Ohio Environmental Protection Agency

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

3/15/2010

Certified Mail

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

Stephan Dopuch
Ohio River Clean Fuels LLC
c/o BAARD ENERGY
800 NE TENNEY ROAD., SUITE 110 #104
VANCOVER, WA 98685

RE: FINAL AIR POLLUTION PERMIT-TO-INSTAL
Facility ID: 0215130393
Permit Number: P0106127
Permit Type: Administrative Modification
County: Columbiana

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. 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.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NEDO; Pennsylvania; West Virginia

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Ohio River Clean Fuels LLC

Facility ID: 0215130393
Permit Number: P0106127
Permit Type: Administrative Modification
Issued: 3/15/2010
Effective: 3/15/2010

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Ohio River Clean Fuels LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 9
1. Federally Enforceable Standard Terms and Conditions 10
2. Severability Clause 10
3. General Requirements 10
4. Monitoring and Related Record Keeping and Reporting Requirements 11
5. Scheduled Maintenance/Malfunction Reporting 12
6. Compliance Requirements 12
7. Best Available Technology 13
8. Air Pollution Nuisance 13
9. Reporting Requirements 14
10. Applicability 14
11. Construction of New Sources(s) and Authorization to Install 14
12. Permit-To-Operate Application 15
13. Construction Compliance Certification 16
14. Public Disclosure 16
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 16
16. Fees 16
17. Permit Transfers 16
18. Risk Management Plans 16
19. Title IV Provisions 17
B. Facility-Wide Terms and Conditions 18
C. Emissions Unit Terms and Conditions 20
1. B001, Phase 1 Boiler 21
2. B005, Product Upgrade System. 36
3. B006, F-T Process Unit. 44
4. F001, Coal Storage Piles. 52
5. F002, Biomass Storage Piles. 57
6. F003, Coal & Biomass Receiving Building. 62
7. F009, Coal Crusher House 66

8. F010, Biomass Crusher House. 70
9. F027, Slag Storage Pile. 73
10. F028, Plant Roadways & Parking Areas 78
11. J001, Loading Rack for F-T fuels. 82
12. P015, Emergency Generator 86
13. P029, Three F-T Reactor Trains 92
14. P030, F-T Catalyst Rotary Dryer. 99
15. P031, Equipment Leaks 105
16. Emissions Unit Group - 4.0 mmBtu/hr gas-fired Heaters: B002, B003, B004 108
17. Emissions Unit Group - Acid Gas Removal Units: P026, P027, P028 114
18. Emissions Unit Group - Coal or Biomass Drying and Milling: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010 120
19. Emissions Unit Group - Coal or Biomass Silos: F011, F012, F013, F014 127
20. Emissions Unit Group - Combined Cycle Turbines: P018, P019 131
21. Emissions Unit Group - Cooling Towers: P013, P014 140
22. Emissions Unit Group - Diesel Fuel Tanks: T001, T002, T003, T004, T005, T006, T007, T008 144
23. Emissions Unit Group - Fire Pump Engines: P016, P017 147
24. Emissions Unit Group - Fly Ash Handling Systems: F015, F016, F017, F018, F019, F020 153
25. Emissions Unit Group - Gasifiers 1-6: P020, P021, P022, P023, P024, P025 156
26. Emissions Unit Group - Naphtha Tanks: T009, T010, T011, T012 163
27. Emissions Unit Group - Slag Dewatering Silos: F021, F022, F023, F024, F025, F026 166
28. Emissions Unit Group - Sulfur Recovery Units: P011, P012 170
29. Emissions Unit Group - Transfer Towers: F004, F005, F006, F007, F008 177

Authorization

Facility ID: 0215130393
Facility Description: Coal to liquid fuel facility
Application Number(s): M0000756
Permit Number: P0106127
Permit Description: Administrative Modification to PTI No. 02-22896 to correct errrors in the permit test.
Permit Type: Administrative Modification
Permit Fee: $0.00
Issue Date: 3/15/2010
Effective Date: 3/15/2010

This document constitutes issuance to:

Ohio River Clean Fuels LLC
Sixteen Scool Road
Wellsville, OH 43958

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

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: P0106127
Permit Description: Administrative Modification to PTI No. 02-22896 to correct errrors in the permit test.

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

Emissions Unit ID:	**B001**
Company Equipment ID:	Phase 1 Boiler
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B002**
Company Equipment ID:	Reduction Gas Heater (4.0 mmBtu/hr)
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B003**
Company Equipment ID:	Oxidation Gas Heater (4.0 mmBtu/hr)
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B004**
Company Equipment ID:	Hydrogen Heater (4.0 mmBtu/hr)
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B005**
Company Equipment ID:	Oxidation Gas heater (4.0 mmBtu/hr)
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B006**
Company Equipment ID:	F-T Process w/154.0 mmBtu/hr Fractionator Fired Heater
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F001**
Company Equipment ID:	Coal Storage Piles (4-5) and associated 2 Stacker/Reclaimers
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F002**
Company Equipment ID:	2 Biomass Storage Piles and associated conveyors.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F003**
Company Equipment ID:	Coal and Biomass Hopper, Truckload Receiving, Building.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F004**
Company Equipment ID:	Transfer Tower 1 w/dust collector.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F005**
Company Equipment ID:	Transfer Tower 2 with dust collector.

Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F006**
Company Equipment ID: Transfer Tower 3 with dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F007**
Company Equipment ID: Transfer Tower 4 with dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F008**
Company Equipment ID: Transfer Tower 5 with dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F009**
Company Equipment ID: Coal Crusher House with dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F010**
Company Equipment ID: Biomass Crusher House with dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F011**
Company Equipment ID: Coal Silos 1 and 2 with common dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F012**
Company Equipment ID: Coal Silos 3 and 4 with common dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F013**
Company Equipment ID: Coal Silos 5 and 6 with common dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F014**
Company Equipment ID: Biomass Silos 1 and 2 with common dust collector.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F015**
Company Equipment ID: Fly Ash Handling System 1.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F016**
Company Equipment ID: Fly Ash handling System 2.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **F017**
Company Equipment ID: Fly Ash Handling System 3.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID:	**F018**
Company Equipment ID:	Fly Ash Handling System 4.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F019**
Company Equipment ID:	Fly Ash Handling System 5.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F020**
Company Equipment ID:	Fly Ash Handling System 6.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F021**
Company Equipment ID:	Slag Dewatering Silo 1
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F022**
Company Equipment ID:	Slag Dewatering Silo 2.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F023**
Company Equipment ID:	Slag Dewatering Silo 3.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F024**
Company Equipment ID:	Slag Dewatering Silo 4.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F025**
Company Equipment ID:	Slag Dewatering Silo 5.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F026**
Company Equipment ID:	Slag Dewatering Silo 6.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F027**
Company Equipment ID:	Slag Storage Pile.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F028**
Company Equipment ID:	Plant Roadways and Parking Areas.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**J001**
Company Equipment ID:	Loading Rack for Product F-T Fuels.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P001**
Company Equipment ID:	Coal Drying and Milling Line 1

Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P002
Company Equipment ID: Coal Drying and Milling Line 2.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P003
Company Equipment ID: Coal Drying and Milling Line 3
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P004
Company Equipment ID: Coal Drying and Milling Line 4
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P005
Company Equipment ID: Coal Drying and Milling Line 5
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P006
Company Equipment ID: Coal Drying and Milling Line 6
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P007
Company Equipment ID: Coal Drying and Milling Line 7
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P008
Company Equipment ID: Biomass Drying and Milling Line 1
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P009
Company Equipment ID: Biomass Drying and Milling Line 2
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P010
Company Equipment ID: Biomass Drying and Milling Line 3
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P011
Company Equipment ID: Sulfur Recovery Train 1.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P012
Company Equipment ID: Sulfur Recovery Train 2
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: P013
Company Equipment ID: Cooling Tower 1.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID:	**P014**
Company Equipment ID:	Cooling Tower 2.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P015**
Company Equipment ID:	Emergency Generator.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P016**
Company Equipment ID:	Fire Pump Engine 1.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P017**
Company Equipment ID:	Fire Pump Engine 2.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P018**
Company Equipment ID:	Combined Cycle Plant1.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P019**
Company Equipment ID:	Combined Cycle Plant 2.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P020**
Company Equipment ID:	Gasifier No. 1.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P021**
Company Equipment ID:	Gasifier No. 2.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P022**
Company Equipment ID:	Gasifier No. 3.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P023**
Company Equipment ID:	Gasifier No. 4.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P024**
Company Equipment ID:	Gasifier No. 5.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P025**
Company Equipment ID:	Gasifier No. 6.
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P026**
Company Equipment ID:	Syngas Cleanup Train No.1.
Superseded Permit Number:	02-22896

General Permit Category and Type: Not Applicable

Emissions Unit ID: **P027**
Company Equipment ID: Syngas Cleanup Train No. 2.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P028**
Company Equipment ID: Syngas Cleanup Train No. 3.
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P029**
Company Equipment ID: Three F-T Reactor Trains
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P030**
Company Equipment ID: F-T Catalyst Rotary Dryer & 2 heaters
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **P031**
Company Equipment ID: Equipment Leaks of VOC
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T001**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T002**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T003**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T004**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T005**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T006**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T007**
Company Equipment ID: Storage Tank
Superseded Permit Number: 02-22896
General Permit Category and Type: Not Applicable

Emissions Unit ID: **T008**
Company Equipment ID: Storage Tank

Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T009**
Company Equipment ID:	Storage Tank
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T010**
Company Equipment ID:	Storage Tank
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T011**
Company Equipment ID:	Storage Tank
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T012**
Company Equipment ID:	Storage Tank
Superseded Permit Number:	02-22896
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

1)

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

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

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

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

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

10. Applicability

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

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

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed 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 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

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. B001, Phase 1 Boiler

Operations, Property and/or Equipment Description:

Phase 1 Boiler, with a rated maximum heat input capacity of 1,200 mmBtu/hour, firing natural gas or tailgas.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20. Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average.
b.	OAC rule 3745-31-10 through 3745-31-20	PE/PM10: 18.7 lbs per hour (as a 3-hr average) and 81.9 tons per rolling 12-month period. NOx: 120.0 lbs per hour (as a 3-hr average) and 524.2 tons per rolling 12-month period. NOx during boiler startups: 473.8 lbs per hour and 5.7 tons per rolling 12-month period. CO: 36.0 lbs per hour (as a 3-hr average) and 157.2 tons per rolling 12-month period. O.C.: 13.0 lbs per hour (as a 3-hr average) and 56.9 tons per rolling 12-month period. SO2: 2.0 lbs per hour (as a 3-hr average) and 8.9 tons per rolling 12-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		month period. Sulfuric acid mist: 0.17 lb per hour (as a 3-hr average) and 0.75 tons per rolling 12-month period. Total HAPs: 0.178 lbs per hour (as a 3-hr average) and 0.779 tons per rolling 12-month period. Hexane: 0.12 lbs per hour (as a 3-hr average) and 0.532 tons per rolling 12-month period. (Hexane is the greatest single HAP emitted.) The visible particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are equivalent to the requirements of these rules. See b)(2)a.
c.	40 CFR Part 60, Subpart Db	The particulates and NOx emissions limitations specified by this rule are equivalent to or less stringent than those established pursuant to the BACT requirements.
d.	OAC rule 3745-17-07	The visible emission limitations specified in this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).
e.	OAC rule 3745-17-10(B)	The emission limitations specified in this rule are equivalent to the emission limitations established pursuant to OAC rule 3745-31-10 through 3745-31-20.
f.	OAC Chapter 3745-14 (NOx Budget Trading Program)	The permittee shall comply with all applicable requirements under the NOx Budget Trading Program in a timely manner.
g.	OAC chapter 3745-109	On July 11, 2008, the Washington DC Circuit Court vacated U.S. EPA's CAIR. U.S. EPA is reviewing the court's decisions and evaluating its

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		impacts. Because Ohio's CAIR was based on the above federal rule, its future implementation has yet to be determined.
h.	OAC Chapter 3745-108 (Clean Air Mercury Rule)	On Feb 8, 2008, the Washington DC Circuit Court vacated U.S. EPA's rule removing power plants from the CAA list of sources of HAPs. At the same time, they vacated CAMR. U.S. EPA is reviewing the court's decisions. Because Ohio's CAMR was based on the above federal rule, its future implementation has yet to be determined.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. use of only either natural gas or tailgas as fuel;

ii. employ Low-NOx burners in the boiler and a Selective Catalytic Reduction (SCR) unit emissions control device to reduce NOx emissions to 0.1 lb/mmBtu of actual heat input;

iii. burn only gaseous fuels, employ good combustion practices and employ a catalytic oxidation emission control device to limit CO emissions to 0.034 lb/mmBtu, and VOC emissions to 3.9 lbs per 1.0 million scf of gas fired; and

iv. burn only gaseous fuels, employ good combustion practices to limit SO2 emissions to 0.6 lb per 1.0 million scf of gas fired, Sulfuric Acid Mist emissions to 0.17 lb/hour and PE/PM10 emissions to 0.0156 lb/mmBtu.

b. The permittee shall prepare and submit to the Ohio EPA Northeast District Office a unit-specific monitoring plan for each monitoring system (NOx, and CO2 or O2) at least 45 days before commencing certification testing of the monitoring systems. The plan must address the requirements in 40 CFR 75 and 40 CFR Part 60, Subpart Db.

c) Operational Restrictions

(1) The permittee shall only burn natural gas and/or other gaseous fuels in the identified boiler(s); no liquid or solid fuels shall be burned in the boilers identified above.

[This permittee shall cease operating this emissions unit, B001, the Phase 1 Boiler, upon startup of either emissions unit P018 or P019.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in each subject boiler during each reporting period.

(2) See 40 CFR Part 60, Subpart Db.

(3) Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

(4) Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

(5) The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(5)g. and d)(5)h.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(6) Prior to the installation of the continuous CO_2 or O2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO_2 or O2 monitoring system meets the requirements of Performance Specification 3; and the U.S. EPA shall certify that the continuous CO_2 or O2 monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintain on-site and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

(7) The permittee shall operate and maintain equipment to continuously monitor and record CO2 or O2 emitted from this emissions unit in percent. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and Part 75.

The permittee shall maintain records of data obtained by the continuous CO_2 or O2 monitoring system including, but not limited to:

a. percent on an instantaneous (one-minute) basis;

b. results of quarterly cylinder gas audits or linearity checks;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous CO_2 or O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous CO_2 or O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous CO_2 or O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(7)f. and d)(7)g.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

(8) The permitted shall keep a record of any simultaneous operation of this emissions unit, B001, and emissions unit P018 and/or P019. The date, time, duration and operating rates of each emissions unit shall be recorded.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) See 40 CFR Part 60, Subpart Db.

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northeast District Office, documenting all instances of NO_x emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, 40 CFR Parts 75 and 76, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no

excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. the location of the continuous NOx monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits or linearity checks;

ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in e)(3)b.xi. and e)(3)b.xii.

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

(4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO_2 or O_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northeast District Office, documenting all instances of continuous CO_2 or O_2 monitoring system downtime and malfunction while the emissions unit was on line.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO_2 or O_2 and other associated monitors;

iii. the location of the continuous CO_2 or O_2 monitor;

iv. the total operating time (hours) of the emissions unit;

v. the total operating time of the continuous CO_2 or O_2 monitoring system while the emissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits or linearity checks;

vii. results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));

viii. the results of any relative accuracy test audit showing the continuous CO_2 or O_2 monitor out-of-control and the compliant results following any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous CO_2 or O_2 monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous CO_2 or O_2 monitoring system while the emissions unit was in operation; and

xi. the reason (if known) and the corrective actions taken (if any) for each event in e)(4)b.ix. and e)(4)b.x.

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

(5) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by 40 CFR Part 75.

[40 CFR Part 75]

(6) 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:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Northeast District Office of the Ohio EPA
Division of Air Pollution Control
2110 E. Aurora Road
Twinsburg, Ohio 44087.

(7) The permittee shall submit a signed statement with each required quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60(and/or 40 CFR Part 75) and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. compliance with the standards has or has not been achieved during the reporting period.

The permittee shall report each event during which simultaneous operation of this emissions unit, B001, and emissions unit P018 and/or P019 occurred. The date, time, duration and operating rates of each emissions unit shall be reported.

f) Testing Requirements

(1) Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous NO_x monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are reported in units of the applicable standard(s) and approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Northeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Northeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the NO_x emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

(2) Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO_2 or O_2 monitoring system to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous CO_2 or O_2 monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Northeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous CO_2 or O_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the CO_2 or O_2 monitoring requirements contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

(3) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

Particulate matter less than ten microns (PM-10), filterable and condensible emissions, shall not exceed 0.015 pound per million Btu heat input (as a 3-hour average),18.7 pounds per hour (as a 3-hour average) and 81.9 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour PM-10 emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by compliance with the hourly emissions limit.

b. Emission Limitations:

Sulfur dioxide (SO2) emissions shall not exceed 0.6 lb per 1.0 million scf of gas fired, 2.0 lbs per hour (as a 3-hour average), and 8.9 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by compliance with the hourly emissions limit.

c. Emission Limitations:

Nitrogen oxides (NOx) emissions shall not exceed 0.10 pound per million Btu heat input (as a 3-hour average), 120.0 lbs per hour (as a 3-hour average), and 524.2 tons per rolling 12-month period.

NOx during boiler startups: 473.8 lbs per hour and 5.7 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour NOx emissions limitations shall be demonstrated based upon the applicable emissions tests

specified in f)(4), the monitoring and record keeping requirements in d) and the reporting requirements in e).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to d) and the associated emission factors derived from emissions testing as specified in d), and f)(4).

Compliance with the NOx startup emissions limits shall be demonstrated by the record keeping required pursuant to d)(3) above.

d. Emission Limitations:

Carbon monoxide(CO) emissions shall not exceed 0.03 lb per million Btu heat input(as a 3-hour average), 36.0 lbs per hour(as a 3-hour average), and 157.2 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour CO emissions limitations shall be demonstrated based upon the applicable emissions tests specified f(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to d) and the associated emission factors derived from emissions testing as specified in f(4).

e. Emission Limitations:

Volatile organic compound(VOC) emissions shall not exceed 3.9 lbs per 1.0 million scf of gas fired, 13.0 lbs per hour(as a 3-hour average) and 56.9 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour VOC emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f(4).

f. Emission Limitations:

Total HAPs emissions shall not exceed, 0.178 lbs per hour(as a 3-hour average) and 0.779 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the lbs per hour total HAPs emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(4).

g. Emission Limitations:

Hexane emissions shall not exceed, 0.12 lbs per hour(as a 3-hour average) and 0.532 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the lbs per hour total HAPs emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(4).

h. Emission Limitations:

Sulfuric acid mist emissions shall not exceed 0.17 lb per hour (as a 3-hr average) and 0.75 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the lbs per hour sulfuric acid mist emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(4).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(4).

a. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with these emissions limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

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

a. The emissions 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 start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for PM-10, NO_X, SO_2, VOC, CO, Sulfuric Acid Mist, Total HAPs, Hexane and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM-10	Method 201(40 CFR Part 51, Appendix M)
	Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Sulfuric Acid Mist	Method 8 of 40 CFR Part60
Total HAPs	Methods 1 through 4 and Method 18 of 40 CFR Part 60, Appendix A.
Hexane	Methods 1 through 4 and Method 18 of 40 CFR Part 60, Appendix A.
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

f. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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 Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

g) Miscellaneous Requirements

(5) None

2. B005, Product Upgrade System.

Operations, Property and/or Equipment Description:

Product Upgrade System w/21.0 mmBtu/hr Hydrocracker Feed Oil Heater, 20.0 mmBtu/hr Hydrocracker Feed Hydrogen Heater & 24.0 mmBtu/hr Product Fractionator Heater.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-31-10 through 3745-31-20	Particulate emissions (PE) shall not exceed 4.7 pounds per hour and 20.7 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Nitrogen oxides (NOx) emissions shall not exceed 7.0 pounds per hour and 30.66 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Carbon monoxide (CO) emissions shall not exceed 51.9 pounds per hour and 227.3 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Volatile organic compounds (VOC) emissions shall not exceed 3.4 pounds per hour and 14.9 tons per rolling, 12-month period from the SCR device controlling this emissions unit.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Sulfur dioxide (SOx) emissions shall not exceed 0.4 pound per hour and 1.6 tons per rolling 12-month period from the SCR device controlling this emissions unit. The visible particulate emissions lim itations established pursuant to OAC rule 3745-17-0(A)(1) are equivalent to the requirements of these rules. See b)(2)b. These limitations are the total allowable emissions for emissions unit B006, the 154.0 mm Btu/hr F-T Fractionator Fired Heater, the 21.0 mm Btu/hr Hydrocracker Feed Oil Heater, the 20.0 mm Btu/hr Hydrocracker Feed Hydrogen Heater, and the 24.0 mm Btu Production Fractionation Feed Heater, all of which vent to the SCR device. Note: For purposes of totaling the facility-wide emissions, the emissions from emissions units B005 and B006 represent the same set of emissions and shall not be twice counted.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-10	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-08(E)	See b)(2)a.
f.	40 CFR Part 60, Subpart Ja	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-31-05(A)(3).
g.	OAC rule 3745-31-05(D)	This permit to install takes into account the restrictions (including the use of any applicable air pollution control equipment) established pursuant to OAC rules 3745-31-10 through 3745-31-20 upon S02 emissions as proposed by the permittee for the purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The waste gas stream shall be burned at 1,300 degrees Fahrenheit for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

b. The BACT determination for this emissions unit includes:

i. use of only either natural gas or tailgas as fuel;

ii. employ ultra low-NOx burners (ULNB) in the boiler and a Selective Catalytic Reduction (SCR) unit emissions control device to reduce NOx emissions by at least 95%, by weight;

iii. burn only gaseous fuels and employ good combustion practices to limit CO emissions, VOC emissions, SO2 emissions, H2S emissions, and PE/PM10 emissions.

c) Operational Restrictions

(1) Each heater shall be designed and manufactured to meet the requirements of b)(2)a.

d) Monitoring and/or Recordkeeping Requirements

(1) See 40 CFR Part 60, Subpart Ja.

Subpart Ja, Section 60.107a allows the permittee to choose to continuously monitor and record either the sulfur dioxide emissions into the atmosphere from this emissions unit or to continuously monitor and record the H2S content of the fuel gas before being burned.

(2) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in this emissions unit during each reporting period.

(3) The permittee shall collect and record the following information for each day for the emissions unit and control equipment:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

e) Reporting Requirements

(1) See 40 CFR Part 60, Subpart Ja.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall submit quarterly summaries of the following records:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

NOx emissions shall not exceed 7.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, the maximum amount of the low Btu fuel gas entering the heaters, and the combined control efficiency of the Low-NOx Burners and SCR (95%).

E(NOx)FT Heater = 434,359 scf/hr x 280 lbs NOx/10xE6 scf (AP-42 emission factor) x (1-0.95) = 6.1 lbs/hr

E(NOx)HFOH, HFH, PFF Heaters = 183,334 scf/hr x 100 lbs NOx/10xE6 scf (AP-42 EF) x (1-0.90) = 0.9 lbs/hr

E(NOx) Total = 6.1+ 0.9 = 7.0 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly NOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

b. Emission Limitation:

NOx emissions shall not exceed 30.66 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable NOx emission limitation (7.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

c. Emission Limitation:

PE emissions shall not exceed 4.7 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(PE) = 617,693 scf/hr x 7.6 lbs PE/10xE6 scf (AP-42 emission factor) = 4.7 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly PE emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5.

d. Emission Limitation:

PE emissions shall not exceed 20.7 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable PE emission limitation (4.7 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 51.9 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(CO) = 617,693 scf/hr x 84 lbs CO/10xE6 scf (AP-42 emission factor) = 51.9 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

f. Emission Limitation:

CO emissions shall not exceed 227.3 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable CO emission limitation (51.9 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

g. Emission Limitation:

VOC emissions shall not exceed 3.4 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(VOC) = 617,693 scf/hr x 5.5 lbs VOC/10xE6 scf (AP-42 emission factor) = 3.4 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 25 or 25A.

h. Emission Limitation:

VOC emissions shall not exceed 14.9 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable VOC emission limitation (3.4 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

i. Emission Limitation:

SOx emissions shall not exceed 0.4 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters .

E(SOx) = 617,693 scf/hr x 0.6 lbs SOx/10xE6 scf (AP-42 emission factor) = 0.4 lb/hr

If required, the permittee shall demonstrate compliance with the hourly SOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6.

j. Emission Limitation:

SOx emissions shall not exceed 1.6 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable SOx emission limitation (0.4 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with these emissions limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

3. B006, F-T Process Unit.

Operations, Property and/or Equipment Description:

F-T Process w/154.0 mmBtu/hr Fractionator Fired heater fueled by natural gas/tailgas, controlled by a common SCR device.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-31-10 through 3745-31-20	Particulate emissions (PE) shall not exceed 4.7 pounds per hour and 20.7 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Nitrogen oxides (NOx) emissions shall not exceed 7.0 pounds per hour and 30.66 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Carbon monoxide (CO) emissions shall not exceed 51.9 pounds per hour and 227.3 tons per rolling, 12-month period from the SCR device controlling this emissions unit. Volatile organic compounds (VOC) emissions shall not exceed 3.4 pounds per hour and 14.9 tons per rolling, 12-month period from the SCR device controlling this emissions unit.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Sulfur dioxide (SOx) emissions shall not exceed 0.4 pound per hour and 1.6 tons per rolling 12-month period from the SCR device controlling this emissions unit. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-0(A)(1) are equivalent to the requirements of these rules. See b)(2)b. These limitations are the total allowable emissions for emissions unit B006, the 154.0 mm Btu/hr F-T Fractionator Fired Heater, the 21.0 mm Btu/hr Hydrocracker Feed Oil Heater, the 20.0 mm Btu/hr Hydrocracker Feed Hydrogen Heater, and the 24.0 mm Btu Production Fractionation Feed Heater, all of which vent to the SCR device. Note: For purposes of totaling the facility-wide emissions, the emissions from emissions units B005 and B006 represent the same set of emissions and shall not be twice counted.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-10	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-08(E)	See b)(2)a.
f.	40 CFR Part 60, Subpart Ja	The emission limitation required by this applicable rule is less stringent than the emission limitation

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-31-05(D)	This permit to install takes into account the restrictions (including the use of any applicable air pollution control equipment) established pursuant to OAC rules 3745-31-10 through 3745-31-20 upon S02 emissions as proposed by the permittee for the purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The waste gas stream shall be burned at 1,300 degrees Fahrenheit for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

b. The BACT determination for this emissions unit includes:

i. use of only either natural gas or tailgas as fuel;

ii. employ ultra low-NOx burners (ULNB) in the boiler and a Selective Catalytic Reduction (SCR) unit emissions control device to reduce NOx emissions by at least 95%, by weight;

iii. burn only gaseous fuels and employ good combustion practices to limit CO emissions, VOC emissions, SO2 emissions, and PE/PM10 emissions.

c) Operational Restrictions

(1) Each heater shall be designed and manufactured to meet the requirements of b)(2)a.

d) Monitoring and/or Recordkeeping Requirements

(1) See 40 CFR Part 60, Subpart Ja.

Subpart Ja, Section 60.107a allows the permittee to choose to continuously monitor and record either the sulfur dioxide emissions into the atmosphere from this emissions unit or to continuously monitor and record the H2S content of the fuel gas before being burned.

(2) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in this emissions unit during each reporting period.

(3) The permittee shall collect and record the following information for each day for the emissions unit and control equipment:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

e) Reporting Requirements

(1) See 40 CFR Part 60, Subpart Ja.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall submit quarterly summaries of the following records:

a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

NOx emissions shall not exceed 7.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, the maximum amount of the low Btu fuel gas entering the heaters, and the combined control efficiency of the ULNB and SCR (95%).

E(NOx)FT Heater = 434,359 scf/hr x 280 lbs NOx/10xE6 scf (AP-42 emission factor) x (1-0.95) = 6.1 lbs/hr

E(NOx)HFOH, HFH, PFF Heaters = 183,334 scf/hr x 100 lbs NOx/10xE6 scf (AP-42 EF) x (1-0.95) = 0.9 lbs/hr

E(NOx) Total = 6.1+ 0.9 = 7.0 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly NOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

b. Emission Limitation:

NOx emissions shall not exceed 30.66 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable NOx emission limitation (7.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

c. Emission Limitation:

PE emissions shall not exceed 4.7 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(PE) = 617,693 scf/hr x 7.6 lbs PE/10xE6 scf (AP-42 emission factor) = 4.7 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly PE emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5.

d. Emission Limitation:

PE emissions shall not exceed 20.7 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable PE emission limitation (4.7 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 51.9 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(CO) = 617,693 scf/hr x 84 lbs CO/10xE6 scf (AP-42 emission factor) = 51.9 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

f. Emission Limitation:

CO emissions shall not exceed 227.3 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable CO emission limitation (51.9 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

g. Emission Limitation:

VOC emissions shall not exceed 3.4 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(VOC) = 617,693 scf/hr x 5.5 lbs VOC/10xE6 scf (AP-42 emission factor) = 3.4 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 25 or 25A.

h. Emission Limitation:

VOC emissions shall not exceed 14.9 tons per rolling, 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable VOC emission limitation (3.4 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

i. Emission Limitation:

SOx emissions shall not exceed 0.4 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(SOx) = 617,693 scf/hr x 0.6 lbs SOx/10xE6 scf (AP-42 emission factor) = 0.4 lb/hr

If required, the permittee shall demonstrate compliance with the hourly SOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6.

j. Emission Limitation:

SOx emissions shall not exceed 1.6 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable SOx emission limitation (0.4 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by the rule..

Applicable Compliance Method:

Compliance with these emissions limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

4. F001, Coal Storage Piles.

Operations, Property and/or Equipment Description:

Coal Storage Piles, 16.6 acres with stocker/reclaimers.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20. There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)c.
b.	OAC rule 3745-17-07(B)(6)	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
c.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 12.3 tons per rolling, 12-month period. Fugitive particulate matter emissions

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		shall not exceed 25.7 tons per rolling, 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are equivalent to the requirements of these rules. See b)(2)a. through b)(2)b.

(2) Additional Terms and Conditions

a. The Best Available Control Technology (BACT) determination for this emissions unit includes:

i. installation and use of a 3-sided windscreen barrier, at all times, around the storage piles to minimize particulate matter and PM10 emissions caused by windblown erosion of the storage piles. Said wind barrier shall have a design, emission reduction efficiency of at least 75%;

ii. enclosed conveyors;

iii. reduced drop heights; and

iv. use of chemical stabilization/dust suppressants and/or watering, as required to comply with the visible particulate emissions limitations listed above.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation and for wind erosion at each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-in inspection frequency
all	daily

(2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-out inspection frequency
all	daily

(3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification	minimum wind erosion inspection frequency
all	daily

(4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

(6) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date and time of each inspection where it was determined by the permittee that it was necessary to implement chemical stabilization/dust suppressants;

c. the dates that chemical stabilization/dust suppressants were applied; and

d. on a calendar quarter basis, the total number of days that chemical stabilization/dust suppressants were applied and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(6)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when chemical stabilization/dust suppressants, that were to be implemented as a result of an inspection, were not implemented.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 12.3 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor equations in U.S. EPA's 'Control of Open Fugitive Dust Sources' (EPA-450/3-88-008),Section 4.1.3 and Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum coal pile storage area of 16.6 acres of continuously active piles, an average silt content of 4.8%, a 28% time factor representing wind speeds of 12 miles per hour or greater on an annual basis and a 75% overall control efficiency for particulate emissions and PM10.

b. Emission Limitation:

Particulate emissions shall not exceed 25.7 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor equations in U.S. EPA's 'Control of Open Fugitive Dust Sources' (EPA-450/3-88-008),Section 4.1.3 and Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum coal pile storage area of 16.6 acres of continuously active piles, an average silt content of 4.8%, a 28% time factor representing wind speeds of 12 miles per hour or greater on an annual basis and a 75% overall control efficiency for particulate emissions and PM10.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

5. F002, Biomass Storage Piles.

Operations, Property and/or Equipment Description:

Biomass Storage Piles, 4.40 acres consisting of clean, untreated wood chips or sawdust, under roof.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-17-07(B)(6)	There shall be no visible particulate emissions except for a period of time not to exceed thirteen minutes in any 60-minute observation period.
c.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.0 tons per rolling, 12-month period. Fugitive particulate matter emissions shall not exceed 2.71 tons per rolling, 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(B)(6) are equivalent to the requirements of these rules. See b)(2)a. and b)(2)b.

(2) Additional Terms and Conditions

a. The Best Available Control Technology (BACT) determination for this emissions unit includes:

i. installation and use of a 3-sided windscreen barrier, at all times, around the storage piles to minimize particulate matter and PM10 emissions caused by windblown erosion of the storage piles. Said wind barrier shall be designed for an, emission reduction efficiency, of at least 75%;

ii. enclosed conveyors;

iii. reduced drop heights; and

iv. use of chemical stabilization/dust suppressants and/or watering, as required to comply with the visible particulate emissions limitations listed above.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation and for wind erosion at each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-in inspection frequency
all	daily

(2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-out inspection frequency
all	daily

(3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification	minimum wind erosion inspection frequency
all	daily

(4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

(6) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date and time of each inspection where it was determined by the permittee that it was necessary to implement chemical stabilization/dust suppressants;

c. the dates that chemical stabilization/dust suppressants were applied; and

d. on a calendar quarter basis, the total number of days that chemical stabilization/dust suppressants were applied and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(6) shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when chemical stabilization/dust suppressants, that were to be implemented as a result of an inspection, were not implemented.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitation:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.0 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor equations in U.S. EPA's 'Control of Open Fugitive Dust Sources' (EPA-450/3-88-008),Section 4.1.3, and Sections 13.2.4 and 13.2.5, in 'Compilation of Air Pollutant Emission Factors', AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum biomass storage pile area of 4.4 acres of continuously active piles, an average silt content of 8.0%, a 28% time factor representing wind speeds of 12 miles per hour or greater on an annual basis and a 75% overall control efficiency for particulate emissions and PM10.

b. Emission Limitation:

Particulate emissions shall not exceed 2.71 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor equations in U.S. EPA's 'Control of Open Fugitive Dust Sources' (EPA-450/3-88-008),Section 4.1.3, and Sections 13.2.4 and 13.2.5, in 'Compilation of Air Pollutant Emission Factors', AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum biomass storage pile area of 4.4 acres of continuously active piles, an average silt content of 8.0%, a 28% time factor representing wind speeds of 12 miles per hour or greater on an annual basis and a 75% overall control efficiency for particulate emissions and PM10.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed thirteen minutes in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

6. F003, Coal & Biomass Receiving Building.

Operations, Property and/or Equipment Description:

Coal & Biomass Hopper, Truckload Receiving Building.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PE/PM10 emissions shall not exceed 0.12 lb per hour and 0.6 ton per year from the baghouse exhaust stack. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 60 Subpart Y	See b)(2)c.

(2) Additional Terms and Conditions

a. The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

b. The BACT determination for this emissions unit includes:

i. Totally enclosing coal and biomass unloading hopper building, including all material transfer points;

ii. Equipping the unloading hopper building with a baghouse dust collector that reduces particulate emissions by 99%, by weight; and

iii. Totally enclosing coal and biomass exit conveyors from the building.

c. In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing equipment, coal storage system or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks while the equipment is in operation for any visible particulate emissions from the baghouse stack. The presence or absence of any visible emissions from the baghouse stack, along with the date and time shall be noted in an operations log. If any visible emissions are observed from the stack, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

e) Reporting Requirements

(1) The permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from the baghouse stack and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) 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 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with:

i. the allowable mass emission rate for PE of 0.12 lb/hour; and

ii. the visible PE limitation.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. for particulates, Method 5 of 40 CFR Part 60, Appendix A; and

ii. for visible PE, Method 9 of 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 Ohio EPA Northeast District Office.

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

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

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 Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Emissions Limitation:

Particulate emissions shall not exceed 0.6 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated.

(3) Emissions Limitation:

Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. The initial performance test shall be conducted in accordance with the requirements listed in f)(1).

(4) Emissions Limitation:

In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in Section 60.11 of 40 CFR Part 60.

In accordance with Section 60.8, of 40 CFR Part 60, the permittee shall conduct initial performance tests within 60 days of achieving the maximum production rate at which the affected facility will be operated, but no longer than 180 days after initial startup.

The permittee shall comply with the requirements in f)(1)e. through f)(1)g., in regard to testing notice, Ohio EPA witness of testing, and submitting written reports on results.

g) Miscellaneous Requirements

(1) None.

7. F009, Coal Crusher House.

Operations, Property and/or Equipment Description:

Coal Crusher House, 2,000 tons per hr. maximum w/dust collector.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PE/PM10 emissions shall not exceed 1.2 lbs per hour and 5.3 tons per rolling 12-month period the baghouse exhaust stack. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 60 Subpart Y	See b)(2)c.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

b. The BACT determination for this emissions unit includes:

i. a totally enclosed coal crusher house, including all coal transfer points;

ii. equipping the coal crusher house with a baghouse dust collector that limits stack outlet PE loading to 0.005 gr/dscf of exhaust gases; and

iii. totally enclosed inlet and exit coal conveyors to the coal crusher house.

c. In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

c) Operational Restrictions

(1) A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

e) Reporting Requirements

(1) The permittee shall submit on a semi annual basis a report that identifies each event where an audible alarm sounds on the bag leak detector. These reports shall include a summary of the date, time, duration, cause, and the action taken in response to the alarm. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) 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 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE of 1.2 lbs/hour.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulates, Method 5 of 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 Ohio EPA Northeast District Office.

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

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

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 Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Emissions Limitation:

Particulate emissions shall not exceed 5.3 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated.

(3) Emissions Limitation:

Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(4) Emissions Limitation:

In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method:

If, required, compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in Section 60.11 of 40 CFR Part 60.

In accordance with Section 60.8, of 40 CFR Part 60, the permittee shall conduct initial performance tests within 60 days of achieving the maximum production rate at which the affected facility will be operated, but no longer than 180 days after initial startup.

The permittee shall comply with the requirements in f)(1)e. through f)(1)g., in regard to testing notice, Ohio EPA witness of testing, and submitting written reports on results.

g) Miscellaneous Requirements

(5) None.

8. F010, Biomass Crusher House.

Operations, Property and/or Equipment Description:

Biomass Crusher House, 2,000 tons per hour maximum w/dust collector.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PE/PM10 emissions shall not exceed 1.2 lbs per hour and 5.3 tons per rolling 12-month period the baghouse exhaust stack. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-08(B)	See b)(2)a.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

b. The BACT determination for this emissions unit includes:

i. a totally enclosed biomass crusher house, including all transfer points;

ii. equipping the biomass crusher house with a baghouse dust collector that limits stack outlet PE loading to 0.005 gr/dscf of exhaust gases; and

iii. totally enclosed inlet and exit biomass conveyors to the biomass crusher house.

c) Operational Restrictions

(1) A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

e) Reporting Requirements

(1) The permittee shall submit on a semi annual basis a report that identifies each event where an audible alarm sounds on the bag leak detector. These reports shall include a summary of the date, time, duration, cause, and the action taken in response to the alarm. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) 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 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE of 1.2 lbs/hour.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulates, Method 5 of 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 Ohio EPA Northeast District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

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

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 Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Emissions Limitation:

Particulate emissions shall not exceed 5.3 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated.

(3) Emissions Limitation:

Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

9. F027, Slag Storage Pile.

Operations, Property and/or Equipment Description:

Slag Storage Pile.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.8 ton per rolling 12-month period from wind erosion on the storage pile. Emissions of fugitive particulate matter (PE) shall not exceed 1.6 tons per rolling 12-month period from wind erosion on the storage pile. Emissions of fugitive PE from load out to trucks shall not exceed 11.7 ton per rolling 12-month period. Emissions of fugitive PM10 from load out to trucks shall not exceed 11.5 ton per rolling 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are equivalent to the requirements of these rules. See b)(2)a.

b.	OAC rule 3745-17-07(B)(6)	The emissions limitations established by this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20. There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)c.
d.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. the use of a dust control program (use of water trucks and/or fire hoses as needed to reduce fugitive dust) to maintain a high moisture content in the slag;

ii. water will be applied as needed for load out from the slag storage pile;

iii. minimize free fall distances; and

iv. the haul trucks shall be covered before exiting the slag storage area;

b. The above BACT determination notwithstanding, should any visible emissions be observed, except for a period of time not to exceed thirteen minutes during any 60-minute observation period, the permittee shall implement additional measures as required to comply with the visible particulate emissions limitations listed above.

c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform observations for visible emissions in accordance with the following frequencies:

storage pile identification	minimum load-in inspection frequency
all slag storage piles	daily
storage pile front end	
loading to trucks	daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the slag storage piles from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the slag storage piles indicate no need for implementing the above-mentioned control measures; and

b. The permittee continues to comply with all the record keeping and monitoring requirements specified in d).

c. The permittee shall revert to daily inspections of the slag storage piles if the inspections of the slag storage piles indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the slag storage piles that indicate no need for implementing the above-mentioned control measures.

(2) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

(3) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for wind erosion from the surface of a storage pile and from load out of the pile into trucks. The inspections shall be performed during representative, normal storage pile operating conditions.

(4) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date and the time of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(4)d. shall be kept separately for (i) wind erosion from the storage pile and (ii) load out of the pile into trucks and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitations:

Emissions of fugitive PM10 shall not exceed 0.8 ton per rolling 12-month period from wind erosion on the storage pile.

Emissions of fugitive PE shall not exceed 1.6 tons per rolling 12-month period from wind erosion on the storage pile.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor equations in U.S. EPA's 'Control of Open Fugitive Dust Sources' (EPA-450/3-88-008), Section 4.1.3 and Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth

Edition, Volume 1 (revised 1/95), for wind erosion. These emission limits were based on a maximum slag storage pile area of 1.2 acres of continuously active piles, an average silt content of 7.3%, a 28% time factor representing wind speeds of 12 miles per hour or greater on an annual basis, 150 days/year with ≥ 0.01 inch of precipitation per year and 50% overall control efficiency for particulate emissions and PM10.

b. Emissions Limitations:

Emissions of fugitive PE from load out to trucks shall not exceed 11.7 ton per rolling 12-month period.

Emissions of fugitive PM10 from load out to trucks shall not exceed 11.5 ton per rolling 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter and PM10 emissions limitations shall be determined by using the emission factor 0.02 lb PE/ton slag in Sections 13.2.4.3 in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for loading slag out of the pile onto trucks. These emission limits were based on a slag generation rate of 255.42 tons per hour slag generation, a 15% moisture content, wind speed of 10 mph and particle size multipliers of 0.74 for PE and 0.35 for PM10.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”).

g) Miscellaneous Requirements

(1) None.

10. F028, Plant Roadways & Parking Areas.

Operations, Property and/or Equipment Description:

Plant Roadways & Parking Areas.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period. The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 3745-31-20. See b)(2)e.
b.	OAC rule 3745-17-07(B)(7)	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 15.39 tons per rolling 12-month period. Fugitive particulate matter emissions shall not exceed 79.0 tons per rolling 12-month period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. The visible particulate emissions limitations established pursuant to OAC

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rule 3745-31-05(A)(3) are equivalent to the requirements of these rules. See b)(2)a. through b)(2)d.

(2) Additional Terms and Conditions

a. Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of reduced speed limits, sweeping, watering and good housekeeping for control measures constitutes BACT for this emissions unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring.

c. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
all paved roads and parking areas	daily

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(3) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date and the time of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

(4) The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) permit shall be determined in accordance with the following methods:

a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 15.39 tons per rolling 12-month period.

Fugitive particulate matter emissions shall not exceed 79.0 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. These emission limits were based on 736,205 vehicle miles traveled per year, and a 90% control efficiency for particulate emissions and PM10.

b. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

11. J001, Loading Rack for F-T fuels.

Operations, Property and/or Equipment Description:

Loading Rack for F-T fuels.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
b.	OAC rules 3745-31-10 through 3745-31-20	See Section b)(2)a. and b)(2)b below. VOC emissions shall not exceed 1.7 tons per rolling 12-month period.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes the following emissions limitations and control requirements:

i. F-T diesel fuel shall be loaded to transport vehicles via submerged fill pipes. VOC emissions shall not exceed 0.01 lb per 1,000 gallons of fuel loaded.

ii. F-T naphtha shall be loaded to transport vehicles via submerged fill pipes. VOC emissions shall not exceed 0.06 lb per 1,000 gallons of naphtha loaded.

iii. The dedicated F-T naphtha loading bay shall be equipped with a VOC vapor recovery unit which has a collection efficiency of at least 91%, by weight, and a VOC vapor recovery system which has a control efficiency of at least 95%, by weight.

b. The proposed maximum annual throughput of the loading rack is 114,975,000 gallons. The mix of products loaded will vary from 100% F-T diesel fuel to a 50% split between F-T diesel fuel and F-T naphtha.

c. The annual VOC emission limitation of 1.7 tons per rolling 12-month period is based upon a 50% split between F-T diesel fuel and F-T naphtha loading. Said 50% split of products loaded results in the maximum potential to emit for this emissions unit.

d. This emissions unit is a transfer rack consisting of 2 bays, one for F-T naphtha loading and another for F-T diesel fuel loading.

c) Operational Restrictions

(1) The F-T naphtha loading rack bay shall be equipped with a vapor collection system whereby during the transfer of F-T naphtha to any delivery vessel:

a. all vapors displaced from the delivery vessel during loading are vented only to the vapor collection system; and

b. the pressure in the vapor collection system is maintained at the manufacturers recommended design range.

(2) The F-T naphtha loading rack bay shall be equipped with a vapor control system whereby:

a. all vapors collected by the vapor collection system are vented to the vapor control system;

b. the mass emissions of VOC from the vapor control system do not exceed 0.06 pound of VOC per 1,000 gallons of F-T naphtha loaded into the delivery vessel; and

c. any liquid F-T naphtha returned to a stationary storage tank from the vapor control system is free of entrained air to the extent possible with good engineering design.

(3) The loading rack shall be provided with a means to prevent drainage of F-T naphtha from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(4) All F-T naphtha loading lines and vapor lines shall be equipped with fittings which are vapor tight.

(5) The permittee shall not permit F-T naphtha to be spilled, discarded into sewers, stored in open containers, or handled in any other manner that would result in evaporation.

(6) The permittee shall repair any leak from the vapor collection system or vapor control system within 15 days of detection, when such leak is equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep monthly records of the volumes of F-T naphtha and F-T diesel fuel loaded to transport vehicles for the purposes of calculating monthly emissions of VOC.

(2) The permittee shall keep records of the12-month rolling volumes of F-T naphtha and F-T diesel fuel loaded to transport vehicles for the purposes of calculating the 12-month rolling emissions of VOC to demonstrate compliance with the annual emission limit in b)(1)b above.

(3) While F-T naphtha is being loaded, the permittee shall monitor the vapor collection system for leaks. If vapor leaks are detected, the permittee shall maintain a record of the following information:

a. the date the leak was detected;

b. the findings of the inspection for the leak, which shall indicate the location, nature, and severity of the leak;

c. the leak detection method;

d. the corrective action(s) taken to repair each leak and the date of final repair;

e. the reasons for any repair interval exceeding 15 calendar days (from the time of detection to the date of final repair) for each leak equal to or greater than one hundred per cent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10; and

f. the inspector's name and signature.

These records shall be retained and accessible for a period of 5 years.

e) Reporting Requirements

(1) Any leaks in the vapor collection system or vapor control system equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10 of the Administrative Code, that are not repaired within 15 days after identification, shall be reported to the director (Ohio EPA Northeast District Office) within 30 days after the repair is completed. This report shall include the date the leak was detected and the date the leak was repaired.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitations:

VOC emissions shall not exceed 0.01 lb per 1,000 gallons of F-T diesel fuel loaded.

Applicable Compliance Method:

Compliance shall be demonstrated using formulae and emission factors specified in USEPA reference document AP-42, Fifth Edition, 'Compilation of Air Pollution Emission Factors', Section 5-2 (1/95).

b. Emissions Limitations**:**

VOC emissions shall not exceed 0.06 lb per 1,000 gallons of F-T naphtha loaded.

Applicable Compliance Method:

Compliance shall be demonstrated using formulae and emission factors specified in USEPA reference document AP-42, Fifth Edition, 'Compilation of Air Pollution Emission Factors', Section 5-2 (1/95).

c. Emissions Limitations**:**

VOC emissions shall not exceed 1.7 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated using formulae and emission factors specified in USEPA reference document AP-42, Fifth Edition, 'Compilation of Air Pollution Emission Factors', Section 5-2 (1/95), and then multiplying by the maximum throughput of F-T diesel fuel and F-T naphtha, as listed in A.2.b, above.

g) Miscellaneous Requirements

(1) None.

12. P015, Emergency Generator.

Operations, Property and/or Equipment Description:

Emergency Generator-Engine Set, 2,000 KW compression ignition diesel engine with a displacement of 4 liters per cylinder (40 CFR Part 60 IIII and 40 CFR Part 89 Table 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	The BACT determination for this emissions unit is equivalent to the requirements specified in 40 CFR Part 60, Subpart IIII. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A)(3) and 40 CFR, Part 89 are equivalent to the requirements of these rules. Also see b)(2)a., b)(2)b. and c)(4).
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% as a 6-minute average, except as provided by rule. This limitation applies any time the limitations specified in 40 CFR 89.113 are not applicable for the acceleration and lugging modes. (This limit does not apply during peaks in either acceleration or lugging modes.)
d.	OAC rule 3745-17-11 (B)(5)	The emissions limitation specified by this rule is less restrictive than the emissions limitation specified under 40 CFR 89.112.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-18-06(F)	The emissions limitation specified by this rule is less restrictive than the emissions limitation specified under 40 CFR 80.510(b).
f.	40 CFR Part 89, Section 112	Emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NOx) combined shall not exceed 6.4 grams/kW-hr. Emissions of carbon monoxide (CO) shall not exceed 3.5 grams/kW-hr. Particulate emissions (PE) shall not exceed 0.20 gram/kW-hr.
g.	40 CFR Part 89, Section 113	The exhaust opacity from the engine must not exceed 20 percent during the acceleration mode and 15 percent during the lugging mode. During the peaks in either the acceleration or lugging modes, this rule is less restrictive (50% opacity is permitted) than the requirements specified in OAC rule 3745-17-07(A), (20% opacity as a six-minute average).

(2) Additional Terms and Conditions

a. The emissions limitations established as BACT are:

PE: 0.87 lb/hour and 0.22 ton per rolling 12-month period;

CO: 15.18 lbs/hour and 3.80 tons per rolling 12-month period;

NOx: 26.47 lbs/hour and 6.61 tons per rolling 12-month period; and

NMHC: 1.39 lbs/hour and 0.35 ton per rolling 12-month period.

b. The BACT determination for this emissions unit also includes:

i. good combustion practices;

ii. good engine design;

iii. ignition timing retard;

iv. turbocharger; and

v. low-temperature aftercooler.

c. The permittee shall install a non-resettable hour meter prior to startup of the engine, per 40 CFR 60.4209(a).

c) Operational Restrictions

(1) Per 40 CFR 60.4211 (c) the permittee shall purchase an engine certified to the emissions standards specified in 40 CFR 89.112 and 40 CFR 89.113. The engine must be installed and configured according to the manufacturer's specifications.

(2) Per 40 CFR 60.4211 (a) the permittee shall operate and maintain the engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer.

(3) Per 40 CFR 60.4211(e) the engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of the engine in emergency situations. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State or local standards require maintenance and testing of the engine beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted in this section is prohibited.

(4) The maximum annual operating hours for this emissions unit shall not exceed 500, based upon a rolling, 12-month summation of the operating hours.

(5) The permittee shall combust only diesel fuel which meets the following specifications, as detailed in 40 CFR 80.510(b) and required by 40 CFR 60.4207(b):

a. sulfur content of 15 ppm, maximum; and

b. cetane index of 40, minimum or

c. aromatic content of 35 volume percent, maximum.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is undergoing maintenance or readiness testing and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. These checks are not required when operating under emergency conditions. The presence or absence of any visible emissions, along with the date and time, 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 emission incident; and

e. Any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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.

f. The permittee shall retain records of:

i. hours of operation recorded in the non-resettable hour meter;

ii. the hours of operation over each rolling 12-month period;

iii. time of operation of the engine; and

iv. the reason the engine operated.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

(2) The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month periods.

f) Testing Requirements

Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

(1) Emission Limitation:

Visible particulate emissions (PE) shall not exceed 20% as a 6-minute average, except as provided by rule, except for the acceleration and lugging modes.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(2) Emission Limitation:

The exhaust opacity from the engine must not exceed 20 percent during the acceleration mode and 15 percent during the lugging mode. During the peaks in either the acceleration and lugging modes, this rule is less restrictive (50% opacity is permitted).

Applicable Compliance Method:

The permittee shall comply with this requirement by following the procedures specified in 40 CFR Part 86, Subpart I.

(3) Emission Limitation:

0.87 lb PE/hour and 0.22 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 2,650 hp by the emission factor of 0.20 gram/hp-hr taken from Table 1 of 40 CFR Part 89, Section 112 and the conversion factor of 1 gram equals 0.0022 lb.

Compliance with the annual emission limits shall be assumed if compliance with the hourly emission limits is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

(4) Emission Limitation:

15.18 lbs CO/hour and 3.80 tons per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 2,650 hp by the emission factor of 3.5 grams/hp-hr taken from Table 1 of 40 CFR Part 89, Section 112 and the conversion factor of 1 gram equals 0.0022 lb.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

(5) Emission Limitation:

26.43 lbs NOx/hour and 6.61 tons per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 2,650 hp by the factor in Table 1 of 40 CFR Part 89, Section 112 of 6.4 grams/kW-hr and the conversion factor of 1 gram equals 0.0022 lb. 95% of the NMHC + NOx is assumed to be NOx.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

(6) Emission Limitation:

1.39 lbs NMHC/hour and 0.35 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 2,650 hp by the factor of 6.4 grams/kW-hr from Table 1 of 40 CFR Part 89, Section 112 and the conversion factor of 1 gram equals 0.0022 lb. 5% of the NMHC + NOx is assumed to be NMHC.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

(7) Emission Limitation:

Diesel fuel specifications: sulfur content of 15 ppm, maximum; and cetane index of 40, minimum or aromatic content of 35 volume percent, maximum.

Applicable Compliance Method:

Compliance with the fuel specifications shall be determined by any method allowed under 40 CFR Part 80 Subpart I.

g) Miscellaneous Requirements

(1) None.

13. P029, Three F-T Reactor Trains.

Operations, Property and/or Equipment Description:

Three F-T Reactor Trains, with tailgas sent to the sponge oil column, catalyst regeneration and process vent emissions controlled by 150 mmBtu per hr. low pressure flare.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-10 through 3745-31-20	Particulate emissions (PE) shall not exceed 2.3 pounds per hour and 10.0 tons per rolling, 12-month period. Nitrogen oxides (NOx) emissions shall not exceed 30.0 pounds per hour and 131.4 tons per rolling, 12-month period. Carbon monoxide (CO) emissions shall not exceed 25.2 pounds per hour and 110.3 tons per rolling, 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 0.03 pound per hour and 0.1 ton per rolling 12-month period. Sulfur dioxide (SOx) emissions shall not exceed 0.2 pounds per hour and 0.8 ton per rolling 12-month period. The total HAPs emissions shall not exceed 0.067 ton per rolling 12-month period. Hexane emissions shall not exceed 0.056 ton per rolling 12-month period. The visible particulate emissions

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		limitations established pursuant to OAC rule 3745-17-07(A)(1) are equivalent to the requirements of these rules. See b)(2)a. through b)(2)c.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)(1)	The visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-21-07(M)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.
e.	OAC rule 3745-21-09(EE)	See b)(2)a.

(2) Additional Terms and Conditions

a. The permittee shall operate and maintain a low pressure flare emission capture system capable of capturing and controlling VOC emissions from this emissions unit.

The VOC control equipment (low pressure flare) shall provide an efficiency (percent destruction) of not less than 98%, by weight, for VOC emissions vented to the control equipment.

b. The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

c. The BACT determination for this emissions unit includes the use of a low pressure flare using only natural gas or tailgas as fuel.

c) Operational Restrictions

(1) A pilot flame shall be maintained at all times in the flare's pilot light burner.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information each day for the flare and process operations:

a. all periods during which there was no pilot flame ; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify all periods of time during which the pilot flame was not functioning properly or the flare was not maintained as required in this permit. The reports shall include the date, time, and duration of each such period.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

NOx emissions shall not exceed 30.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the flare from the pilot burner and F-T catalyst regeneration process.

E(NOx) = 0.301 mm scf/hr x 100 lbs NOx/10xE6 scf (AP-42 emission factor) = 30.0 lbs/hr

b. Emission Limitation:

NOx emissions shall not exceed 131.4 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling 12 month emission limitation shall be determined by multiplying the short-term allowable NOx emission limitation (30.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

c. Emission Limitation:

PE emissions shall not exceed 2.3 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the flare from the pilot burner and F-T catalyst regeneration process.

E(PE) = 0.301 mm scf/hr x 7.6 lbs PE/10xE6 scf (AP-42 emission factor) = 2.3 lbs/hr

d. Emission Limitation:

PE emissions shall not exceed 10.0 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling 12 month emission limitation was developed by multiplying the short-term allowable PE emission limitation (2.3 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 25.2 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the flare from the pilot burner and F-T catalyst regeneration process.

E(CO) = 0.301 mm scf/hr x 84 lbs CO/10xE6 scf (AP-42 emission factor) = 25.2 lbs/hr

f. Emission Limitation:

CO emissions shall not exceed 110.3 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling 12 month emission limitation was developed by multiplying the short-term allowable CO emission limitation (25.2 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if

compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the rolling 12 month emission limitation.

g. Emission Limitation:

VOC emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the flare from the pilot burner and F-T catalyst regeneration process.

E(VOC) = 0.301 mm scf/hr x 5.5 lbs VOC/10xE6 scf (AP-42 emission factor) x 0.02= 0.03 lb/hr

h. Emission Limitation:

VOC emissions shall not exceed 0.10 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.03 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

SOx emissions shall not exceed 0.2 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the flare from the pilot burner and F-T catalyst regeneration process.

E(SOx) = 0.301 mm scf/hr x 0.6 lb SOx/10xE6 scf (AP-42 emission factor) = 0.2 lb/hr

j. Emission Limitation:

SOx emissions shall not exceed 0.8 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable SOx emission limitation (0.2 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:

Total HAPs emissions shall not exceed 0.067 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the calculated hourly emission rate of 0.0153 lb/hour by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. The calculated hourly emission rate was derived by summing the HAP emissions factors listed in Table 1.4-3 of Section 1.4 of AP-42 (1998).

l. Emission Limitation:

Hexane emissions shall not exceed 0.056 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the calculated hourly emission rate of 0.0108 lb/hour by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. The calculated hourly emission rate was derived from the hexane emissions factor listed in Table 1.4-3 of Section 1.4 of AP-42 (1998).

m. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(2) The net heating value of the gas being combusted at the flare shall be calculated as follows:

$$H_T = k \sum_{i=1}^{n} C_i H_i$$

where:

H_T = net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard

temperature of 20 degrees Celsius is used for determining the volume corresponding to one mole;

k = constant, 1.740 x 10^{-7} (1/ppm) (g mole/scm) (MJ/kcal), where the standard temperature for "g mole/scm" is 20 degrees Celsius;

C_i = concentration of sample component "i" in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-90; and

H_i = net heat of combustion of sample component "i", kcal/g mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D4809-95 if published values are not available or cannot be calculated.

The conversion factor of "26.84 Btu scm/MJ scf" can be used to convert the net heating value of the gas (H_T) from MJ/scm to Btu/scf.

(3) The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure) of the flare header or headers that feed the flare, as determined by Reference Methods 2, 2A, 2C, or 2D (found in 40 CFR 60, Appendix A), as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

The conversion factor of "3.281 ft/m" can be used to convert the velocity from m/sec to ft/sec.

g) Miscellaneous Requirements

(1) None.

14. P030, F-T Catalyst Rotary Dryer.

Operations, Property and/or Equipment Description:

F-T Catalyst Rotary Dryer, with nitrogen heater and hot oil heater (4.0 mmBtu per hr. each)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-10 through 3745-31-20	Particulate emissions (PE) shall not exceed 0.18 pound per hour and 0.8 ton per rolling 12-month period. Nitrogen oxides (NOx) emissions shall not exceed 2.26 pounds per hour and 9.8 tons per rolling 12-month period. Carbon monoxide (CO) emissions shall not exceed 1.8 pounds per hour and 8.4 tons per rolling 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.6 ton per rolling 12-month period. Sulfur dioxide (SOx) emissions shall not exceed 0.02 pounds per hour and 0.08 ton per rolling 12-month period. These limitations are the total allowable emissions for the 4.0 mm Btu/hr Nitrogen Heater and the 4.0 mm Btu/hr Hot Oil Heater.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A)(1) are equivalent to the requirements of

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		these rules.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. use of only either natural gas or tailgas as fuel; and

ii. burn only gaseous fuels and employ good combustion practices to limit NOx emissions, CO emissions, VOC emissions, SO2 emissions, and PE/PM10 emissions.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in this emissions unit during each reporting period.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

NOx emissions shall not exceed 2.26 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(NOx) = 22,564 scf/hr x 100 lbs NOx/10xE6 scf (AP-42 emission factor) = 2.26 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly NOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

b. Emission Limitation:

NOx emissions shall not exceed 9.8 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable NOx emission limitation (2.26 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

PE emissions shall not exceed 0.18 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(PE) = 22,564 scf/hr x 7.6 lbs PE/10xE6 scf (AP-42 emission factor) = 0.18 lb/hr

If required, the permittee shall demonstrate compliance with the hourly PE emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5.

d. Emission Limitation:

PE emissions shall not exceed 0.8 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable PE emission limitation (0.18 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 1.8 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(CO) = 22,564 scf/hr x 84 lbs CO/10xE6 scf (AP-42 emission factor) = 1.8 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

f. Emission Limitation:

CO emissions shall not exceed 8.4 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable CO emission limitation (1.8 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(VOC) = 22,564 scf/hr x 5.5 lbs VOC/10xE6 scf (AP-42 emission factor) = 0.12 lb/hr

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 25 or 25A.

h. Emission Limitation:

VOC emissions shall not exceed 0.60 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.12 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

SOx emissions shall not exceed 0.02 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heaters.

E(SOx) = 22,564 scf/hr x 0.6 lb SOx/10xE6 scf (AP-42 emission factor) = 0.02 lb/hr

If required, the permittee shall demonstrate compliance with the hourly SOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6.

j. Emission Limitation:

SOx emissions shall not exceed 0.08 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable SOx emission limitation (0.02 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with these emissions limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None

15. P031, Equipment Leaks

Operations, Property and/or Equipment Description:

Equipment Leaks from Pumps, Compressors, Devices, Sampling Valves, Connections, Closed Vent Systems, and Control Devices.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 60, Subpart GGGa	See b)(2)a.
b.	OAC rule 3745-21-09(T)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart GGGa.
c.	OAC rule 3745-31-10 through 3745-31-20	Volatile Organic Compound (VOC) emissions shall not exceed 1.7 tons per rolling 12-month period from this emissions unit.
d.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. The facility shall meet the requirements of 40 CFR 60.592a and 40 CFR 60.482-1a to 60.482-10a.

b. The BACT determination for this emissions unit includes:

i. the use of leakless/sealless or low-emission pumps, valves and compressors; and

ii. the use of a Leak Detection and Repair (LDAR) program for flanges.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) See 40 CFR 60.592a (40 CFR60.486a)

e) Reporting Requirements

(1) See 40 CFR 60.592a (40 CFR60.487a)

f) Testing Requirements

(1) See 40 CFR 60.592a (40 CFR60.485a)

(2) Compliance with emission limitations in b)(1) shall be determined in accordance with the following methods:

Emissions Limitation:

VOC emissions shall not exceed 1.7 tons per rolling 12-month period.

Applicable Compliance Method**:**

Compliance with the emission limitation may be demonstrated based on a one time calculation by using emission factors obtained from Table 2-2 of EPA's Protocol for Equipment Leak Emission Estimates (EAP-453/R-95-017) and the summation of the following equation for each component type:

Emissions(VOC) = EF x Wf x No. of Components x control efficiency

where: Ef = component specific emission factor.

Wf = the wt. fraction of worst case total organic carbon within the liquids used, assumed to be 100%.

Control eff. credit for use of leakless/sealless or low-emission pumps, valves and compressors = 99%

Control eff. for flanges under LDAR = 68%

The calculated and component summed results are as follows:

Component	Quantity	EFxWF in lb/hr	Potential TONS PER ROLLING 12-MONTH PERIOD @ 8760/2000	Control Eff.	Actual TONS PER ROLLING 12-MONTH PERIOD
Pump Seals	20	0.2513	22.0	99%	0.2
Valves	250	0.0240	26.3	99%	0.3
Flanges	540	0.00055	1.3	68%	0.4
Compressors seals	13	1.4021	79.8	99%	0.8
Total					**1.7**

g) Miscellaneous Requirements

(1) None

16. Emissions Unit Group - 4.0 mmBtu/hr gas-fired Heaters: B002, B003, B004

EU ID	Operations, Property and/or Equipment Description
B002	Reduction Gas Heater (4.0 mmBtu/hr) fueled by natural gas/tailgas.
B003	Oxidation Gas Heater (4.0 mmBtu/hr) fueled by natural gas/tailgas.
B004	Hydrogen Stripping Heater (4.0 mmBtu/hr) fueled by natural gas/tailgas.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-10 through 3745-31-20	Particulate emissions (PE) shall not exceed 0.09 pound per hour and 0.4 ton per rolling 12-month period. Nitrogen oxides (NOx) emissions shall not exceed 1.13 pounds per hour and 4.9 tons per rolling 12-month period. Carbon monoxide (CO) emissions shall not exceed 0.9 pound per hour and 4.2 tons per rolling 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 0.06 pound per hour and 0.3 ton per rolling 12-month period. Sulfur dioxide (SOx) emissions shall not exceed 0.01 pounds per hour and 0.04 ton per rolling 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A)(1) are equivalent to the requirements of these rules.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the rule.
c.	OAC rule 3745-17-10	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. use of only either natural gas or tailgas as fuel; and

ii. burn only gaseous fuels and employ good combustion practices to limit NOx emissions, CO emissions, VOC emissions, SO2 emissions, and PE/PM10 emissions.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in this emissions unit during each reporting period.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

NOx emissions shall not exceed 1.13 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(NOx) = 11,282 scf/hr x 100 lbs NOx/ 1 X 10E06 scf (AP-42 emission factor) = 1.13 lbs/hr

If required, the permittee shall demonstrate compliance with the hourly NOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

b. Emission Limitation:

NOx emissions shall not exceed 4.9 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable NOx emission limitation (1.13 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

PE emissions shall not exceed 0.09 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(PE) = 11,282 scf/hr x 7.6 lbs PE/1x10E6 scf (AP-42 emission factor) = 0.09 lb/hr

If required, the permittee shall demonstrate compliance with the hourly PE emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5.

d. Emission Limitation:

PE emissions shall not exceed 0.4 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable PE emission limitation (0.09 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 0.9 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(CO) = 11,282 scf/hr x 84 lbs CO/1x10E6 scf (AP-42 emission factor) = 0.9 lb/hr

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

f. Emission Limitation:

CO emissions shall not exceed 4.2 tons per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.9 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

VOC emissions shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(VOC) = 11,282 scf/hr x 5.5 lbs VOC/1x10EE06 scf (AP-42 emission factor) = 0.06 lb/hr

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 25 or 25A.

h. Emission Limitation:

VOC emissions shall not exceed 0.30 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.06 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

SOx emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (1998) for Natural Gas Combustion, and the maximum amount of the low Btu fuel gas entering the heater.

E(SOx) = 11,282 scf/hr x 0.6 lb SOx/1x10E06 scf (AP-42 emission factor) = 0.01 lb/hr

If required, the permittee shall demonstrate compliance with the hourly SOx emission limitation by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6.

j. Emission Limitation:

SOx emissions shall not exceed 0.04 ton per rolling 12-month period.

Applicable Compliance Method:

The tons per rolling 12-month period emission limitation was developed by multiplying the short-term allowable SOx emission limitation (0.01 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with these emissions limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None

17. Emissions Unit Group - Acid Gas Removal Units: P026, P027, P028

EU ID	Operations, Property and/or Equipment Description
P026	Syngas Cleanup Train 1.
P027	Syngas Cleanup Train 2.
P028	Syngas Cleanup Train 3.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-10 through 3745-31-20	CO: 308.7 lbs per hour and 1,351.7 tons per rolling 12-month period. H_2S: 0.93 lbs per hour and 4.0 tons per rolling 12-month period.
b.	OAC rule 3745-31-05(D)	COS: 0.67 lbs per hour and 2.87 tons per rolling 12-month period. (COS is the greatest single HAP emitted.)
c.	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. Each Syngas Cleanup Train, consists of 2 fly ash filter units, 2 wet scrubber units, a sour CO shift unit, 2 mercury guard beds, an acid gas removal unit (Rectisol Process) with CO2 exhaust stack and a sulfur guard bed.

b. The BACT determination for this emissions unit includes:

i. the only emission point from each of the Syngas Cleanup Trains Nos. 1 - 3 shall be the acid gas removal units' waste CO2 exhaust stack;

ii. limiting the carbon monoxide concentration of the acid gas removal units' waste CO2 exhaust stream to 406 ppm; and

iii. limiting the total H2S emissions of the acid gas removal units's waste CO2 exhaust stream to 1.0 ppm.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60, Appendix B.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

(2) Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate). The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(3) Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60, Appendix F; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60, Appendix F.

e) Reporting Requirements

(1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

f) Testing Requirements

(1) Within 60 days of installing the CEMs system required in d), the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

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

a. The emissions 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 start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for CO, COS and H_2S, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
COS	Methods 1 through 4 and Method 15 of 40 CFR Part 60, Appendix A.
H2S	Methods 1 through 4 and Method 15 of 40 CFR Part 60, Appendix A.

(3) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

CO emissions shall not exceed 308.7 lbs per hour and 1,351.7 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per hour CO emissions limitation shall be demonstrated based upon the applicable emissions tests specified in f)(1).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(1).

b. Emission Limitations:

H_2S emissions shall not exceed 0.93 lb per hour and 4.0 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per hour H_2S emissions limitation shall be demonstrated based upon the applicable emissions tests specified in f)(2).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(2).

c. Emission Limitations:

COS emissions shall not exceed 0.67 lbs per hour and 2.87 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per hour COS emissions limitation shall be demonstrated based upon the applicable emissions tests specified in f)(2).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(2).

g) Miscellaneous Requirements

(1) None

18. Emissions Unit Group - Coal or Biomass Drying and Milling: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010

EU ID	Operations, Property and/or Equipment Description
P001	Coal or Biomass Drying & Milling Line 1, 200 tons per hr. includes Bunker 1, Hot Gas Generator 1 and Filling Vessel Vent 1.
P002	Coal or Biomass Drying & Milling Line 2, 200 tons per hr. includes Bunker 2, Hot Gas Generator 2 and Filling Vessel Vent 2.
P003	Coal or Biomass Drying & Milling Line 3, 200 tons per hr. includes Bunker 3, Hot Gas Generator 3 and Filling Vessel Vent 3.
P004	Coal or Biomass Drying & Milling Line 4, 200 tons per hr. includes Bunker 4, Hot Gas Generator 4 and Filling Vessel Vent 4.
P005	Coal or Biomass Drying & Milling Line 5, 200 tons per hr. includes Bunker 5, Hot Gas Generator 5 and Filling Vessel Vent 5.
P006	Coal or Biomass Drying & Milling Line 6, 200 tons per hr. includes Bunker 6, Hot Gas Generator 6 and Filling Vessel Vent 6.
P007	Coal or Biomass Drying & Milling Line 7, 200 tons per hr. includes Bunker 7, Hot Gas Generator 7 and Filling Vessel Vent 7.
P008	Coal or Biomass Drying & Milling Line 8, 200 tons per hr. includes Bunker 8, Hot Gas Generator 8 and Filling Vessel Vent 8.
P009	Coal or Biomass Drying & Milling Line 9, 200 tons per hr. includes Bunker 9, Hot Gas Generator 9 and Filling Vessel Vent 9.
P010	Coal or Biomass Drying & Milling Line 10, 200 tons per hr. includes Bunker 10, Hot Gas Generator 10 and Filling Vessel Vent 10.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	From the Bunker Stack - PE/PM10 emissions shall not exceed 0.43 lb per hour and 1.9 tons per rolling 12-month period from the baghouse exhaust stack. From the Hot Gas Generator Stack - PE/PM10 emissions shall not exceed 0.6 lb per hour and 2.62 tons per rolling 12-month period. From the Hot Gas Generator Stack -

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Sulfur dioxide emissions: 0.24 lb/hour and 1.06 tons pr year. From the Hot Gas Generator Stack - Nitrogen oxide emissions: 1.32 lbs/hour and 5.8 tons per rolling 12-month period. From the Hot Gas Generator Stack - Carbon monoxide emissions: 2.23 lbs/hour and 9.75 tons per rolling 12-month period. From the Hot Gas Generator Stack - Organic compound emissions: 0.15 lbs/hour and 0.64 tons per rolling 12-month period. From the Filling Vessel - PE/PM10 emissions shall not exceed 0.07 lb per hour and 0.32 ton per rolling 12-month period from the baghouse exhaust stack. (It is assumed that all the PE is 100% PM10.) The combined annual emission rate of total HAPs from the Hot Gas Generator Stacks of P001-P010 shall not exceed 2.913 tons per rolling 12-month period. The combined annual emission rate of hexane from the Hot Gas Generator Stacks of P001-P010 shall not exceed 2.09 tons per rolling 12-month period. The visible particulate emissions limitations established pursuant to 40 CFR Part 60, Subpart Y are equivalent to the requirements of these rules. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	The visible PE limitations established by this rule are less stringent than those specified in Subpart Y.
d.	40 CFR Part 60, Subpart Ja, Section 60.102a(g)(1)	The permittee shall not discharge from any fuel gas combustion device any gases that contain SO2 in excess of 20 ppmv (dry basis, corrected to 0% excess air) determined on a 3-hour rolling

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		average basis and SO2 in excess of 8 ppmv (dry basis, corrected to 0% excess air) determined daily on a 365 successive day rolling average basis; or The permittee shall not burn in any fuel gas combustion device any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive day rolling average basis.
e.	40 CFR Part 60 Subpart Y, Section 60.252(a)(1)	Visible PE from the hot gas generator exhaust stack and the coal filling vessel baghouse exhaust stack shall not exhibit 20% opacity or greater.
f.	40 CFR Part 60 Subpart Y, Section 60.252(a)(2)	The PE limitation of this rule is less stringent than the limit required by OAC rule 3745-31-10 thru -20.
g.	40 CFR Part 60 Subpart Y, Section 60.252(c)	Visible PE from the Coal Bunker Stack shall not exhibit 20% opacity or greater. See b)(2)c.

(2) Additional Terms and Conditions

a. Milling and Drying Line 1 includes; a Bunker with baghouse, Hot Gas Generator and Filling Vessel with baghouse, as shown in Figure 6, Module 2, of the permit application.

b. The BACT determination for this emissions unit includes:

i. a totally enclosed bunker, including all coal transfer points;

ii. equipping the bunker and the filling vessel each with a baghouse dust collector that limits stack outlet PE loading to 0.005 gr/dscf of exhaust gases; and

iii. totally enclosed inlet and exit conveyors to the milling and drying line.

iv. use of a low NOx burner (rated heat input of 31.0 mmBtu/hr) in the Hot Gas Generator limiting emissions to 50 lbs NOx per 1.0 MMscf of gas burnt.

c. In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks while the equipment is in operation for any visible particulate emissions from the baghouse stacks. The presence or absence of any visible emissions from the baghouse stacks, along with the date and time, shall be noted in an operations log. If any visible emissions are observed from the stacks, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

(2) Comply with the applicable monitoring requirements of Section 60.107a of Subpart Ja.

(3) Comply with the applicable recordkeeping requirements of Section 60.108a of Subpart Ja.

e) Reporting Requirements

(1) The permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from the baghouse stacks and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

(2) Comply with the applicable reporting requirements of Section 60.108a of Subpart Ja.

f) Testing Requirements

(1) 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, but not later than 180 days after initial start-up.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE of 0.6 lb per hour from the Hot Gas Generator stack and 0.07 lb/hour from the Filling Vessel baghouse stack.

Emissions testing shall also be conducted to demonstrate compliance with the allowable mass emission rates for sulfur dioxide, nitrogen oxide, carbon monoxide and organic compounds from the Hot Gas Generator stack. The permittee shall conduct, or have conducted, emission testing for this or a representative emissions unit from the group of emissions units, P001-P010.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Particulates	Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A

SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
OC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from 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 Northeast District Office.

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 Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

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

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 Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

(2) Emission Limitation:

Bunker Stack - PE/PM10 emissions shall not exceed 0.43 lb per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the baghouse grain loading emission limit of 0.005 gr/dscf by the design exhaust flow rate of 10,000 scfm and the conversion factors; 1.0 lb/7,000 gr and 60 min./hour.

(3) Emission Limitations

(Hot Gas Generator Stack):

Sulfur dioxide emissions: 0.24 lb/hour and 1.06 tons per rolling 12-month period.

Nitrogen oxide emissions: 1.32 lbs/hour and 5.8 tons per rolling 12-month period.

Carbon monoxide emissions: 2.23 lbs/hour and 9.75 tons per rolling 12-month period.

Organic compound emissions: 0.15 lbs/hour and 0.64 tons per rolling 12-month period.

(4) Total HAPs: The combined annual emission rate of total HAPs from the Hot Gas Generator Stacks of P001-P010 shall not exceed 2.913 tons per rolling 12-month period.

(5) Hexane: The combined annual emissions rate of hexane from the the Hot Gas Generator Stacks of P001-P010 shall not exceed 2.09 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion of natural gas or fuel gas shall be determined by multiplying the volume (scf) of fuel burned in the Hot Gas Generator's burner by the emission factors in AP-42 Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and appropriate conversion factors.

Compliance with the annual emission limits shall be assumed if compliance with the hourly emission limits is demonstrated.

(6) Emission Limitations:

a. Particulate emissions from the bunker baghouse stack shall not exceed 1.9 tons per rolling 12-month period

b. Particulate emissions from the hot gas generator stack baghouse stack shall not exceed 2.62 tons per rolling 12-month period.

c. Particulate emissions from the filling vessel baghouse stack shall not exceed 0.32 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limits shall be assumed if compliance with the hourly emission limits is demonstrated.

(7) Emission Limitations:

The permittee shall not discharge from any fuel gas combustion device any gases that contain SO2 in excess of 20 ppmv (dry basis, corrected to 0% excess air) determined on a 3-hour rolling average basis and SO2 in excess of 8 ppmv (dry basis, corrected to 0% excess air) determined daily on a 365 successive day rolling average basis; or

The permittee shall not burn in any fuel gas combustion device any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive day rolling average basis.

Applicable Compliance Method:

Comply with the applicable testing requirements in Section 60.104a of Subpart Ja.

(8) Emission Limitations:

Visible PE from the Hot Gas Generator exhaust stack and the Coal Filling Vessel baghouse exhaust stack shall not exhibit 20% opacity or greater.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(9) Emission Limitations:

Visible PE from the Coal Bunker Stack shall not exhibit 20% opacity or greater.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None

19. Emissions Unit Group - Coal or Biomass Silos: F011, F012, F013, F014

EU ID	Operations, Property and/or Equipment Description
F011	Coal Silos 1 & 2 w/common dust collector.
F012	Coal Silos 3 & 4 w/common dust collector.
F013	Coal Silos 5 & 6 w/common dust collector.
F014	Biomass Silos 1 & 2 w/common dust collector.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PE/PM10 emissions shall not exceed 0.7 lb per hour and 3.0 tons per rolling 12-month period (for F011) and 0.9 lb per hour and 3.8 tons (for F012, F013, and F014) per year from the baghouse exhaust stack. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A)(1) and 40 CFR Part 60, Subpart Y are equivalent to the requirements of these rules. See b)(2)b.
b.	OAC RULE 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	40 CFR Part 60 Subpart Y	See b)(2)c

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

b. The BACT determination for this emissions unit includes:

i. totally enclosed silos, including all transfer points;

ii. equipping the silos with a common baghouse dust collector that limits stack outlet PE loading to 0.005 gr/dscf of exhaust gases; and

iii. totally enclosed fill and exit conveyors to the silos.

c. In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

c) Operational Restrictions

(1) For emissions units F012, F013, and F014, a bag leak detector shall be installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound, should emissions above the percent saturation be determined during the calibration testing, be exceeded.

d) Monitoring and/or Recordkeeping Requirements

(1) For emissions unit F011, the permittee shall perform weekly checks while the equipment is in operation for any visible particulate emissions from the baghouse stack. The presence or absence of any visible emissions from the baghouse stack, along with the date and time, shall be noted in an operations log. If any visible emissions are observed from the stack, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

(2) The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause and the action taken in response to the alarm.

(3) For emissions unit F012, F013 and F014, the permittee shall submit on a semi annual basis a report that identifies each event where an audible alarm sounds on the bag leak detector. These reports shall include a summary of the date, time, duration, cause, and the action taken in response to the alarm. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

e) Reporting Requirements

(1) For emissions unit F011, the permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from the baghouse stack and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

(2) The permittee shall submit on a semi annual basis a report that identifies each event where an audible alarm sounds on the bag leak detector. These reports shall include a summary of the date, time, duration, cause, and the action taken in response to the alarm. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) 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 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with:

i. the allowable mass emission rate for PE of 0.7 or 0.9 lb/hour; and

ii. the visible PE limitation.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. for particulates, Method 5 of 40 CFR Part 60, Appendix A; and

ii. for visible PE, Method 9 of 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 Ohio EPA Northeast District Office.

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

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

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 Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written

report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Emission Limitations:

Particulate emissions shall not exceed 3.0 (from F011) or 3.8 (each from F012-F014) tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated.

(3) Emission Limitations:

Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. The initial performance test shall be conducted in accordance with the requirements listed in f)(1).

(4) Emission Limitations:

In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in Section 60.11 of 40 CFR Part 60.

In accordance with Section 60.8, of 40 CFR Part 60, the permittee shall conduct initial performance tests within 60 days of achieving the maximum production rate at which the affected facility will be operated, but no longer than 180 days after initial startup.

The permittee shall comply with the requirements in f)(1)e. through f)(1)g. above, in regard to testing notice, Ohio EPA witness of testing and submitting written reports on results.

g) Miscellaneous Requirements

(1) None.

20. Emissions Unit Group - Combined Cycle Turbines: P018, P019

EU ID	Operations, Property and/or Equipment Description
P018	Combined Cycle Plant 1
P019	Combined Cycle Plant 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-10 through 3745-31-20	PE/PM10:18.21 lbs per hour (as a 3-hr average) and 78.67 tons per rolling 12-month period. NOx: 28.53 lbs per hour (as a 3-hr average) and 123.3 tons per rolling 12-month period. CO: 23.1 lbs per hour (as a 3-hr average) and 99.78 tons per rolling 12-month period. VOC: 26.62 lbs per hour (as a 3-hr average) and 114.99 tons per rolling 12-month period. SO_2: 21.06 lbs per hour (as a 3-hr average) and 90.97 tons per rolling 12-month period. Sulfuric acid mist: 1.07 lb per hour (as a rolling 3-hr average) and 4.34 tons per rolling 12-month period. During startup and shutdown the combined emissions from P018 and P019 shall not exceed:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PE/PM10:65.0 lbs per hour and 3.1 tons per rolling 12-month period. NOx: 370.0 lbs per hour and 17.3 tons per rolling 12-month period. CO: 870.0 lbs per hour and 43.5 tons per rolling 12-month period. VOC: 65.0 lbs per hour and 3.1 tons per rolling 12-month period. SO_2: 2.5 lbs per hour and 0.1 tons per rolling 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are equivalent to the requirements of these rules. Total HAPs emissions shall not exceed 0.8 ton per rolling 12-month period. Formaldehyde emissions shall not exceed 0.68 ton per rolling 12-month period.
b.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average. Mercury: 43.45 lbs per year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20.
c.	40 CFR Part 60, Subpart Da	The PE/PM10, NOx and SO2 emissions limitations of this rule are less stringent than those established in accordance with the BACT requirements of OAC rules 3745-31-10 through 3745-31-20. Mercury (Hg) emissions shall not exceed

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.020 lb/GWh (20 X 10E -06 lb/MWh), as a 12-month rolling average.
d.	40 CFR Part 60, Subpart GG	Not applicable. See b)(2)b.
e.	40 CFR Part 60, Subpart KKKK	Not applicable. See b)(2)b.
f.	OAC rule 3745-17-07(A)	The visible emission limitations specified in this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).
g.	OAC rule 3745-17-11(B)(4)	The emission limitations specified in this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-10 through 3745-31-20.
h.	OAC chapter 3745-14 (NOx Budget Trading Program)	The permittee shall comply with all applicable requirements under the NOx Budget Trading Program in a timely manner.
i.	OAC chapter 3745-109 (Clean Air Interstate Rule (CAIR))	On July 11, 2008, the Washington DC Circuit Court vacated U.S. EPA's CAIR. U.S. EPA is reviewing the court's decisions and evaluating it's impacts.. Because Ohio's CAIR was based on the above federal rule, it's future implementation has yet to be determined.
j.	OAC chapter 3745-108 (Clean Air Mercury Rule (CAMR))	On Feb 8, 2008, the Washington DC Circuit Court vacated U.S. EPA's rule removing power plants from the CAA list of sources of HAPs. At the same time, the vacated CAMR. U.S. EPA is reviewing the court's decisions. Because Ohio's CAMR was based on the above federal rule, it's future implementation has yet to be determined.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. use of only tailgas or natural gas as fuel;

ii. employ a Selective Catalytic Reduction (SCR) emissions control device to reduce NOx emissions to 2.5 ppmvd (at 15% O2) with a 10.0 ppmvd NH3 slip, when firing tail gas;

iii. employ water or steam injection in the combustion turbine in combination with the SCR emissions control device to reduce NOx emissions to 2.5 ppmvd (at 15% O2) when firing natural gas;

iv. employ a Catalytic Oxidation emissions control device along with good combustion practices to reduce CO emissions to 0.008 lb/mmBtu (as a rolling 24-hour average);

v. employ a Catalytic Oxidation emissions control device along with good combustion practices to reduce VOC emissions to 0.012 lb/mmBtu (as a rolling 24-hour average);

vi. employ good combustion practices in firing only gaseous fuels to reduce PM/PM10 emissions to 0.008 lb/mmBtu; and

vii. tailgas fired in this emissions unit shall contain no more than 0.006 grains H2S per 100 dscf or firing pipeline quality natural gas.

viii. Sulfuric acid mist emissions shall be limited to 4.45 X 10E -04 lb/mmBtu.

b. This emissions unit is subject to 40 CFR Part 60, Subpart Da and not subject to Subpart GG or Subpart KKKK, of Part 60. This emissions unit is a combined cycle gas turbine (both stationary combustion turbine and associated duct burner) that meets all of the applicability requirements of Section 60.40 Da(b).

c. The permittee shall prepare and submit to the Ohio EPA Northeast District Office a unit-specific monitoring plan for each monitoring system (opacity, SO_2, NO_x, CO_2 or O_2 and Hg) at least 45 days before commencing certification testing of the monitoring systems. The plan must address the requirements in 40 CFR 75 and paragraphs (s)(1) through (s)(6) of 40 CFR 60.49Da.

[40 CFR 60.13]; [40 CFR Part 60, Appendix F]; and [40 CFR Part 75]

c) Operational Restrictions

(1) The permittee shall only burn natural gas and/or other gaseous fuels in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) See 40 CFR Part 60, Subpart Da.

(2) The permittee shall maintain monthly records of the total quantity and type of gaseous fuel(s) burned in this emissions unit.

e) Reporting Requirements

(1) See 40 CFR Part 60, Subpart Da.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or tailgas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) 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:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Northeast District Office of the Ohio EPA
Division of Air Pollution Control
2110 E. Aurora Road
Twinsburg, Ohio 44087

f) Testing Requirements

(1) Compliance with the emission limitations in b) shall be determined in accordance with the following methods:

a. Emission Limitations:

Particulate matter less than ten microns (PM-10), filterable and condensible emissions, shall not exceed 0.008 pound per million Btu heat input(as a 3-hour average),18.21 pounds per hour(as a 3-hour average) and 78.67 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour PM-10 emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by compliance with the hourly emissions limit.

b. Emission Limitation:

Tailgas fired in this emissions unit shall contain no more than 0.006 grains H2S per 100 dscf or firing pipeline quality natural gas: and sulfur dioxide(SO2) emissions shall not exceed, 21.06 lbs per hour(as a 3-hour average), and 90.97 tons per rolling,12-month period.

Applicable Compliance Methods:

Compliance with the pound per hour SO2 emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2), the monitoring and record keeping requirements in d) and the reporting requirements in e).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the monitoring and record keeping required pursuant to d), and the associated emission factors derived from emissions testing as specified in d), and f)(2).

c. Emission Limitations:

Nitrogen oxides(NOx) emissions shall not exceed 2.5ppmvd at 15% O2, 28.53 lbs per hour(as a 3-hour average),and 123.3 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the ppmvd and pound per hour NOx emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2), the monitoring and record keeping requirements in d) and the reporting requirements in e).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the monitoring and record keeping required pursuant to d) and the associated emission factors derived from emissions testing as specified in f)(2).

d. Emission Limitations:

Carbon monoxide(CO) emissions shall not exceed 0.008 lb per million Btu heat input, 23.01 lbs per hour(as a 3-hour average), and 99.78 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour CO emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2), the monitoring and record keeping requirements in d) and the reporting requirements in e).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the monitoring and record keeping required pursuant to d)and

the associated emission factors derived from emissions testing as specified in f)(2).

e. Emission Limitations:

Volatile organic compound(VOC) emissions shall not exceed 0.012 lb per mmBtu actual heat input, 26.62 lbs per hour(as a 3-hour average) and 114.99 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour VOC emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2).

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(2).

f. Emission Limitations:

Total HAPs emissions shall not exceed 0.8 ton per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the monitoring and record keeping required pursuant to d) and the associated emission factors derived from emissions testing as specified in f)(2).

g. Emission Limitations:

Formaldehyde emissions shall not exceed 0.68 ton per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(2).

h. Emission Limitations:

Mercury emissions shall not exceed 0.02 lb/GWh (20 X 10E -06 lb/MWh), as a rolling 12-month average, and 43.45 lbs per year.

Applicable Compliance Methods:

Compliance with the lb/GWh emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2), the monitoring and record keeping requirements in d) and the reporting requirements in e).

Compliance with the pounds per year emission limitation shall be demonstrated by the monitoring and record keeping required pursuant to d) and the associated emission factors derived from emissions testing as specified in f)(2)

i. Emission Limitations:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Methods:

Compliance with the visible particulate emissions limitations shall be demonstrated based upon the applicable emissions tests specified in f)(2), the monitoring and record keeping requirements in d) and the reporting requirements in e).

j. Emission Limitations

Sulfuric acid mist shall exceed 1.07 lb per hour (as a rolling 3-hr average) and 4.34 tons per rolling 12-month period.

Applicable Compliance Methods

Compliance with the lbs per hour sulfuric acid mist emissions limitation shall be demonstrated base upon the applicable test method in f)(2) above.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in f)(2).

k. Emission Limitations

During startup and shutdown:

PE/PM10:65.0 lbs per hour and 3.1 tons per rolling 12-month period.

NOx: 370.0 lbs per hour and 17.3 tons per rolling 12-month period.

CO: 870.0 lbs per hour and 43.5 tons per rolling 12-month period.

VOC: 65.0 lbs per hour and 3.1 tons per rolling 12-month period.

SO_2: 2.5 lbs per hour and 0.1 tons per rolling 12-month period.

Applicable Compliance Methods

Compliance with the PE/PM10, VOC and SO2 emissions limits shall be based on the f)(1)a, f)(1)e and f)(1)b testing requirements above.

Compliance with the NOx emissions limit shall be determined base on the d(1) NOx continuous monitoring requirements above.

Compliance with the CO emissions limit shall determined based upon the uncontrolled rate of CO emissions calculated from Table 3.1-1, Section 3.1 of AP-42.

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

a. The emissions 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 start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for PM-10, NO_X, SO_2, VOC, CO, H2SO4 Mist, Total HAPs, Formaldehyde, Mercury and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM-10	Method 201(40 CFR Part 51, Appendix M)
	Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR
	Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
H2SO4 Mist	Method 8 of 40 CFR Part 60, Appendix A
Total HAPs	Methods 1 through 4 and Method 18 of 40 CFR Part 60, Appendix A.
Formaldehyde	Methods 1 through 4 and Method 18 of 40 CFR Part 60, Appendix A
Mercury	40 CFR Part 60, Subpart Da, Section 60.50Da
Opacity	Method 9 of 40 CFR Part 60, Appendix A

g) Miscellaneous Requirements

(1) None.

21. Emissions Unit Group - Cooling Towers: P013, P014

EU ID	Operations, Property and/or Equipment Description
P013	Cooling Tower 1.
P014	Cooling Tower 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PM10 emissions shall not exceed 2.4 lbs per hour and 10.5 tons per rolling 12-month period. [PE is assumed to be 100% PM10.] The permittee shall install a drift eliminator with a maximum drift rate of 0.0005%, by weight, onto this emissions unit. Visible particulate emissions shall not exceed 10% opacity as a 6-minute average. The presence of condensed water vapor shall not be deemed a violation for failure of stack emissions meeting this visible emission limitation.
b.	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	See b)(2)a.
d.	OAC rule 3745-17-11(B)	See b)(2)a.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

b. The provisions of 40 CFR Part 63, Subpart Q, apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals and are either major sources or are integral parts of facilities that are major sources as defined in 40 CFR 63.401. Since chromium-based water treatment chemicals will not be used in this emissions unit, the provisions of this subpart do not apply to this emissions unit.

c) Operational Restrictions

(1) The permittee shall maintain an average total dissolved solids (TDS) concentration of the cooling water less than or equal to 2,000 milligrams per liter.

(2) The permittee shall not use chromium-based water treatment chemicals in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall monitor the TDS content of the circulating cooling water on a daily basis.

(2) The permittee shall maintain daily records of the daily TDS content of the circulating cooling water, in mg/L.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the average TDS limitation. The reports shall identify corrective action taken to reduce the TDS concentration. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitation:

PM10 emissions shall not exceed 2.4 lbs per hour.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by the following one-time calculation.

$PM10 = Q \times (TDS / 10^6 \text{ ppm}) \times (Drift/100) \times (Density) \times (60 \text{ min/hr})$

where:

Q = maximum cooling tower circulating water flow rate (481,000 gallons/min)

TDS = the maximum TDS concentration in the circulating water 2,000 mg/L (2,000 ppm by weight);

Drift = the maximum drift loss, 0.0005%; and

Density = Density of water, 8.34 lb/gal

b. Emission Limitation:

PM10 emissions shall not exceed 10.5 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by the following one-time calculation.

Multiply the allowable hourly emissions (2.4 lbs/hr) by the maximum annual hours of operation (8,760 hours per year) and divide by 2000 lbs per ton.

c. Emission Limitation:

The maximum drift rate shall not exceed 0.0005%.

Applicable Compliance Method:

Manufacturer's emissions data shall be used to demonstrate compliance with this limitation.

Within 90 days of startup, the permittee shall submit to the Ohio EPA-Northeast District Office written documentation provided by the vendor/manufacturer, of the maximum drift rate of 0.0005% for the drift eliminator and the premise, basis, and justification for the drift rate.

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e. Emission Limitation:

The permittee shall maintain the average TDS concentration of the cooling water less than or equal to 2,000 milligrams per liter.

Applicable Compliance Method:

The monitoring and recordkeeping requirements under d) shall serve as demonstration of compliance.

If required, compliance shall be demonstrated using test procedures that conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants". Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

g) Miscellaneous Requirements

(1) None

22. Emissions Unit Group - Diesel Fuel Tanks: T001, T002, T003, T004, T005, T006, T007, T008

EU ID	Operations, Property and/or Equipment Description
T001	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 1.
T002	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 2.
T003	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 3.
T004	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 4.
T005	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 5.
T006	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 6.
T007	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 7.
T008	3.0 MM Gallon Cap. F-T Diesel Fuel, Fixed Roof, Storage Tank 8.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-21-09(L)	Exempt. See b)(2)a.
c.	OAC rules 3745-31-10 through 3745-31-20	VOC emissions shall not exceed 0.8 tons per rolling 12-month period. See b)(2)c.
d.	40 CFR Part 60, Subpart Kb	See b)(2)b.

(2) Additional Terms and Conditions

a. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless the tank is equipped with an internal floating roof (or equivalent control approved by the Director) in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09 prior to storing a petroleum liquid with a higher vapor pressure.

b. NSPS Subpart Kb does not apply to storage vessels with a capacity greater than 151 cubic meters (39,890 gallons) storing a liquid with a true maximum vapor pressure less than 3.5 kilopascals (0.508 psia), per Section 60.110b(b).

c. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available control technology requirements of OAC rules 3745-31-10 thru 3745-31-20.

c) Operational Restrictions

(1) The permittee shall not store a petroleum liquid with a true vapor pressure equal to or greater than 3.5 kilopascals (0.508 psia).

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information for the fixed roof tank:

a. the types of petroleum liquids stored in the tank;

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute; and

c. the number of tank turnovers per year.

(2) These records shall be maintained for at least 5 years and shall be made available to the director or his representative upon verbal or written request.

e) Reporting Requirements

(1) If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the Ohio EPA Northeast District Office) within 30 days of becoming aware of the occurrence. The date that such petroleum liquid was first stored in the tank, the date removed (if removed), the total gallons throughput of each petroleum liquid exceeding this vapor pressure, and the proposed method of compliance shall be included in the report.

f) Testing Requirements

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

Emissions Limitations:

VOC emissions shall not exceed 0.8 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated using: 'Tanks 4.0.9d', the latest version of Tanks computer software, or equivalent AP-42, Section 7.1, "Organic liquid Storage tanks' methodology issued by U.S. EPA for calculating tank emissions.

g) Miscellaneous Requirements

(1) None

23. Emissions Unit Group - Fire Pump Engines: P016, P017

EU ID	Operations, Property and/or Equipment Description
P016	Fire Pump Engine 1.
P017	Fire Pump Engine 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	The BACT determination for this emissions unit is equivalent to the requirements specified in 40 CFR Part 60, Subpart IIII. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules. Also see b)(2)a., b)(2)b. and c)(4).
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-17-11 (B)(5)	The emissions limitation specified by this rule is less restrictive than the emissions limitation specified under 40 CFR Part 60, Subpart IIII.
e.	OAC rule 3745-18-06(B)	This emissions unit is exempt from the requirements of this rule.
f.	40 CFR Part 60, Subpart IIII, Section 60.4204(d) and 60.4205(c) [Table 4 to Subpart IIII of Part 60]	Emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NOx) combined shall not exceed 7.8 grams/hp-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		hr. Emissions of carbon monoxide (CO) shall not exceed 2.6 grams/hp-hr. Particulate emissions (PE) shall not exceed 0.40 gram/hp-hr. Also see b)(2)c., c)(1), c)(2), c)(3), and c)(5).

(2) Additional Terms and Conditions

a. The emissions limitations established as BACT are:

PE: 0.27 lb/hour and 0.07 ton per rolling 12-month period;

CO: 1.72 lbs/hour and 0.43 tons per rolling 12-month period;

NOx: 4.89 lbs/hour and 1.23 tons per rolling 12-month period; and

NMHC: 0.26 lbs/hour and 0.07 ton per rolling 12-month period.

b. The BACT determination for this emissions unit also includes:

i. good combustion practices;

ii. good engine design;

iii. ignition timing retard;

iv. turbocharger; and

v. low-temperature aftercooler.

c. The permittee shall install a non-resettable hour meter prior to startup of the engine, per 40 CFR 60.4209(a).

c) Operational Restrictions

(1) Per 40 CFR 60.4211(c) the permittee shall purchase an engine certified to the emissions standards specified in 40 CFR 60.4205(c). The engine must be installed and configured according to the manufacturer's specifications.

(2) Per 40 CFR 60.4211 (a) the permittee shall operate and maintain the engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer.

(3) Per 40 CFR 60.4211(e) the engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of the engine in emergency situations. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State or local standards require maintenance and testing of the engine beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted in this section is prohibited.

(4) The maximum annual operating hours for this emissions unit shall not exceed 500, based upon a rolling, 12-month summation of the operating hours.

(5) The permittee shall combust only diesel fuel which meets the following specifications, as detailed in 40 CFR 80.510(b) and required by 40 CFR 60.4207(b):

a. sulfur content of 15 ppm, maximum; and

b. cetane index of 40, minimum or

c. aromatic content of 35 volume percent, maximum.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is undergoing maintenance checks or readiness testing and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. These checks are not required when operating under emergency conditions. 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 date and time along with 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 emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under d)(1)d. or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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.

(2) The permittee shall retain records of:

a. hours of operation recorded in the non-resettable hour meter;

b. the hours of operation over each rolling 12-month period;

c. time of operation of the engine; and

d. the reason the engine operated.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

(2) The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous six-month periods.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions (PE) shall not exceed 20% as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

0.27 lb PE/hour and 0.07 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 300 hp by the emission factor of 0.40 gram/hp-hr taken from Table 4 of 40 CFR Part 60, Section 4200 (Table 4) and the conversion factor of 1 gram equals 0.0022 lb.

Compliance with the annual emission limits shall be assumed if compliance with the hourly emission limits is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

c. Emission Limitation:

1.72 lbs CO/hour and 0.43 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 300 hp by the emission factor of 2.6 grams/hp-hr taken from Table 4 of 40 CFR part 60, Section 4200 and the conversion factor of 1 gram equals 0.0022 lb.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

d. Emission Limitation:

4.89 lbs NOx/hour and 1.23 tons per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 300 hp by the factor in Table 4 of 40 CFR part 60, Section 4200 of 7.8 grams/hp-hr and the conversion factor of 1 gram equals 0.0022 lb. 95% of the NMHC + NOx is assumed to be NOx.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

e. Emission Limitation:

0.26 lb NMHC/hour and 0.07 ton per rolling 12-month period

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion shall be determined by multiplying the engine's rating of 300 hp by the factor of 7.8 grams/hp-hr from Table 4 of 40 CFR Part 60, Section 4200 and the conversion factor of 1 gram equals 0.0022 lb. 5% of the NMHC + NOx is assumed to be NMHC.

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated and compliance with the rolling 12-month hours of operation limitation is demonstrated.

f. Emission Limitation:

Diesel fuel specifications: sulfur content of 15 ppm, maximum; and cetane index of 40, minimum or aromatic content of 35 volume percent, maximum.

Applicable Compliance Method:

Compliance with the fuel specifications shall be determined by any method allowed under 40 CFR Part 80 Subpart I.

g) Miscellaneous Requirements

(1) None

24. Emissions Unit Group - Fly Ash Handling Systems: F015, F016, F017, F018, F019, F020

EU ID	Operations, Property and/or Equipment Description
F015	Flyash handling system 1, intermediate vessels, silo and pneumatic transfer to trucks.
F016	Flyash handling system 2, intermediate vessels, silo and pneumatic transfer to trucks.
F017	Flyash handling system 3, intermediate vessels, silo and pneumatic transfer to trucks.
F018	Flyash handling system 4, intermediate vessels, silo and pneumatic transfer to trucks.
F019	Flyash handling system 5, intermediate vessels, silo and pneumatic transfer to trucks.
F020	Flyash handling system 6, intermediate vessels, silo and pneumatic transfer to trucks.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter (PE)/particulate matter of 10 microns or less (PM10) from the intermediate fly ash vessels shall not exceed 0.015 pound/hour and 0.065 ton per rolling 12-month period. Emissions of fugitive PE/PM10 from the fly ash storage silo shall not exceed 0.03 pound/hour and 0.13 ton per rolling 12-month period. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(B)(1) are equivalent to the requirements of these rules. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		through 3745-31-20.
c.	OAC rule 3745-17-07(B)(1)	Visible PE shall not exhibit 20% opacity or greater as a three-minute average.
d.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-13-20.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. totally enclosed fly ash intermediate storage bins equipped with a passive dust collector;

ii. totally enclosed fly ash storage silo equipped with a passive dust collector;

iii. each passive dust collector shall limit stack outlet PE loading to 0.005 gr/dscf of exhaust gases or less;

iv. high moisture content in the ash (from previous processing);

v. pneumatic conveying;

vi. totally enclosed truck loading (including no open drop height); and

vii. covering, at all times, of open-bodied vehicles when transporting ash.

The above BACT determination notwithstanding, should any visible emissions be observed, the permittee shall implement additional measures as needed to comply with the requirements in this permit.

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks while the equipment is in operation for any visible particulate emissions from each of the passive dust collectors. The presence or absence of any visible emissions from the passive dust collectors shall be noted in an operations log. If any visible emissions are observed from the stacks, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

e) Reporting Requirements

(1) The permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from any of the passive dust collectors and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

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

a. Emission Limitation:

Emissions of fugitive PE/PM10 from the intermediate fly ash vessels shall not exceed 0.015 pound/hour and 0.065 ton per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the anticipated passive dust collector grain loading emission rate of 0.005 gr/dscf by the anticipated air displacement rate of 438 cfm for the intermediate ash storage vessels and the conversion factors: 1.0 lb/7,000 gr and 60 min./hour.

b. Emission Limitation:

Emissions of fugitive PE/PM10 from the fly ash storage silo shall not exceed 0.03 pound/hour and 0.13 ton per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the anticipated passive dust collector grain loading emission rate of 0.005 gr/dscf by the anticipated air displacement rate of 876 cfm for the fly ash silos and the conversion factors: 1.0 lb/7,000 gr and 60 min./hour.

c. Emission Limitations:

Visible PE from each passive dust collector exhaust shall not exhibit 20% opacity or greater as a three-minute average.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None

25. Emissions Unit Group - Gasifiers 1-6: P020, P021, P022, P023, P024, P025

EU ID	Operations, Property and/or Equipment Description
P020	Gasifier No. 1
P021	Gasifier No. 2
P022	Gasifier No. 3.
P023	Gasifier No. 4.
P024	Gasifier No. 5.
P025	Gasifier No. 6.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-10(B)(1)	The particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
d.	OAC rule 3745-31-10 through 3745-31-20	PE/PM10: 9.4 lbs per hour and 0.43 ton per rolling 12-month period. SO2: 1,738.93 lbs per hour and 78.25 tons per rolling 12-month period. NOx: 376.8 lbs per hour and 16.96 tons per rolling 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		CO: 2,521.4 lbs per hour and 113.46 tons per rolling 12-month period. VOC.: 157.0 lbs per hour and 7.07 tons per rolling 12-month period. Total HAPs/COS: 2.07 lbs per hour and 0.093 tons per rolling 12-month period. H2S: 10.830 lbs per hour and 0.487 tons per rolling 12-month period. The flare stack shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. use of a flare with a 98% by weight, design, VOC destruction efficiency**,** to burn exhausted syngas during all startups and shutdowns.

ii. The flare shall be designed, monitored and operated in conformance with the requirements for flares as listed in Section 60.18 of 40 CFR Part 60.

iii. employ good combustion practices in firing only gaseous fuels to reduce PM/PM10 emissions to 0.003 lb/mmBtu;

iv. employ good combustion practices in firing only gaseous fuels to limit SO2 emissions to 1.384 lbs/mmBtu;

v. employ good combustion practices in firing only gaseous fuels to reduce NOx emissions to 0.30 lb/mmBtu;

vi. employ good combustion practices in firing only gaseous fuels to reduce CO emissions to 2.01 lb/mmBtu; and

vii. employ good combustion practices in firing only gaseous fuels to reduce VOC emissions to 0.125 lb/mmBtu;

b. The high pressure flare shall control syngas emissions from the Gasifiers Numbers 1- 6 during startups. The raw syngas to be flared shall be filtered for particulates prior to being flared.

The high pressure flare shall be used to flare raw syngas during process upsets and emergencies. During process upsets and emergencies, raw syngas may be flared directly from a gasifier vessel, without being processed through the particulate and acid gas filtration equipment.

c. The high pressure flare shall be equipped with multiple pilot burners having a combined, design rated, heat input of 0.55 mmBtu per hour, and fired by natural gas. The maximum, design heat release rate of the flare shall be 3,140 mmBtu/hour, for the flaring of syngas.

d. The permittee shall properly install, operate, and maintain a thermocouple or any other equivalent device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, and the requirements of Section 60.18 of 40 CFR Part 60.

c) Operational Restrictions

(1) For emissions units P020 - P025 (Gasifiers Nos. 1 - 6), each emissions unit shall be limited to a maximum total of 90hours of flaring due to startup events per rolling 12 - month period.

(2) Emissions units P020 - P025 (Gasifiers Nos. 1 - 6) shall be limited to a combined maximum total of 90 hours of flaring due to startup events per rolling 12 -month period.

(3) The flare pilot shall be operated at all times when raw syngas may be vented to it.

(4) During startup of a gasfier the heat input to the flare shall be limited to 1,256 mmBtu per hour of combustible gases.

(5) Only coal or other feedstocks with a sulphur content of 0.63 percent, by weight, or less shall be used during startup of a gasifier.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design parameters and the requirements contained in this permit, and in the 'General control device requirements' for flares listed in Section 60.18 of 40 CFR Part 60.

(2) The permittee shall record each startup event, identifying the gasifier no. and emissions unit no., the time and date and the rolling 12-month total number of startups, to-date.

(3) The permittee shall record each process upset or emergency shutdown event during which raw syngas is sent directly to the high pressure flare, without being passed through the particulate and acid gas filtration units.

The permittee shall record the date, time, duration, volume of raw syngas flared, the amounts of the resulting air emissions and the reason for each such event.

(4) The permittee shall record the hourly heat input rate to the high pressure flare for each gasifier startup event.

(5) The permitted shall keep a record of each startup event during which coal or other feedstock with a sulfur content greater than 0.63 percent, by weight, was used.

(6) The permittee shall perform weekly checks during startup of a gasifier for any visible particulate emissions from the high pressure flare stack. The presence or absence of any visible emissions from the high pressure flare stack shall be noted in an operations log. If any visible emissions are observed from the stack, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify all periods of time during which the pilot flame was not functioning properly or the flare was not maintained as required in this permit. The reports shall include the date, time, and duration of each such period.

(2) The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any record showing that the maximum number of startup events for this emissions unit individually or, for the group of emissions units P020 - P025, exceeded 90 hours of flaring due to startup events. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

(3) The permittee shall submit quarterly reports to the Ohio EPA Northeast District Office which summarize the number of process upset or emergency shutdown events which occurred during the previous calendar quarter.

(4) The permittee shall submit all reports and notifications required in Section 60.18 of 40 CFR Part 60.

(5) The permittee shall report any exceedances of the hourly heat input limitation to the high pressure flare, which occurred during a gasifier startup.

(6) The permittee shall report any exceedances of the coal, and other feedstock, sulfur content limitation, which occurred during a gasifier startup.

(7) The permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from the high pressure flare stack and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

Particulate matter less than ten microns (PM-10), filterable and condensible emissions, shall not exceed 9.4 pounds per hour and 0.42 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the 9.4 pounds per hour emissions limitation shall be demonstrated by multiplying the BACT based limit of 0.008 lb/mmBtu by the maximum flare heat input of 1256 mmBtu/hour.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d) above.

b. Emission Limitations:

SO2 emissions shall not exceed 1738.93 , lbs/hour and 78.3 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the 1738.93 pounds per hour emissions limitation shall be demonstrated by multiplying the BACT based limit of 1.384 lbs per mmBtu by the maximum flare heat input of 1,256 mmBtu/hour.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

c. Emission Limitations:

Nitrogen oxides(NOx) emissions shall not exceed 376.80 lbs per hour and 16.96 tons per rolling 12-month period 0.30 lb per mmBtu and

Applicable Compliance Methods:

Compliance with the 376.8 lbs per hour NOx emissions limitations shall be demonstrated by multiplying the BACT based limit of 0.30 lb per mmBtu by the maximum flare heat input of 1256 mmBtu/hour.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

d. Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 2521.42 lbs per hour and 113.46 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the 2521.42 lbs per hour CO emissions limitations shall be demonstrated by multiplying the BACT based limit of 2.008 lb per mmBtu by the maximum flare heat input of 1,256. mmBtu/hour.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

e. Emission Limitations:

Volatile organic compound (VOC) emissions shall not exceed 157.0 lbs per hour and 7.07 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the 157.0 lbs per hour VOC emissions limitations shall be demonstrated by multiplying the BACT based limit of 0.125 lb per mmBtu by the maximum flare heat input of 1256 mmBtu/hour.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

f. Emission Limitations:

Total HAPs/COS emissions shall not exceed 2.07 lbs per hour and 0.093 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the 2.07 lbs per hour total HAPs/COS emissions limitations shall be demonstrated based by multiplying an emission factor for Total HAPS/COS of 0.002 lb/mmBtu heat input by the maximum hourly heat input rate during flaring of the gasifier. The listed emission factor is an engineering estimate based upon the design of the flare and anticipated characteristics of the flared syngas.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

g. Emission Limitations:

H2S emissions shall not exceed 10.83 lbs per hour and 0.487 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the 10.83 lbs per hour H2S emissions limitations shall be demonstrated based by multiplying an emission factor for H2S of 0.009 lb/mmBtu heat input by the maximum hourly heat input rate during flaring of the gasifier. The listed emission factor is an engineering estimate based upon the design of the flare and anticipated characteristics of the flared syngas.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by multiplying the hourly emission limitation by 90 hours per year and the conversion factor 1.0 ton/2,000 lbs and the monitoring and record keeping required pursuant to d).

h. Emission Limitations:

The flare stack shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Methods:

Compliance with the visible emissions limitations shall be demonstrated in accordance with US EPA Method 22.

(2) The flare shall comply with the requirements of Section 60.18 of 40 CFR Part 60.

g) Miscellaneous Requirements

(1) None

26. Emissions Unit Group - Naphtha Tanks: T009, T010, T011, T012

EU ID	Operations, Property and/or Equipment Description
T009	3.0 MM Gallon Capacity F-T Naphtha, Internal Floating Roof, Tank 1
T010	3.0 MM Gallon Capacity F-T Naphtha, Internal Floating Roof, Tank 2
T011	3.0 MM Gallon Capacity F-T Naphtha, Internal Floating Roof, Tank 3
T012	3.0 MM Gallon Capacity F-T Naphtha, Internal Floating Roof, Tank 4

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-21-09(L)	See c)(1), d)(1), d)(2) and e)(1)
c.	OAC rules 3745-31-10 through 20	VOC emissions shall not exceed 0.88 tons per rolling 12-month period. See b)(2)a.
d.	40 CFR Part 60, Subpart Kb	See b)(2)a.

(2) Additional Terms and Conditions

a. The Best Available Control Technology requirements for this emissions unit include equipping this storage tank with a fixed roof in combination with an internal floating roof for the control of VOC and HAP emissions, which meets all of the requirements of 40 CFR part 60, Subpart Kb .

c) Operational Restrictions

(1) The permittee shall install the following control equipment and shall maintain tank vents, seals, and or covers as follows:

a. The fixed roof storage tank shall be equipped with an internal floating roof.

b. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports.

c. The rim vents, if present, shall be set to open or at the manufacturer's recommended setting when the roof is being floated off the roof leg supports.

d. All openings, except stub drains, shall be equipped with a cover, seal, or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

(2) See 40 CFR Part 60, Subpart Kb.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information for the fixed roof tank:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

[OAC rule 3745-21-09(L)(3)]

(2) The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit and per the rules.

[OAC rule 3745-21-09(L)(1)(b) and (c) and (L)(4)]

(3) See 40 CFR Part 60, Subpart Kb.

e) Reporting Requirements

(1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.

[OAC rule 3745-21-09(L)(4)]

(2) See 40 CFR Part 60, Subpart Kb.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitations:

VOC emissions shall not exceed 0.88 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated using: 'Tanks 4.0.9d', the latest version of 'Tanks' computer software, or equivalent AP-42, Fifth Edition, Volume 1, Section 7.1, "Organic Liquid Storage Tanks', (11/06) methodology issued by U.S. EPA for calculating tank emissions..

g) Miscellaneous Requirements

(1) None.

27. Emissions Unit Group - Slag Dewatering Silos: F021, F022, F023, F024, F025, F026

EU ID	Operations, Property and/or Equipment Description
F021	Slag Dewatering Silo 1.
F022	Slag Dewatering Silo 2.
F023	Slag Dewatering Silo 3.
F024	Slag Dewatering Silo 4.
F025	Slag Dewatering Silo 5.
F026	Slag Dewatering Silo 6.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	Emissions of fugitive particulate matter (PE)/particulate matter of 10 microns or less (PM10) from the silo vent shall not exceed 1.9 tons per rolling 12-month period. Emissions of fugitive PE/PM10 from conveying and transferring to storage shall not exceed 1.9 tons per rolling 12-month period. (It is assumed that the PE is 100% PM10.) The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(B)(1) are equivalent to the requirements of these rules. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)(1)	Visible PE from the silo vent shall not exceed 20% opacity or greater as a three-minute average.
d.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. totally enclosed belt conveyors;

ii. minimizing drop heights at transfer points; and

iii. moisture content in the slag is 10-20%.

b. The above BACT determination notwithstanding, should any visible emissions from the silo vent be observed in excess of 20% opacity or greater as a three-minute average, the permittee shall implement additional measures as needed to comply with the requirements in this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each transfer point in accordance with the following frequencies:

slag transfer point	minimum transfer point inspection frequency
dewatering silo transfer to conveyor	daily
conveyor transfer to storage pile	daily

(2) Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the transfer points from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in d).

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

(3) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit. The inspections shall be performed during representative, normal operating conditions.

(4) The permittee shall maintain records of the following information:

a. the date and time of each inspection where it was determined by the permittee that it was necessary to implement control measures;

b. the dates the control measures were implemented;

c. a description of the control measure(s) implemented; and

d. on a calendar quarter basis, the total number of days control measures were implemented.

(5) The information required in d)(4) shall be kept separately for (i) the dewatering silo transfer to conveyor and (ii) the transfer conveyor to the slag storage pile and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

The permittee shall perform weekly checks while the equipment is in operation for any visible particulate emissions from the silo vent. The presence or absence of any visible emissions from the silo vent shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

(3) The permittee shall submit on a semi-annual basis a report that (a) identifies all dates during which any visible particulate emissions were observed from the silo vent and (b) describes the corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) Compliance with the emission limitations in b) shall be determined in accordance with the following methods:

a. Emission Limitation:

PE/PM10 emissions from the silo vent shall not exceed 1.9 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with fugitive PE and PM10 emissions limitations shall be determined by using the emission factor 0.02 lb PE/ton slag from Ohio EPA's RACM 'Reasonably Available Control Measures for Fugitive Dust', Table 2.2.2-1. These emission limits were based on a slag generation rate of 42.5 tons per hour and a 50% overall control efficiency for high moisture content assumed equivalent to watering.

b. Emission Limitations:

PE/PM10 emissions from conveying and transferring to storage shall not exceed 1.9 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with fugitive PE and PM10 emissions limitations shall be determined by using the emission factor 0.02 lb PE/ton slag for conveying and 0.02 lb PE/ton slag for transferring to storage from Ohio EPA's RACM 'Reasonably Available Control Measures for Fugitive Dust', Table 2.2.2-1. These emission limits were based on a slag generation rate of 42.5 tons per hour, a 50% overall control efficiency for high moisture content assumed equivalent to watering and 99% control efficiency for the covered conveyor.

c. Emission Limitations:

Visible PE from the silo vent shall not exhibit 20% opacity or greater.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

28. Emissions Unit Group - Sulfur Recovery Units: P011, P012

EU ID	Operations, Property and/or Equipment Description
P011	Sulfur Recovery Process Unit 1.
P012	Sulfur Recovery Process Unit 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-31-10 through 3745-31-20	From the Thermal Oxidizer burner's natural gas combustion: PE/PM10: 0.2 lb per hour (as a 3-hr average) and 0.85 tons per rolling 12-month period. NOx: 1.27 lbs per hour (as a 3-hr average) and 5.55 tons per rolling 12-month period. CO: 2.13 lbs per hour (as a 3-hr average) and 9.32 tons per rolling 12-month period. VOC: 0.2 lbs per hour (as a 3-hr average) and 0.85 tons per rolling 12-month period. SO2: 0.015 lb per hour (as a 3-hr average) and 0.07 tons per rolling 12-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		month period. From the incineration of the Sulfur Pit Sweep Air and the Spent Degassing Air by the TTO: SO2: 25.9 lbs per hr (as a 3-hr average) and 113.45 tons per rolling 12-month period. From the incineration of tailgas during startups and shutdowns: NOx: 1224.0 lbs per hour and 7.35 tons per rolling 12-month period. SO2: 4,867.5 lbs per hour and 29.2 tons per rolling 12-month period. CO: 52.5 lbs per hour and 0.32 tons per rolling 12-month period. Sulfuric acid mist: 2.37 lbs per hour (as a 3-hr average) and 10.4 tons per rolling 12-month period. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules. See b)(2)a. below. See b)(2)b. below.
d.	40 CFR Part 60, Subpart Ja, Section 60.102a(f)(1)(i) - Emission Limitation for Sulfur Recovery Plants	Shall not discharge any gases into the atmosphere in excess of 250 ppmv as SO2 (dry basis) at zero percent excess air, or comply with a flow rate weighted average of 250 ppmv for all release points from the sulfur recovery plant. See b)(2)c.

(2) Additional Terms and Conditions

a. The BACT determination for this emissions unit includes:

i. an acid gas sulfur recovery train, including an in-line Claus Plant, a SCOT Process Tailgas Treatment Unit, and a Tailgas Compression Unit, which during normal operation recycles tailgas to the Acid Gas Removal Unit without exhaust to the atmosphere.

ii. use of a tailgas thermal oxidizer (TTO) operated at 500 degrees F or higher, to control H_2S emissions from the acid gas sulfur recovery train during startups and shutdowns, and continuously from the sulfur pit sweep air and spent degassing air;

iii. use of only natural gas as fuel in the TTO;

iv. equip the TTO with Low NOx burners

v. comply with the listed Subpart Ja sulfur dioxide emission limitation and all other applicable requirements therein.

b. During startups and shutdowns tailgas from the Tailgas Treatment Unit (SCOT Process) shall be vented to the TTO for incineration. During normal operation, tailgas shall be sent to the Tailgas Compression Unit and then recycled to the Acid Gas Removal Unit for sulfur recovery.

c. The permittee shall prepare and submit to the Ohio EPA Northeast District Office a unit-specific monitoring plan for each monitoring system (SO_2 and O_2) at least 45 days before commencing certification testing of the monitoring systems. The plan must address the requirements in 40 CFR Part 60, Subpart Ja.

c) Operational Restrictions

(1) The maximum annual operating hours for this emissions unit shall not exceed 12 hours of startup and shutdown events, based upon a rolling, 12-month summation of the operating hours. (The permittee has applied for 3 startup and shutdown events per rolling 12-month period for this emissions unit, during which tailgas must be incinerated by the TTO). Each startup and shutdown event takes 2 hours, for a total of 12 hours per rolling 12-month period.

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 operating hours levels specified in the following table:

Maximum Allowable

Month(s)	Cumulative Operating Hours
1	4 hours
1-2	4 hours
1-3	4 hours
1-4	4 hours
1-5	8 hours
1-6	8 hours
1-7	8 hours

1-8	8 hours
1-9	12 hours
1-10	12 hours
1-11	12 hours
1-12	12 hours

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours of startup and shutdown events.

d) Monitoring and/or Recordkeeping Requirements

(1) See 40 CFR Part 60, Subpart Ja, Section 60.106.a, monitoring requirements for sulfur recovery plants.

(2) See 40 CFR Part 60, Subpart Ja, Section 60.108.a, record keeping requirements for sulfur recovery plants.

(3) The permittee shall maintain monthly records of the following information:

a. the operating hours of startup and shutdown events 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 operating hours.

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 operating hours for each calendar month.

e) Reporting Requirements

(1) See 40 CFR Part 60, Subpart Ja, Section 60.108.a, reporting requirements for sulfur recovery plants.

(2) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; 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 hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions.

(3) 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:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Northeast District Office of the Ohio EPA
Division of Air Pollution Control
2110 E. Aurora Road
Twinsburg, Ohio 44087.

f) Testing Requirements

(1) See 40 CFR Part 60, Subpart Ja, Section 60.104.a, performance testing requirements for sulfur recovery plants.

(2) Emission Limitations (from the TTO burner's natural gas combustion:):

PE/PM10 emissions: 0.2 lb/hour and 0.85 ton per rolling 12-month period.

Nitrogen oxide emissions: 1.27 lbs/hour and 5.55 tons per rolling 12-month period.

Carbon monoxide emissions: 2.13 lbs/hour and 9.32 tons per rolling 12-month period.

VOC emissions: 0.2 lbs/hour and 0.85 ton per rolling 12-month period.

Sulfur dioxide emissions: 0.015 lb/hour and 0.07 tons pr year.

Applicable Compliance Method:

Compliance with the above emission limits for the products of combustion of natural gas shall be determined by multiplying the TTO's burner heat input rating of 24.0 mmBtu/hr by the emission factors in AP-42 Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and appropriate conversion factors.

Compliance with the annual emission limits shall be assumed if compliance with the hourly emission limits is demonstrated.

(3) Emission Limitations (from the incineration of the Sulfur Pit Sweep Air and the Spent Degassing Air by the TTO):

SO2: 25.9 lbs per hr (as a 3-hr average) and 113.45 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the above emission limits shall be determined in accordance with the testing requirements in f)(6).

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limits is demonstrated.

(4) Emission Limitations (From the incineration of Tailgas during startups and shutdowns):

NOx: 1,224.0 lbs per hour and 7.35 tons per rolling 12-month period.

SO2: 4,867.5 lbs per hour and 29.2 tons per rolling 12-month period.

CO: 52.5 lbs per hour and 0.32 tons per rolling 12-month period.

Sulfuric acid mist: 2.37 lbs per hour (as a 3-hr average) and 10.4 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the above emission limits shall be determined in accordance with the testing requirements in Section f)(6) below.

Compliance with the annual emission limit shall be demonstrated by the emission testing requirements in Section f(6) along with the recordkeeping requirements of Section d)(3).

(5) Emission Limitations

Shall not discharge any gases into the atmosphere in excess of 250 ppmv as SO2 (dry basis) at zero percent excess air, or comply with a flow rate weighted average of 250 ppmv for all release points from the sulfur recovery plant..

Applicable Compliance Method:

Compliance with the above emission limits shall be determined in accordance with the testing requirements in Section f)(6) below.

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

a. The emissions 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 start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for NO_X, SO_2, CO and Sulfuric Acid Mist, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
Sulfuric Acid Mist	Method 8 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

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

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

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 Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

g) Miscellaneous Requirements

(1) None.

29. Emissions Unit Group - Transfer Towers: F004, F005, F006, F007, F008

EU ID	Operations, Property and/or Equipment Description
F004	Coal and Biomass Parallel Conveyors to transfer tower #1.
F005	Coal and Biomass Parallel Conveyors to transfer tower #2.
F006	Coal and Biomass Parallel Conveyors to transfer tower #3.
F007	Coal and Biomass Parallel Conveyors to transfer tower #4.
F008	Coal and Biomass Parallel Conveyors to transfer tower #5.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20	PE/PM10 emissions shall not exceed 0.9 lb per hour and 3.9 tons per rolling 12-month period from the baghouse exhaust stack. (It is assumed that the PE is 100% PM10.) See b)(2)b. below.
b.	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-10 through 3745-31-20.
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. The visible particulate emissions limitations established pursuant to OAC rule 3745-17-07(A) are equivalent to the requirements of these rules.
d.	OAC rule 3745-17-08(B)	See b)(2)b.
e.		

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	40 CFR Part 60, Subpart Y	See b)(2)b.iii. below.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

b. The BACT determination for this emissions unit includes:

i. a totally enclosed coal transfer tower, including all coal transfer points;

ii. equipping the transfer tower with a baghouse dust collector that limits stack outlet PE loading to 0.005 gr/dscf of exhaust gases; and

iii. In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

c) Operational Restrictions

(1) A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound, should emissions above the percent saturation during the calibration testing, be exceeded.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

e) Reporting Requirements

(1) The permittee shall submit on a semi annual basis a report that identifies each event where an audible alarm sounds on the bag leak detector. These reports shall include a summary of the date, time, duration, cause, and the action taken in response to the alarm. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this or a representative emissions unit from the group of emissions units, F004-F008, in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE of 0.9 lb/hour.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for particulates, Method 5 of 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 Northeast District Office.

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 Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the specific emissions unit to be tested and the emissions unit or units that the testing will be representative of, 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 Northeast District Office's refusal to accept the results of the emission test(s).

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

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 Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

(2) Emission Limitations:

Particulate emissions shall not exceed 3.9 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limit shall be assumed if compliance with the hourly emission limit is demonstrated.

(3) Emission Limitations:

Visible PE from the baghouse exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(4) Emission Limitations:

In accordance with Section 60.252(c) of 40 CFR Part 60, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in Section 60.11 of 40 CFR Part 60.

In accordance with Section 60.8, of 40 CFR Part 60, the permittee shall conduct initial performance tests within 60 days of achieving the maximum production rate at which the affected facility will be operated, but no longer than 180 days after initial startup.

The permittee shall comply with the requirements in f)(1)e. through f)(1)g., in regard to testing notice, Ohio EPA witness of testing and submitting written reports on results.

g) Miscellaneous Requirements

(1) None.