the applicable emission limitations set forth in this PTI. This PTI includes operational restrictions, record keeping and reporting requirements, reporting requirements and emission compliance demonstration requirements which will allow the facility to determine compliance with the limitations for emissions units B002 and B003.

6. Please provide additional notes or comments as necessary:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	37.98
NOx	37.79
PE/PM10	6.45
SO2	40.54
OC	4.71

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
General Mills Cereals Properties, LLC

Issue Date: 9/22/2010

Permit Number: P0106715

Permit Type: Administrative Modification

Permit Description: Administrative modification to PTI #14-04653 to correct the specifications of #2 fuel oil to match the current Title V permit.

Facility ID: 1431400175

Facility Location: General Mills Cereals Properties, LLC
11301 Mosteller Road,
Cincinnati, OH 45241

Facility Description: Breakfast Cereal Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Mike Kramer at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy., Cincinnati, OH 45219-2660 or (513)946-7777. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc



DRAFT

**Division of Air Pollution Control
Permit-to-Install
for
General Mills Cereals Properties, LLC**

Facility ID: 1431400175
Permit Number: P0106715
Permit Type: Administrative Modification
Issued: 9/22/2010
Effective: To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
General Mills Cereals Properties, 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 10
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 13
1. B002, Boiler #1 14
2. B003, Boiler No. 2 24



Authorization

Facility ID: 1431400175
Facility Description: Manufacturer of breakfast cereals and snack foods.
Application Number(s): M0000898
Permit Number: P0106715
Permit Description: Administrative modification to PTI #14-04653 to correct the specifications of #2 fuel oil to match the current Title V permit.
Permit Type: Administrative Modification
Permit Fee: \$400.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 9/22/2010
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

General Mills Cereals Properties, LLC
11301 Mosteller Road
Cincinnati, OH 45241

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

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(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

Chris Korleski
Director



Authorization (continued)

Permit Number: P0106715
Permit Description: Administrative modification to PTI #14-04653 to correct the specifications of #2 fuel oil to match the current Title V permit.

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

Emissions Unit ID:	B002
Company Equipment ID:	Boiler #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B003
Company Equipment ID:	Boiler #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



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 Hamilton County Dept. of Environmental Services.

- (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 Hamilton County Dept. of Environmental Services. 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 Hamilton County Dept. of Environmental Services 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 Hamilton County Dept. of Environmental Services 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:



Effective Date: To be entered upon final issuance

- (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 Hamilton County Dept. of Environmental Services 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 Hamilton County Dept. of Environmental Services.

- 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 Hamilton County Dept. of Environmental Services. 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.

B. Facility-Wide Terms and Conditions

Effective Date: To be entered upon final issuance

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.

C. Emissions Unit Terms and Conditions



1. B002, Boiler #1

Operations, Property and/or Equipment Description:

Boiler #1

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include references to OAC rules 3745-31-05(D), 3745-31-05(A), 3745-17-07(A), 3745-17-10(B), 3745-18-06(D), and 40 CFR Part 60 Subpart Dc.

(2) Additional Terms and Conditions

a. When burning No. 2 fuel oil, the following emission limitations shall not be exceeded:

i. Carbon monoxide (CO) emissions from the boiler shall not exceed 0.20 lb of CO/MMBtu of actual heat input;

Effective Date: To be entered upon final issuance

- ii. Nitrogen oxide (NO_x) emissions from the boiler shall not exceed 0.17 lb of NO_x/MMBtu of actual heat input;
- iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) from the boiler shall not exceed 0.020 lb of PE and PM₁₀/MMBtu of actual heat input;
- iv. Sulfur dioxide (SO₂) emissions from the boiler shall not exceed 0.304 lb of SO₂/MMBtu of actual heat input; and
- v. Organic compound (OC) emissions from the boiler shall not exceed 0.0146 lb of OC/MMBtu.

The lb/MMBtu emission limitations for CO, OC, PE/PM₁₀, and NO_x are based on the emissions unit's potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

- b. When burning only natural gas, the following emission limitations shall not be exceeded:
 - i. Carbon monoxide (CO) emissions from the boiler shall not exceed 0.06 lb of CO/MMBtu of actual heat input;
 - ii. Nitrogen oxide (NO_x) emissions from the boiler shall not exceed 0.08 lb of NO_x/MMBtu of actual heat input;
 - iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) from the boiler shall not exceed 0.020 lb of PE and PM₁₀/MMBtu of actual heat input;
 - iv. Sulfur dioxide (SO₂) emissions from the boiler shall not exceed 0.0006 lb of SO₂/MMBtu of actual heat input; and
 - v. Organic compound (OC) emissions from the boiler shall not exceed 0.0146 lb of OC/MMBtu.

The lb/MMBtu emission limitations for CO, OC, PE/PM₁₀, and NO_x are based on the emissions unit's potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

- c. The total combined emissions from emissions units B002 and B003 shall not exceed the following limitations based on a rolling 12-month summation:
 - i. Carbon monoxide (CO) emissions shall not exceed 37.98 tons per year;
 - ii. Nitrogen oxide (NO_x) emissions shall not exceed 37.79 tons per year;
 - iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) shall not exceed 6.45 tons per year;

- iv. Sulfur dioxide (SO₂) emissions shall not exceed 40.54 tons per year; and
 - v. Organic compound (OC) emissions shall not exceed 4.71 tons per year.
 - d. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.
 - 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.
- c) Operational Restrictions
- (1) The permittee shall operate and maintain low-NO_x burners capable of meeting the NO_x emission limitations specified in b)(2) at all times when operating emissions units B002 and B003.
 - (2) The total heat input for emissions units B002 and B003, combined, shall not exceed 73.7 MMBtu/hr this corresponds to a steam load of 60,000 lbs of steam per hour.
 - (3) The quality of the No. 2 fuel oil burned in emissions units B002 and B003 shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO₂ emission limitation of 0.304 pound of SO₂/MMBtu actual heat input.
 - (4) The total amount of No. 2 fuel oil burned in emissions units B002 and B003, combined, shall not exceed 1,900,000 gallons per year based upon a rolling, 12-month summation.
 - (5) The permittee shall burn only natural gas and/or No. 2 fuel oil* in this emissions unit.

*The permittee may burn a vegetable oil based fuel (biodiesel) in this emission unit under the following conditions:

At least 30-days prior to employing biodiesel as a fuel, the permittee shall submit to the Hamilton County Department of Environmental Services emission information that demonstrates the use of biodiesel as a fuel will result in compliance with the emission limitations established in this permit. At a minimum, this request shall detail the following information:

- a. certification that the biodiesel employed meets the specifications for B(100) ASTM D6751-07(b);
- b. a description of all operating scenarios for the fuel (i.e. any mixtures of biodiesel and No. 2 fuel oil); and
- c. emission information for all operating scenarios noted above.

The emission information noted above shall include references to all supporting stack test or fuel analysis used to generate the emission information submitted.

After reviewing the emission information required above, the Hamilton County Department of Environmental Services will respond in writing to either approve or deny the request for the permittee to employ biodiesel as a fuel. The permittee shall not employ biodiesel as a fuel without receiving prior written approval from the Hamilton County Department of Environmental Services.

Should the use of biodiesel as a fuel in this emission unit result in any physical or operational change that triggers a modification as defined in OAC rule 3745-31-01, the permittee shall submit a Permit to Install application prior to making the modification.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information on a monthly basis:
 - a. the total amount of No. 2 fuel oil burned in emissions units B002 and B003, combined;
 - b. the rolling 12-month summation of the usage totals recorded pursuant to d)(1)a. above, i.e., the current month's total added to the previous 11-month total; and
 - c. the total amount of natural gas burned in emissions units B002 and B003, combined.
- (2) 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 emissions unit, 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 fuel oil 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 fuel oil 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

Effective Date: To be entered upon final issuance

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.

- (3) For each day during which the permittee burns a fuel other than natural gas, and/or No. 2 fuel oil, and/or Biodiesel (after approval for use as a fuel as specified in c)(5) of this permit), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (4) The permittee shall continuously monitor and record the total combined steam flow rate for emissions units B002 and B003.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) 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



Effective Date: To be entered upon final issuance

emission limitation contained in this permit, based upon the sulfur dioxide emission rates 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.

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
 - a. No. 2 fuel oil usage limitation of 1,900,000 gallons per year based on a rolling, 12-month summation; and
 - b. steam flow rate limitation of 60,000 lbs of steam/hr.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in the General Terms and Conditions of this permit.

- (3) The permittee shall submit semiannual written reports that identify:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (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); and
 - c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:
 Department of Environmental Services
 250 William Howard Taft Road
 Cincinnati, Ohio 45219.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(2) of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitations:

PE/PM10 emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

PE/PM10 emissions shall not exceed 6.45 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning No. 2 fuel oil:

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs of filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

b. Emission Limitations:

SO₂ emissions shall not exceed 0.304 lb/MMBtu of actual heat input when burning fuel oil.

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

SO₂ emissions shall not exceed 40.54 TPY.

Applicable compliance method when burning No. 2 fuel oil:

Compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments of oil received during the calendar month.

Applicable compliance method when burning natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb of

Effective Date: To be entered upon final issuance

SO₂/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained. Should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factor and methodologies specified above for natural gas, and the calculated SO₂ emission rates and fuel usage information collected and recorded in d)(1) for No. 2 fuel oil.

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.

c. Emission Limitations:

NO_x emissions shall not exceed 0.17 lb/mmBtu of actual heat input when burning only No. 2 fuel oil.

NO_x emissions shall not exceed 0.08 lb/mmBtu of actual heat input when burning only natural gas.

NO_x emissions shall not exceed 37.79 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the manufacturer's guaranteed emission factor of 80 lbs of NO_x/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 20 lbs of NO_x/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A

d. Emission Limitations:

CO emissions shall not exceed 0.06 lb/mmBtu of actual heat input when burning only natural gas.

CO emissions shall not exceed 0.2 lb/mmBtu of actual heat input when burning No. 2 fuel oil.

CO emissions shall not exceed 37.98 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the manufacturer's guaranteed emission factor of 60 lbs of CO/MM cu. ft. of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) 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 (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

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

e. Emission Limitations:

OC emissions shall not exceed 0.0146 lb/mmBtu of actual heat input.

OC emissions shall not exceed 4.71 TPY.

Applicable compliance method when burning natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs of VOC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).



Effective Date: To be entered upon final issuance

Applicable compliance method when burning No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb of OC/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

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

f. Emission Limitation

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

Applicable Compliance Method

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- (2) Compliance with the total combined steam flow rate limitation in c)(2) shall be determined by the record keeping in d)(4).

Compliance with the total combined No. 2 fuel oil usage limitation in c)(4) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

- (1) The following is a summary of the netting emissions in tons per year:

Emissions Unit Pollutant Increase Decrease

Table with 4 columns: Emissions Unit, Pollutant, Increase, Decrease. Rows include B001 (SO2, -30.31*), B002 and B003 (SO2, +40.54), and Net Emission Change (+10.23).

* Based on the average actual emissions from the last two years of operation (1996, 1997).None.



2. B003, Boiler No. 2

Operations, Property and/or Equipment Description:

Boiler No. 2

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include references to OAC rules (3745-31-05(D), 3745-31-05(A), 3745-17-07(A), 3745-17-10(B), 3745-18-06(D)) and 40 CFR Part 60 Subpart Dc.

(2) Additional Terms and Conditions

a. When burning No. 2 fuel oil, the following emission limitations shall not be exceeded:

i. Carbon monoxide (CO) emissions from the boiler shall not exceed 0.20 lb of CO/MMBtu of actual heat input;

Effective Date: To be entered upon final issuance

- ii. Nitrogen oxide (NO_x) emissions from the boiler shall not exceed 0.17 lb of NO_x/MMBtu of actual heat input;
- iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) from the boiler shall not exceed 0.020 lb PE and PM₁₀/MMBtu of actual heat input;
- iv. Sulfur dioxide (SO₂) emissions from the boiler shall not exceed 0.304 lb of SO₂/MMBtu of actual heat input; and
- v. Organic compound (OC) emissions from the boiler shall not exceed 0.0146 lb of OC/MMBtu.

The lb/MMBtu emission limitations for CO, OC, PE/PM₁₀, and NO_x are based on the emissions unit's potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

- b. When burning only natural gas, the following emission limitations shall not be exceeded:
 - i. Carbon monoxide (CO) emissions from the boiler shall not exceed 0.06 lb of CO/MMBtu of actual heat input;
 - ii. Nitrogen oxide (NO_x) emissions from the boiler shall not exceed 0.08 lb of NO_x/MMBtu of actual heat input;
 - iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) from the boiler shall not exceed 0.020 lb of PE and PM₁₀/MMBtu of actual heat input;
 - iv. Sulfur dioxide (SO₂) emissions from the boiler shall not exceed 0.0006 lb of SO₂/MMBtu of actual heat input; and
 - v. Organic compound (OC) emissions from the boiler shall not exceed 0.0146 lb of OC/MMBtu.

The lb/MMBtu emission limitations for CO, OC, PE/PM₁₀, and NO_x are based on the emissions unit's potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

- c. The total combined emissions from emissions units B002 and B003 shall not exceed the following limitations based on a rolling 12-month summation:
 - i. Carbon monoxide (CO) emissions shall not exceed 37.98 tons per year;
 - ii. Nitrogen oxide (NO_x) emissions shall not exceed 37.79 tons per year;
 - iii. Particulate emissions (PE) and emissions of particulate matter ten microns and less in diameter (PM₁₀) shall not exceed 6.45 tons per year;

- iv. Sulfur dioxide (SO₂) emissions shall not exceed 40.54 tons per year; and
- v. Organic compound (OC) emissions shall not exceed 4.71 tons per year.
- d. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.
- 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.

c) **Operational Restrictions**

- (1) The permittee shall operate and maintain low-NO_x burners capable of meeting the NO_x emission limitations specified in b)(2) at all times when operating emissions units B002 and B003.
- (2) The total heat input for emissions units B002 and B003, combined, shall not exceed 73.7 MMBtu/hr this corresponds to a steam load of 60,000 lbs of steam per hour.
- (3) The quality of the No. 2 fuel oil burned in emissions units B002 and B003 shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO₂ emission limitation of 0.304 pound SO₂/MMBtu actual heat input.
- (4) The total amount of No. 2 fuel oil burned in emissions units B002 and B003, combined, shall not exceed 1,900,000 gallons per year based upon a rolling, 12-month summation.
- (5) The permittee shall burn only natural gas and/or No. 2 fuel oil* in this emissions unit.

*The permittee may burn a vegetable oil based fuel (biodiesel) in this emission unit under the following conditions:

At least 30-days prior to employing biodiesel as a fuel, the permittee shall submit to the Hamilton County Department of Environmental Services emission information that demonstrates the use of biodiesel as a fuel will result in compliance with the emission limitations established in this permit. At a minimum, this request shall detail the following information:

- a. certification that the biodiesel employed meets the specifications for B(100) ASTM D6751-07(b);
- b. a description of all operating scenarios for the fuel (i.e. any mixtures of biodiesel and No. 2 fuel oil);
- c. emission information for all operating scenarios noted above;

The emission information noted above shall include references to all supporting stack test or fuel analysis used to generate the emission information submitted.

After reviewing the emission information required above, the Hamilton County Department of Environmental Services will respond in writing to either approve or deny the request for the permittee to employ biodiesel as a fuel. The permittee shall not employ biodiesel as a fuel without receiving prior written approval from the Hamilton County Department of Environmental Services.

Should the use of biodiesel as a fuel in this emission unit result in any physical or operational change that triggers a modification as defined in OAC rule 3745-31-01, the permittee shall submit a Permit to Install application prior to making the modification.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information on a monthly basis:
 - a. the total amount of No. 2 fuel oil burned in emissions units B002 and B003, combined;
 - b. the rolling 12-month summation of the usage totals recorded pursuant to d)(1)a. above, i.e., the current month's total added to the previous 11-month total.
 - c. the total amount of natural gas burned in emissions units B002 and B003, combined.
- (2) 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 emissions unit, 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 fuel oil 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 fuel oil 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

Effective Date: To be entered upon final issuance

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.

- (3) For each day during which the permittee burns a fuel other than natural gas, and/or No. 2 fuel oil, and/or Biodiesel (after approval for use as a fuel as specified in section c)(5) of this permit), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (4) The permittee shall continuously monitor and record the total combined steam flow rate for emissions units B002 and B003.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) 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 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.

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
- a. No. 2 fuel oil usage limitation of 1,900,000 gallons per year based on a rolling, 12-month summation; and
 - b. steam flow rate limitation of 60,000 lbs of steam/hr.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in the General Terms and Conditions of this permit.

- (3) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (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); and
 - c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Department of Environmental Services

250 William Howard Taft Road

Cincinnati, Ohio 45219

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(2) of these terms and conditions shall be determined in accordance with the following method(s):
- a. Emission Limitations:

PE/PM10 emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

PE/PM10 emissions shall not exceed 6.45 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning No. 2 fuel oil:

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs of filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

b. Emission Limitations:

SO₂ emissions shall not exceed 0.304 lb/MMBtu of actual heat input when burning fuel oil.

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

SO₂ emissions shall not exceed 40.54 TPY.

Applicable compliance method when burning No. 2 fuel oil:

Compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments of oil received during the calendar month.

Applicable compliance method when burning natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb of

SO₂/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained. Should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factor and methodologies specified above for natural gas, and the calculated SO₂ emission rates and fuel usage information collected and recorded in d)(1) for No. 2 fuel oil.

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.

c. Emission Limitations:

NO_x emissions shall not exceed 0.17 lb/mmBtu of actual heat input when burning only No. 2 fuel oil.

NO_x emissions shall not exceed 0.08 lb/mmBtu of actual heat input when burning only natural gas.

NO_x emissions shall not exceed 37.79 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the manufacturer's guaranteed emission factor of 80 lbs of NO_x/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 20 lbs of NO_x/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A

d. Emission Limitations:

CO emissions shall not exceed 0.06 lb/mmBtu of actual heat input when burning only natural gas.

CO emissions shall not exceed 0.2 lb/mmBtu of actual heat input when burning No. 2 fuel oil.

CO emissions shall not exceed 37.98 TPY.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the manufacturer's guaranteed emission factor of 60 lbs of CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) 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 (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

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

e. Emission Limitations:

OC emissions shall not exceed 0.0146 lb/mmBtu of actual heat input.

OC emissions shall not exceed 4.71 TPY.

Applicable compliance method when burning natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs of VOC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).



Applicable compliance method when burning No. 2 fuel oil:

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb of OC/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation and No. 2 fuel oil usage restriction specified in c)(4) are maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in d)(1).

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

f. Emission Limitation

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

Applicable Compliance Method

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- (2) Compliance with the total combined steam flow rate limitation in c)(2) shall be determined by the record keeping in d)(4).
(3) Compliance with the total combined No. 2 fuel oil usage limitation in c)(4) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

- (1) The following is a summary of the netting emissions in tons per year:

Emissions Unit Pollutant Increase Decrease

Table with 4 columns: Emissions Unit, Pollutant, Increase, Decrease. Rows include B001 (SO2, -30.31*), B002 and B003 (SO2, +40.54), and Net Emission Change (+10.23).

* Based on the average actual emissions from the last two years of operation (1996, 1997).None.