OhioEPA
State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: DRAFT PERMIT TO INSTALL MODIFICATION
LUCAS COUNTY
Application No: 04-01360
Fac ID: 0448020084

Y	TOXIC REVIEW
Y	PSD
	SYNTHETIC MINOR
Y	CEMS
L, CCCCC	MACT
Y	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 10/30/2007

FDS Coke Plant, L.L.C.
Francis Lyons
70 Madison Street
Chicago, IL 60602

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **$ 7650** will be due. Please do not submit any payment now.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Permit Issuance and Data Management Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **TDES** **Toledo Metro Area Council of Gov.** **IN** **MI**

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION REVIEW
FOR THE FDS COKE PLANT

Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued, on October 30, 2007, a revised draft action of the existing permit-to-install (PTI) application number 04-01360 to the FDS Coke (FDS) plant located in Oregon, Lucas County, Ohio. A number of changes have been made to the original permit, which was approved in June 2004.

FDS has proposed to reduce the number of coke ovens from 248 ovens configured into four batteries to 168 ovens configured into two batteries. Under this new configuration, the capacity of the plant would remain the same at 1.44 million tons of coke per year because the reconfigured batteries are slight larger than previously proposed.

All of the other changes in the draft permit result in reductions in most air emissions, including particulate matter, nitrogen oxide, carbon monoxide and volatile organic compounds. However, there would be emission increases in sulfur dioxide, lead and hazardous air pollutants due to limited bypassing allowed in the proposed permit. The mercury emission limit is proposed to remain the same.

The existing and the proposed emissions are in tons per year:

Pollutant	Existing Emissions	Proposed Emissions	PSD Significance Level
CO		285	100
NO_x		1032	40
SO_2		1297	40
VOC		90	40
PM*		690	25
PM_{10}*		249	15
Lead*		0.20	0.6

* Includes fugitive and point emissions.

This facility is subject to the applicable attainment provisions of the Ohio EPA PTI requirements (OAC 3745-31).

The proposed project exceeds the prevention of significant deterioration (PSD) significant emission rates for CO, NOx, PM_{10} and SO_2. The project will have an insignificant impact for CO, so a full NAAQS modeling analysis was not required. The remaining pollutants did have impacts above the significant impact levels and were further modeled to determine the impact of the project and other sources on the NAAQS and the PSD increments. The facility was modeled both under normal operating conditions with pollution controls in operation and under planned boiler outages with some coke oven emissions exiting through bypass vents. Under all conditions, the worst case facility impacts were as follows. SO_2 24-hour increments were predicted to consume 54 % of the available PSD increment. The PM_{10} impacts exceeded ½ the PSD increment (71%) over a limited area near the facility. These limited modeled impacts above ½ of the increment are not expected to limit new source growth to facilities other than FDS Coke. The NOx modeled impacts did not exceed one-half the PSD increments even under venting conditions. Based on this analysis the project complies with the increment consumption requirements.

A public hearing and information session on the draft air permit is scheduled for 6:30 p.m., Thursday, December 6, 2007, at Clay High School Cafeteria, 5665 Seaman Road, Oregon, Ohio 43616. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by Ohio EPA/Toledo Division of Environmental Services by December 13, 2007. Comments received after December 13, 2007 may not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to Matt Stanfield, Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio, 43602. Fax number: (419) 936-3959.

Further information concerning this application, which is available for public inspection, may be secured

from Matt Stanfield, Toledo Division of Environmental Services at the above address during normal business hours. Telephone number: (419) 936-3015. A copy of the application and draft permit will be available for review at the Oregon Branch of the Toledo-Lucas County Public Library, 3340 Dustin Road, Oregon. An electronic copy of the permit can be obtained directly by accessing the 2007 issued permits link on the following web page:

http://www.epa.state.oh.us/dapc/pti_issued/pti.html

Permit To Install **Issue Date: To be entered upon final issuance**
Terms and Conditions **Effective Date: To be entered upon final issuance**

DRAFT MODIFICATION OF PERMIT TO INSTALL 04-01360

Application Number: 04-01360
Facility ID: 0448020084
Permit Fee: **To be entered upon final issuance**
Name of Facility: FDS Coke Plant, L.L.C.
Person to Contact: Francis Lyons
Address: 70 Madison Street
Chicago, IL 60602

Location of proposed air contaminant source(s) [emissions unit(s)]:
Millard and Otter Creek Rd
Oregon, **Ohio**

Description of proposed emissions unit(s):
Modification of coke oven battery configuration, storage piles, and material handling.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping 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:

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

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. 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:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and

October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. 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 appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. If this permit is for an emissions unit located at a Title V facility, then 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.

2. 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 appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06**.**

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

3. 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.

4. 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.

5. Severability Clause

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.

6. 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.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. 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.

b. 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:

i. 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.

ii. 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.

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

iv. 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.

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

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

ii. 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.

10. Permit-To-Operate Application

a. If 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).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to “installation” of “any air contaminant source” as defined in OAC rule 3745-31-01, or “modification”, as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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.

2. 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 appropriate Ohio EPA District Office or local air agency.

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

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing 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 modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

5. Construction of New Sources(s)

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.

6. 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.

7. 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).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
PE	690
PM10	249
SO2	1297
NOx	1050
CO	285
Lead	0.2
VOC	90
*HAP	115
Mercury	0.0255

* Total HAPS include 109 tons/year of HCl emissions

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. Emissions unit B901 is subject to 40 CFR Part 63 Subpart L. The following emissions units are subject to 40 CFR Part 63 Subpart CCCCC: B901, P001, and P002. The complete 40 CFR Part 63 (MACT) requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Toledo Division of Environmental Services.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(B901) - (2) Nonrecovery coke oven batteries consisting of 84 ovens with heat recovery steam generators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B901- (2) Nonrecovery Coke Oven Batteries consisting of 84 ovens per battery (Batteries A and B) with heat recovery steam generators	
40 CFR Part 63 Subpart A (40 CFR 63.1-15)	The following citations of the General Provisions of 40 CFR Part 63 apply to operations subject to 40 CFR Part 63 Subpart L: 40 CFR 63.1-6, 63.8, 63.10, and 63.12-15 Table 1 to 40 CFR Part 63 Subpart CCCCC shows which parts of the General Provisions of 40 CFR Part 63 apply to operations subject to 40 CFR Part 63 Subpart CCCCC.
Waste gas from coking process with staged combustion, lime spray dryer, baghouse and activated carbon injection	
OAC rule 3745-31-05(A)(3)	0.04 pound per hour and 0.13 ton per rolling 12-month period lead emissions from the main stack; 0.12 pound per hour and 0.1 ton per rolling 12-month period lead emissions from all heat recovery steam generator (HRSG) bypass vent stacks combined; 1.52 pounds per hour and 4.55 tons per rolling 12-month period total hazardous air pollutant (HAP) emissions from the main stack 24.8 pounds per hour and 109 tons per rolling 12-month period HCl emissions from the main stack. 1.2 pounds per hour and 0.58 ton per rolling 12-month period total hazardous air pollutant (HAP) emissions from all HRSG bypass vent stacks combined. 4.2 pounds per hour and 2.4 tons per rolling 12-month period HCl

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emissions from all HRSG bypass vent stacks combined. 0.006 lb/hr and 36 pounds per rolling 12-month period of mercury emissions from the main stack; 0.081 lb/hr and 15 pounds per rolling 12-month period of mercury emissions from all HRSG bypass vent stacks combined; See sections A.I.2.c., A.I.2.p., A.I.2.q., A.I.2.s. through A.I.2.u. and A.I.2.w.
OAC rules 3745-31-10 through 20	49.6 pounds per hour and 217.2 tons per rolling 12-month period carbon monoxide (CO) emissions from the main stack; 8.3 pounds per hour and 4.8 tons per rolling 12-month period carbon monoxide (CO) emissions from all HRSG bypass vent stacks combined; 246 pounds per hour and 1030 tons per rolling 12-month period nitrogen oxides (NOx) emissions from the main stack; 39.2 pounds per hour and 22.6 tons per rolling 12-month period nitrogen oxides (NOx) emissions from all HRSG bypass vent stacks combined; 39.0 pounds per hour and 171 tons per rolling 12-month period particulate emissions (PE) from the main stack; 24.4 pounds per hour and 14.1 tons per rolling 12-month period particulate emissions (PE) from all HRSG bypass vent stacks combined; 39.0 pounds per hour and 171 tons per rolling 12-month period PM_{10} emissions from the main stack; 24.4 pounds per hour and 14.1 tons per rolling 12-month period PM_{10} emissions from all HRSG bypass vent stacks combined; 243.3 pounds per hour and 1019 tons per rolling 12-month period sulfur dioxide (SO_2) emissions from the main stack; 431 pounds per hour and 248.2 tons per rolling 12-month period sulfur dioxide (SO_2) emissions from all HRSG bypass vent stacks combined; 10.6 pounds per hour and 46.5 tons per rolling 12-month period volatile organic compound (VOC) emissions from the main stack; 1.8 pounds per hour and 1.0 tons per rolling 12-month period volatile organic compound (VOC) emissions from all HRSG bypass vent stacks combined; 0.99 pound SO_2 emissions per ton of wet coal charged from the main stack when the coal charged contains less than 0.9 weight percent sulfur and 1.06 pounds SO_2 per ton of wet coal charged from the main stack when the coal charged contains greater than or equal to 0.9 weight percent sulfur; 1.00 pound of NOx emissions per ton of wet coal charged from the main stack;

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	20 parts per million by volume, dry basis (ppmvd) CO from the main stack; 10 ppmvd VOC from the main stack; See sections A.I.2.b., A.I.2.c., A.I.2.g, A.I.2.h., A.I.2.v, and A.I.2.w.
OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
OAC rule 3745-17-11(B)	See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	See section A.I.2.a.
OAC rule 3745-21-08(B)	See section A.I.2.e.
40 CFR Part 63, Subpart CCCCC	The visible emission limitations specified by 40 CFR 63.7296 are less stringent than the limitation established by OAC rules 3745-31-10 through 20.
Charging operations: (4) stamped coal carriers, (4) moveable hoods and (4) stationary baghouses	
OAC rule 3745-31-05(A)(3)	0.001 pound per hour and 0.001 ton per year lead emissions from each charging baghouse stack; 0.04 pound per hour and 0.11 ton per year HAPs from each charging baghouse stack; See sections A.I.2.i., A.I.2.j., A.I.2.k., A.I.2.o., and A.I.2.p.
OAC rules 3745-31-10 through 20	0.94 pound per hour and 2.88 tons per rolling 12-month period carbon monoxide (CO) emissions from each charging baghouse stack; 0.05 pound per hour and 0.17 ton per rolling 12-month period PE from each charging baghouse stack; 0.91 pound per hour and 2.78 tons per rolling 12-month period fugitive PE from charging operations; 0.05 pound per hour and 0.17 ton per rolling 12-month period PM_{10} emissions from each charging baghouse stack; 0.27 pound per hour and 0.83 ton per rolling 12-month period fugitive PM_{10} emissions from charging operations; 0.10 pound per hour and 0.31 ton per rolling 12-month period SO_2 emissions from each charging baghouse stack; 0.67 pound per hour and 2.06 tons per rolling 12-month period VOC emissions from each charging baghouse stack;

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.l.
OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
OAC rule 3745-17-07(B)(2)(a)	See section A.I.2.d.
OAC rule 3745-17-07(B)(2)(b)	See section A.I.2.d.
OAC rule 3745-17-08(B)	See section A.I.2.a.
OAC rule 3745-17-11(B)	See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	See section A.I.2.a.
OAC rule 3745-21-08(B)	See section A.I.2.a.
40 CFR Part 63, Subpart L	The permittee shall not discharge or cause to be discharged to the atmosphere any PE from a charging emissions control device that exceed 0.0081 pounds per ton (lbs/ton) of dry coal charged, as determined by the procedures in 40 CFR 63.309(k). The owner or operator shall develop and implement written procedures for adjusting the oven uptake damper to maximize oven draft during charging and for monitoring the oven damper setting during each charge to ensure that the damper is fully open. See Section A.I.2.k.
Pushing Operations: (4) pushing machines and (4) fully enclosed flat push hot cars, each equipped with a baghouse to control emissions during travel to the quench tower	
OAC rule 3745-31-05(A)(3)	0.001 lb/hr and 0.001 ton per year lead emissions from each pushing baghouse stack; 0.1 pound per hour and 0.3 ton per year HAPs from each pushing baghouse stack; See sections A.I.2.c, A.I.2.n., through A.I.2.p, and A.I.2.r
OAC rules 3745-31-10 through 20	21.2 pounds per hour and 65 tons per rolling 12-month period carbon monoxide (CO) emissions from each pushing baghouse stack; 6.4 pound per hour and 20 ton per rolling 12-month period NOx emissions from each pushing baghouse stack; 0.5 pound per hour, 0.03 Pound Per Ton of Coke Pushed and 1.7

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	tons per rolling 12-month period PE from each pushing baghouse stack; 4.2 pounds per hour and 13 tons per rolling 12-month period fugitive PE from pushing operations; 0.2 pound per hour and 0.5 ton per rolling 12-month period PM_{10} emissions from each pushing baghouse stack; 1.9 pounds per hour and 5.8 tons per rolling 12-month period fugitive PM_{10} emissions from pushing operations; 16.8 pounds per hour and 51.5 ton per rolling 12-month period SO_2 emissions from each pushing baghouse stack; 13.5 pounds per hour and 41 tons per rolling 12-month period VOC emissions from each pushing baghouse stack; See section A.I.2.m.
OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
OAC rule 3745-17-07(B)(2)(e)	See section A.I.2.a.
OAC rule 3745-17-08(B)	See section A.I.2.a.
OAC rule 3745-17-11(B)	See section A.I.2.a.
40 CFR Part 63, Subpart CCCCC	The emission limitation for pushing emissions under 40 CFR 63.7290(a)(4) is less stringent than the emission limitation established under OAC rules 3745-31-10 through 20.
Leaks from coke oven doors	
OAC rule 3745-31-05(A)(3)	See section A.I.2.j
OAC rule 3745-17-07(B)(2)(b)-(d)	See section A.I.2.a.
OAC rule 3745-17-08(B)	See section A.I.2.a.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
40 CFR Part 63, Subpart L	0.0 percent leaking coke oven doors, as determined by the procedures in 40 CFR 63.309(d)(1); or the owner or operator shall monitor and record, once per day for each day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under negative pressure. [40 CFR 63.303(b)(1)]

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b Visible particulate emissions shall not exceed 10% opacity as a 6-minute average from the main stack.

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCCCC.

2.d The emission limitations established by this rule are not applicable to this emissions unit, since the rule is based on topside charging [see compliance method under OAC rule 3745-17-03(B)(2)(a)]. This emissions unit will utilize stamped coal charging through the oven door.

2.e The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.f 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to emissions units affected by 40 CFR Part 63.

2.g PE and PM_{10} emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 grain per dry standard cubic foot of exhaust gases.

2.h No visible emissions shall be permitted from the common battery tunnel or its associated piping.

2.i Visible particulate emissions from the charging baghouse stacks shall not exceed 10% opacity as a 6-minute average.

2.j The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart L.

2.k Visible particulate emissions of fugitive dust from charging operations shall not exceed 20% opacity.

2.l PM and PM_{10} emissions from the charging dust collector exhaust stacks shall not exceed 0.008 grain per dry standard cubic foot of exhaust gases.

2.m The permittee shall not discharge to the atmosphere particulate emissions from the dust collectors controlling pushing emissions that exceed 0.03 lb/ton of coke pushed.

2.n Visible particulate emissions of fugitive dust during any pushing operations shall not exceed an average of 20% opacity . For purposes of this paragraph, the duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven, and shall conclude when the quench car enters the quench tower or when visible emission readings can no longer be made, whichever comes first.

2.o i. The permittee shall employ best available control measures for all charging and pushing operations for the purpose of ensuring compliance with the emission limitations above. These control measures shall include, but not be limited to, the enclosure of the emissions sources and the addition of dust control systems to maintain compliance with the visible emission limitations for fugitive dust emissions.

ii. For each charging and pushing operations that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.p The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20.

2.q The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system installed on the main stack and complete corrective actions in a timely manner. Example corrective actions that may be included in the plan include:

i. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in emission,

ii. sealing off defective bags or filter media.,

iii. replacing defective bags or filter media, or otherwise repairing the control device,

iv. sealing off a defective baghouse compartment,

v. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system, and

vi. shutting down the process producing the particulate emissions.

2.r Visible emissions from the pushing baghouse stacks shall not exceed 10% opacity.

2.s The permittee shall install, operate, and maintain an activated carbon injection system for the control of mercury emissions. The activated carbon injection system shall be designed for a maximum activated carbon injection rate of 10 pounds of activated carbon per million actual cubic feet of exhaust gases at the point of injection. The activated carbon shall consist of readily available untreated commercial products that originate from bituminous or lignite coal. The untreated activated carbon shall meet a minimum iodine content of 500 mg/g and a physical specification of at least 90% by weight passing through a 325 mesh U.S. Sieve Size.

The permittee may elect to operate the activated carbon injection system at a lower rate if it has been determined that the lower rate will achieve 90% overall control. As part of the optimization study, the permittee may evaluate carbon injection rates that are less than 10 lbs of activated carbon per million actual cubic feet of exhaust gases to determine what rates achieve 90% overall control of mercury (i.e., taken into account control by the carbon injection system and control by other control devices).

Further, the permittee shall evaluate the use of chemically treated powdered activated carbon injection in their optimization study to determine if 90% control efficiency could be achieved.

The permittee may petition to the Director to increase the allowable mercury emission limitation. The Director may increase the allowable mercury emission limitation, if the permittee demonstrates to the satisfaction of the Director that the activated carbon injection control system has been optimized within the limits of this paragraph.

2.t Since there is not much information available on lead and mercury emissions from non-recovery coke ovens, Ohio EPA may increase the lead and/or mercury

emission limitations for main stack and bypass vent stack on the results of the lead and mercury emission testing required to be conducted under Section A.V.

2.u This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with BAT, the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.v When charging coal with a sulfur content greater than or equal to 0.9 weight percent sulfur, the permittee shall either:

i. adjust operating parameters of the lime spray dryer as needed to increase the control efficiency for SO_2 emissions to comply with the pound per hour and rolling 12-month SO_2 emission limitations; or

ii. reduce production as needed to comply with the pound per hour and rolling 12-month SO_2 emission limitations.

2.w All pound per hour emission limitations for the main stack and heat recovery steam generator bypass vent stacks are based on a 3-hr average.

2.x Design considerations in the event of excess bypassing:

The director reserves the right to require the installation of backup HRSGs if, in his/her judgement, chronic excess bypassing has occurred and is likely to continue. FDS shall design their facility to minimize the costs associated with a later requirement to install bypass HRSGs. These design considerations shall include, but not be limited to, making sure there is room for the installation of backup HRSGs without relocating major parts of the plant.

II. Operational Restrictions

1. The maximum annual wet coal charge rate for this emissions unit shall not exceed 2,058,600 tons per year, based upon a rolling, 12-month summation of the wet coal charge rates.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the wet coal charge levels specified in the following table:

Month	Maximum Allowable Cumulative Wet Coal Charge Rate, tons
1	182,807
1-2	365,614
1-3	542,524
1-4	725,331
1-5	902,241

1-6	1,085,048
1-7	1,267,855
1-8	1,432,971
1-9	1,615,778
1-10	1,792,688
1-11	1,975,526
1-12	2,058,600

After the first 12 calendar months of operation, compliance with the annual wet coal charge rate limitation shall be based upon a rolling, 12-month summation of the wet coal charge rates.

2. The wet coal charge rate shall not exceed 5897 tons per day.

3. The coke push rate shall be limited to 1,440,000 tons per year, based upon a rolling, 12-month summation of the coke push rates.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the coal charge levels specified in the following table:

Month	Maximum Allowable Cumulative Coke Push Rate, tons
1	174,654
1-2	349,308
1-3	523,962
1-4	698,616
1-5	873,270
1-6	1,047,924
1-7	1,222,578
1-8	1,397,232
1-9	1,440,000
1-10	1,440,000
1-11	1,440,000
1-12	1,440,000

   After the first 12 calendar months of operation, compliance with the annual coke push rate limitation shall be based upon a rolling, 12-month summation of the coke push rates.

4. The pressure drop across each charging baghouse and pushing baghouse shall be maintained within the range of 3-12 inches of water and 5-6 inches of water respectively while the emissions unit is in operation. The minimum pressure drop for these units may be adjusted by Ohio EPA based on the values recorded during PE and PM_{10} stack testing.

5. The permittee shall not exceed 88 charges/pushes per day.

6. The permittee shall not operate more than one pushing and charging machine (PCM) or one flat push hot car (FPHC) at any one time while at an open oven door.

7. Each common battery tunnel shall be maintained at a negative pressure.

8. The permittee shall ensure that the common battery tunnel(s), oven exhaust ductwork, waste heat ductwork, heat recovery steam generators, ductwork from the heat recovery steam generators to the lime spray dryer, lime spray dryer, baghouse and fan capacity are designed and installed to handle peak gassing periods.

9. It is recognized that soot formation can occur on the heat transfer surfaces of the heat recovery steam generators and reduce the heat transfer efficiency. The permittee shall implement maintenance procedures that allow for removal of soot from the heat transfer surfaces of the heat recovery steam generators without shutdown of the heat recovery steam generator(s). These maintenance procedures can include, but are not limited to, installation of sootblowers on the heat recovery steam generators to allow for periodic cleaning of the heat transfer surfaces .

10. Waste gas emissions shall not be vented to the HRSG bypass vent stacks for more than 192 hours per rolling 12-month period per vent stack. There shall be no more than one HRSG bypass vent stack in use at any time.

    To ensure enforceability during the first 12-calendar months of operation, the permittee shall not exceed the by-pass levels specified in the following table:

Month	Maximum cumulative hours of operation of each HRSG bypass vent stack
1	192
1-2	192
1-3	192
1-4	192
1-5	192
1-6	192
1-7	192
1-8	192
1-9	192
1-10	192
1-11	192
1-12	192

    After the first 12 calendar months of operation, compliance with the annual HRSG bypass vent stack usage limitation shall be based upon a rolling, 12-month summation of the HRSG bypass vent stack usage rates.

11. The permittee shall maintain an activated carbon injection rate of 2 lbs/mmacf. A reduced activated carbon injection rate operational restriction may later be established by Ohio

EPA, if the permittee demonstrates to the Director's satisfaction that a lower activated carbon injection rate can achieve the mercury emission limitation.

12. The permittee shall operate and maintain common duct temperatures at a minimum of 1400 degrees Fahrenheit to ensure emission limits for the waste gas exhausts are not exceeded.

13. See 40 CFR Part 63, Subpart L (40 CFR 63.310)

14. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7290, 63.7293, 63.7300, 63.7310, and 63.7293)

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall install, operate, and maintain equipment to monitor the pressure drop across each charging dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each charging dust collector on a once per shift basis.

2. The permittee shall install, operate, and maintain equipment to monitor the pressure drop across each pushing dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each pushing dust collector on a once per shift basis.

   The permittee shall also comply with the pushing dust collector monitoring requirements under 40 CFR 63.7330 through 63.7332.

   The enclosed mobile flat push hot car enclosure shall be visually examined weekly for areas potentially needing repair to minimize visible emissions of fugitive dust. When an inspection identifies an area needing repair, the permittee shall document and maintain records of the repair methods of each attempt to repair, and the date of successful repair.

3. The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from the main stack in units of pounds of SO_2 per hour and tons of SO_2 per rolling 12-month period. This continuous SO_2 monitoring system shall include a continuous flow rate monitoring system for monitoring the main stack flow rate. The permittee shall calculate the pounds of SO_2 per ton of wet coal charged based on the daily charge rate and SO_2 CEM data. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

   a. emissions of SO2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO2 in pounds per hour, pounds per hour as a rolling 3-hr average and tons per rolling 12-month 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 SO2 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 SO2 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 SO2 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).

4. Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site(s) in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 for approval by the Ohio EPA, Central Office.

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.

Within 90 days of initial startup, the permittee shall conduct certification tests of the continuous SO2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 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 SO_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 Specifications 2 and 6; and ORC section 3704.03(I). The letter/document of certification of the continuous SO_2 monitoring system, issued by the Ohio EPA, shall be maintained on file upon receipt and made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Ongoing compliance with the SO_2 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.

5. Within 90 days of startup, the permittee shall develop a written quality assurance/quality control plan for the continuous SO_2 monitoring system designed to ensure continuous valid and representative readings of SO_2. 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 SO_2 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 pursuant to 40 CFR Part 60; and conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the permittee shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

6. The permittee shall maintain monthly records of the following information:

   a. The wet coal charge rate for each day, in tons, and for each month, in tons;

   b. The coke push rate for each day, in tons, and for each month, in tons;

   c. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal charge rates, in tons; and,

   d. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the coke push rates, in tons.

   Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal charge rate, in tons for each calendar month, and the cumulative coke push rate, in tons for each calendar month.

7. Ohio EPA reserves the right to require the permittee to install a continuous opacity monitoring system on the main stack if, in the Director's judgment, there is significant ongoing opacity at a level near the allowable visible emission limitation. If the Director determines that a continuous opacity monitoring system is needed to assure compliance with the visible emission limitation, the permittee shall install an opacity monitoring system on the main stack within 180 days of notification by the Director that an opacity monitoring system is required to be installed. Prior to installation of an opacity 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 1 for approval by the Ohio EPA, Central Office.

8. The permittee shall monitor and record the temperature of each common battery tunnel on a once per day basis.

9. The permittee shall maintain monthly records of all the following information for all periods when battery waste gas emissions are vented to by-pass vent stacks (by-passing the lime spray dryer and baghouse):

   a. the date and time each by-pass event occurred;

   b. identification of each by-pass vent stack in use;

   c. the duration of each by-pass event in hours; and,

   d. the reason for the by-pass event.

   e. 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 HRSG bypass vent stack usage rates per stack.

      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 HRSG bypass vent stack usage rates per stack for each calendar month.

10. The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system on the main stack.

    i. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed, operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

    ii. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

    iii. The bag leak detection system sensor shall produce an output of relative particulate emissions.

    iv. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.

v. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

vi. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

vii. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

11. The permittee shall keep a record of number of charges and pushes per day.

12. The permittee shall collect monthly composite samples of the coal charged in this emissions unit. The permittee shall also collect a composite sample of the coal charged in this emissions unit each time the coal blend is changed. The individual samples for each composite sample shall be collected at the coal bin feeding the coal stamping machine or from other locations mutually agreeable by the permittee and Ohio EPA. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal charged in this emissions unit during each calendar month. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each composite sample of coal shall be analyzed for sulfur content (percent), mercury content (percent), and chlorine content (percent). The analytical methods for sulfur content, mercury content and chlorine content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; D3684-01 Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method; and, D2361-95(2001) Standard Test Method for Chlorine in Coal. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

13. The permittee shall maintain monthly records of the results of the analyses for sulfur content, mercury content and chlorine content of the coal charged.

14. All bypass vent stacks shall be equipped with sensors that detect when the bypass stacks are open, or partially opened, either due to relieving system pressure or manual opening of the bypass vent stacks by the operator. These sensors shall be instrumented to the

operator and an alarm sounded when there is stack gas flow to any of the by-pass vent stacks. The permittee shall record and maintain daily records for each bypass vent stack the time periods that there was flow through the bypass vent stack(s).

15. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 that are determined by the Director to be applicable to the permittee, and the following requirements.

    a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for the mercury loading range as specified in Table 324-1 of Method 324. The permittee shall replace the sorbent traps in the sorbent trap sampling system as specified in Table 324-1 of Method 324.

    b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

    (Equation 1) $$E_h = K C_h Q_h t_h (1-B_{ws})$$

    Where:

    E_h = Hg mass emissions for the hour, (lb)
    K = Units conversion constant, 6.24 x 10^{-11} lb-scm/µg-scf
    C_h = Hourly mercury concentration, dry basis, µg/dscm
    Q_h = Hourly stack gas volumetric flow rate, (scfh)
    t_h = Unit operating time, i.e., the fraction of the hour for which the unit operated
    B_{ws} = Stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08)

    (Equation 2) $$M = \sum_{h=1}^{n} E_h$$

    Where:

    M = total Hg mass emissions for the month
    E_h = Hg mass emissions for hour "h", from Equation 1, lb
    n = The number of unit operating hours in the month with valid sorbent trap monitoring system data

    c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75 that are determined by the Director to be applicable to the permittee, and all other quality assurance requirements specified in appendix K to 40CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack(or collect data at all required intervals) at all times that the emissions unit is operating.

f. The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

g. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

16. Prior to startup, the permittee shall prepare and submit to the Toledo Division of Environmental Services and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below.

a. Installation of the sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., at or downstream of the last control device);

b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. Performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. Ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75 that are determined by the Director to be applicable to the permittee;

e. Ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75 hat are determined by the Director to be applicable to the permittee; and

f. Ongoing recordkeeping and reporting procedures in accordance with 40 CFR Part

60, Subpart Da that are determined by the Director to be applicable to the permittee.

17. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack(or collect data at all required intervals) at all times that the emissions unit is operating.

18. The permittee may not use mercury sorbent trap monitoring system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

19. A mercury monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

20. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from non-recovery coke ovens in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

21. The permittee shall install equipment to continuously monitor and record the activated carbon injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

22. The permittee shall observe each coke oven door after charging and record the oven number of any door from which visible emissions occur. Emissions from coal spilled during charging or from material trapped within the seal area of the door are not considered to be a door leak if the permittee demonstrates that the oven is under negative pressure, and that no emissions are visible from the top of the door or from the dampers on the door.

23. The permittee shall monitor and record the temperature of the common battery tunnel on a once per shift basis.

24. See 40 CFR Part 63, Subpart L (40 CFR 63.303, 63.306, and 63.311)

25. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7330, 63.7331, 63.7332, 63.7342, and 63.7343)

IV. Reporting Requirements

1. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the rolling, monthly wet coal charge rate limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative wet coal charge levels. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. Reporting Requirements for SO_2 Continuous Emissions Monitoring System

   The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_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 appropriate Ohio EPA District Office or local air agency, documenting all instances of SO2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, 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:

      (1) the facility name and address;
      (2) the manufacturer and model number of the continuous SO2 and other associated monitors;
      (3) the location of the continuous SO2 monitor;
      (4) the exceedance report as detailed in (a) above;
      (5) the total SO2 emissions for the calendar quarter (tons);
      (6) the total operating time (hours) of the emissions unit;
      (7) the total operating time of the continuous SO2 monitoring system while the emissions unit was in operation;
      (8) results and date of quarterly cylinder gas audits;
      (9) results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
      (10) the results of any relative accuracy test audit showing the continuous SO2 monitor out-of-control and the compliant results following any corrective actions;
      (11) the date, time, and duration of any/each malfunction* of the continuous SO2 monitoring system, emissions unit, and/or control equipment;

(12) the date, time, and duration of any downtime* of the continuous SO2 monitoring system and/or control equipment while the emissions unit was in operation; and
(13) the reason (if known) and the corrective actions taken (if any) for each event in (b)(11) and (12).

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

3. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the daily wet coal charge rate limitation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall submit to the Toledo Division of Environmental Services quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each charging dust collector and each pushing dust collector did not comply with the allowable ranges specified above. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

5. The permittee shall submit semi-annual deviation (excursion) reports that identify all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

6. The permittee shall submit to the Toledo Division of Environmental Services quarterly common battery tunnel pressure deviation (excursion) reports that identify all periods of time during which each common battery tunnel was not maintained at a negative pressure. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

7. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all periods during which visual inspections of the enclosed flat push hot car identified areas potentially needing repair to minimize visible emissions of fugitive dust. The report shall include the repair methods of each attempt to repair, and the date of successful repair. If no deviations occurred during a calendar

quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

8. The permittee shall submit to the Toledo Division of Environmental Services quarterly reports concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each day during the calendar quarter:

   a. the total quantity of wet coal charged (tons);

   b. the average mercury content (weight percent) of the coal charged;

   c. the average chlorine content (weight percent) of the coal charged; and

   d. the average sulfur content (weight percent) of the coal charged.

   These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

9. Reporting Requirements for Hg Sorbent Trap Monitoring System

   The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

   The permittee shall submit reports to the Toledo Division of Environmental Services documenting any Hg sorbent trap monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

10. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the HRSG bypass vent stack usage limitations. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

11. The permittee shall submit to the Toledo Division of Environmental Services quarterly common battery tunnel temperature deviation (excursion) reports that identify all periods of time during which the temperature in the common battery tunnel did not comply with the allowable ranges specified above. These reports shall include the date, time, and duration of the deviation, and corrective action taken. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

12. See 40 CFR Part 63, Subpart L (40 CFR 63.311)

13. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7336, 63.7340, and 63.7341)

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:
   10% opacity as a 6-minute average from the main stack

   Applicable Compliance Method:
   If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:
   39.0 pounds per hour PE from the main stack

   Applicable Compliance Method
   If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

   c. Emission Limitation:
   39.0 pounds per hour PM_{10} from the main stack

   Applicable Compliance Method:
   If required, the permittee shall demonstrate compliance through the emissions

testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:
PE from the lime spray dryer baghouse exhaust shall not exceed 0.008 grains per dry standard cubic foot of exhaust gases

Applicable Compliance Method
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:
PM_{10} emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 grains per dry standard cubic foot of exhaust gases

Applicable Compliance Method
If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:
171 tons PE per rolling 12-month period and 178 tons PM_{10} per rolling 12-month period from the main stack

Applicable Compliance Method:
These emission limitations were developed by multiplying the hourly allowable emission limitations for PM and PM10 (39.0 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton . Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:
49.6 pounds per hour CO from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

h. Emission Limitation:
217.2 tons CO per rolling 12-month period from the main stack

Applicable Compliance Method:
This emission limitation was developed by multiplying the hourly allowable emission limitation for CO (49.6 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton . Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:
246 pounds per hour NOx from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

j. Emission Limitation:
1030 tons per rolling 12-month period NOx from the main stack

Applicable Compliance Method:
This emission limitation was developed by multiplying the annual coal charge rate of 2,058,600 tons/yr by allowable NOx emission rate of 1 pound NOx per ton of coal charged and divided by 2000 lbs/ton. Therefore, compliance with the annual coal charge rate restriction and the 1 pound per ton NOx emission rate demonstrates compliance with the annual NOx emission limitation.

k. Emission Limitation:
243.3 pounds per hour SO_2 from the main stack

Applicable Compliance Method:
The continuous emissions monitoring system records required by this permit shall serve as demonstration of compliance with this emission limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

l. Emission Limitation:
1019 tons SO_2 per rolling 12-month period from the main stack

Applicable Compliance Method:
Data from the continuous SO_2 emissions monitoring system shall serve as demonstration of compliance with the annual emission limitation.

m. Emission Limitation:
10.6 pounds per hour VOC from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

n. Emission Limitation:
46.5 tons VOC per rolling 12-month period from the main stack

Applicable Compliance Method:
This emission limitation was developed by multiplying the hourly allowable emission limitation for VOC (10.6 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton . Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

o. Emission Limitation:
0.99 pound SO_2 per ton of wet coal charged from the main stack when charging coal containing less than 0.9% sulfur; 1.06 lb/ton when charging coal containing greater than or equal to 0.9% sulfur

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

p. Emission Limitation:
1.00 pound NOx per ton of wet coal charged from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

q. Emission Limitation:
20 ppmvd CO from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

r. Emission Limitation:
10 ppmvd VOC from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

s. Emission Limitation:
0.04 pound per hour lead from the main stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

t. Emission Limitation:
0.13 ton lead per rolling 12-month period from the main stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

u. Emission Limitation:
1.52 pounds per hour total HAP emissions from the main stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20* of Draft AP-42 Section 12.2 dated 07/2007] by the maximum hourly coal charge rate (336.4 tons/hr). *In lieu of the mercury emission factor from AP-42, the allowable mercury emission limitation shall be used in the calculation of total HAP emissions.

v. Emission Limitation:
4.55 tons total HAP emissions per rolling 12-month period from the main stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20* of Draft AP-42 Section 12.2 dated 07/2007] by the maximum annual coal charge rate (2,058,600 tons/yr). *In lieu of the mercury emission factor from AP-42, the allowable mercury emission limitation shall be used in the calculation of total HAP emissions

w. Emission Limitation:
No visible emissions from the common battery tunnel or its associated piping

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 22 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

x. Emission Limitation:
0.001 pound per hour lead from the charging dust collector

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

y. Emission Limitation:
0.001 ton lead per rolling 12-month period from the charging dust collector

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

z. Emission Limitation:
0.04 pound per hour total HAP emissions from the charging dust collector

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-21 of Draft AP-42 Section 12.2 dated 07/2007] by the maximum hourly coal charge rate (336.4 tons/hr).

aa. Emission Limitation:
0.11 tons total HAP emissions per rolling 12-month period from the charging dust collector

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-21 of Draft AP-42 Section 12.2 dated 07/2007] by the maximum annual coal charge rate (2,058,600 tons/yr).

bb. Emission Limitation:
Visible particulate emissions from the charging dust collector stack shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations

performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

cc. Emission Limitation:
Visible particulate emissions of fugitive dust from charging operations shall not exceed 20% opacity .

Applicable Compliance Method:
The permittee shall conduct a performance test each week to demonstrate compliance this opacity limit. The permittee shall conduct each performance test according to the procedures and requirements in paragraphs (i)(a) through (iii) of this section.

(i) Using a certified observer, determine the average opacity of five consecutive charges per week for each charging emissions capture system if charges can be observed according to Method 9 (40 CFR Part 60, Appendix A), except as specified in paragraphs (a) and (b) of this section.

(a) Instead of the procedures in section 2.4 of Method 9 (40 CFR Part 60, Appendix A), record observations to the nearest 5 percent at 15-second intervals for at least five consecutive charges.

(b) Instead of the procedures in section 2.5 of Method 9 (40 CFR Part 60, Appendix A), determine and record the highest 3-minute block average opacity for each charge from the consecutive observations recorded at 15-second intervals.

(ii) Opacity observations are to start when the door is removed for charging and end when the door is replaced.

(iii) Using the observations recorded from each performance test, the certified observer shall compute and record the average of the five 3-minute block averages.

dd. Emission Limitation:
0.05 pound per hour PE from each charging stack

Applicable Compliance Method
Multiply the permittee-supplied emission factor (0.008 grain PE/dscf) by the maximum stack flow rate (3,000 dscfm) multiplied by the time per charge (3 minutes/charge) multiplied by the number of charges per hour (5 charges/hr) divided by the number of grains per pound (1 lb/7000 gr). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). During each test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet during each test run. Three valid test runs are needed to comprise a

performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ee. Emission Limitation:
0.05 pound per hour PM_{10} from each charging baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. During each test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ff. Emission Limitation:
0.17 ton PE per rolling 12-month period and 0.17 ton PM_{10} per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee-supplied emission factor (0.008 grain PE/dscf) by the maximum stack flow rate (3,000 dscfm) multiplied by the time per charge (3 minutes/charge) multiplied by the number of charges per day (88 charges/day) divided by the number of grains per pound (1 lb/7000 gr) multiplied by 365 days/yr divided by 2,000 lbs/ton.

gg. Emission Limitation:
2.78 tons per rolling 12-month period fugitive PE from charging operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the wet coal charge rate in tons per rolling 12-month period by the AP-42 PE emission factor of 0.027 lb/ton of coal charged [Table 12.2-21 of draft Section 12 dated 07/2007] multiplied by (1 - the estimated capture efficiency of 90%) and dividing by 2,000 pounds per ton.

hh. Emission Limitation:
0.91 pound per hour fugitive PE emissions from charging operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum wet coal charge rate of 336.4 lbs/hr by the AP-42 PE emission factor of 0.027 lb/ton of coal charged [Table 12.2-21 of draft Section 12 dated 07/2007] multiplied by (1 - the estimated capture efficiency of 90%).

ii. Emission Limitation:

0.27 pound per hour fugitive PM_{10} emissions from charging operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the fugitive PM per hour (0.91 lb/hr) multiplied by a factor of 0.3 because fugitive PM_{10} = 30 % of fugitive PM as stated in the permit application).

jj. Emission Limitation:
0.83 tons per rolling 12-month period fugitive PM_{10} emissions from charging operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the fugitive PE in tons per year (2.78 tons/yr) multiplied by a factor of 0.3 because fugitive PM_{10} = 30 % of fugitive PM as stated in the permit application).

kk. Emission Limitation:
0.94 pound per hour CO from each charging baghouse stack

Applicable Compliance Method:
Multiply the permittee-supplied emission factor (0.0028 lb CO/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ll. Emission Limitation:
2.88 tons CO per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds CO per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for CO, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

mm. Emission Limitation:
0.10 pound per hour SO_2 from each charging baghouse stack

Applicable Compliance Method:
Multiply the permittee-supplied emission factor (0.0003 lb SO_2/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing

performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

nn. Emission Limitation:
0.31 ton SO_2 per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds SO2 per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for SO2, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

oo. Emission Limitation:
0.67 pound per hour VOC from each charging baghouse stack

Applicable Compliance Method:
Multiply the permittee-supplied emission factor (0.002 lb VOC/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as
appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

pp. Emission Limitation:
2.06 tons VOC per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds VOC per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for VOC, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

qq. Emission Limitation:
0.001 pound per hour lead from each pushing baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

rr. Emission Limitation:
0.001 ton lead per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

ss. Emission Limitation:
0.1 pound per hour total HAP emissions from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Tables 12.2-9 and 12.2-10 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum hourly coal charge rate (336.4 tons/hr).

tt. Emission Limitation:
0.3 ton total HAP emissions per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Tables 12.2-9 and 12.2-10 of Draft AP-42 Section 12.2 dated 07/2007] by the maximum annual coal charge rate (2,058,600 tons/yr).

uu. Emission Limitation:
0.5 pound per hour PE from each pushing baghouse stack

Applicable Compliance Method
Multiply the permittee-supplied controlled emission factor (0.008 grain PE/dscf) by the maximum flow rate (9,500 dscfm) multiplied by the number of minutes per push (10 minutes) multiplied by the maximum number of pushes per hour (5 pushes/hr) divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$E_p = (C \times Q \times T) / (K)$

Where:
E_p = Process weighted mass emissions of PE , lb/hr;
C = Concentration of particulate matter of PE, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
K = Conversion factor, 7,000 gr/lb.

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

vv. Emission Limitation:
0.2 pound per hour PM_{10} from each pushing baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$E_p = (C \times Q \times T) / (K)$

Where:
E_p = Process weighted mass emissions of PM_{10} , lb/hr;
C = Concentration of particulate matter of PM_{10}, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
K = Conversion factor, 7,000 gr/lb.

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

ww. Emission Limitation:
13 tons PE per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds PE per ton of coal processed, established during the most recent emissions test which

demonstrated compliance with the emissions limitation for PE, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

xx. Emission Limitation:
0.5 ton PM_{10} per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pound PE per ton of coke pushed) by the maximum rolling, 12-month summation of coke pushed (1,440,000 tons) and dividing by 2,000 pounds per ton.

yy. Emission Limitation:
4.2 pounds per hour fugitive PE from pushing operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pounds PE per ton of coke pushed) by the maximum hourly push rate (231.15 tons) multiplied by the percentage of emissions not captured by the control device (0.1).

zz. Emission Limitation:
13 tons per rolling 12-month period fugitive PE from pushing operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pounds PE per ton of coke pushed) by the maximum annual push rate (1,440,000 tons of coke pushed per rolling 12-month period) multiplied by the percentage of emissions not captured by the control device (0.1) and divided by 2,000 pounds per ton.

aaa. Emission Limitation:
1.9 pounds per hour fugitive PM_{10} from pushing operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.08 pounds PM_{10} per ton of coke pushed) by the maximum hourly push rate (231.15 tons) multiplied by the percentage of emissions not captured by the control device (0.1).

bbb. Emission Limitation:
5.8 tons per rolling 12-month period fugitive PM_{10} from pushing operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.1. pounds PM_{10} per ton of coke pushed) by the maximum annual push rate (1,440,000 tons of coke pushed per rolling 12-month period) multiplied by the percentage of emissions not captured by the control device (0.1).

ccc. Emission Limitation:
21.2 pounds per hour CO from each pushing baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ddd. Emission Limitation:
65 tons CO per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds CO per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for CO, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

eee. Emission Limitation:
6.4 pounds per hour NOx from each pushing baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

fff. Emission Limitation:
20 tons per rolling 12-month period NOx from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds NOx per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for NOx, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

ggg. Emission Limitation:
16.8 pound per hour SO_2 from each pushing baghouse stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

hhh. Emission Limitation:
51.5 ton SO_2 per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds SO_2 per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for SO_2, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

iii. Emission Limitation:
13.5 pounds per hour VOC from each pushing stack

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

jjj. Emission Limitation:
41 tons VOC per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds VOC per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for VOC, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

kkk. Emission Limitation:
Visible particulate emissions of fugitive dust during any pushing operations shall not exceed an average of 20% opacity .

Applicable Compliance Method:
If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the applicable modifications listed in paragraph (B)(2)(d) of OAC rule 3745-17-03.

lll. Emission Limitation:
Visible emissions from the pushing baghouse stacks shall not exceed 10% opacity

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).

mmm. Emission Limitation:
0.006 lb/hr mercury emissions from the main stack

Applicable Compliance Method:
If required, ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method), shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

Data obtained from the initial stack test shall be used to demonstrate compliance with this emission limitation.

nnn. Emission Limitation:
36 pounds per rolling 12-month period mercury emissions from the main stack

Applicable Compliance Method:
Data obtained from the mercury sorbent trap monitoring system , shall be used to demonstrate compliance with this emission limitation.

ooo. Emission Limitation:
Particulate emissions from the baghouses controlling pushing emissions shall not exceed 0.03 lb/ton coke pushed.

Applicable Compliance Method:
If required, compliance shall be demonstrated using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

ppp. Emission Limitation:
0.12 pound per hour lead emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled lead emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

qqq. Emission Limitation:
0.1 ton lead per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour lead emission rate established during the most recent lead emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the lead emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total lead emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total lead emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

rrr. Emission Limitation:
1.2 pounds per hour total HAP emissions from all bypass vent stacks combined

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20* of Draft AP-42 Section 12.2 dated 07/2007] by the maximum daily average hourly coal charge rate (336.4 tons/hr) multiplied by the total number of HRSG bypass vent stacks in use (as recorded in Section A.III.) divided by the total number of HRSG vent stacks (12). Sum the total HAP emissions emitted from each HRSG bypass vent stack to obtain the total HAP emissions from all HRSG bypass vent stacks combined. *In lieu of the mercury emission factor from AP-42, the allowable mercury emission limitation shall be used in the calculation of total HAP emissions

sss. Emission Limitation:
0.58 ton total HAP emissions per rolling 12-month period from all bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20* of Draft AP-42 Section 12.2 dated 07/2007] by the maximum hourly charge rate (336.4 tons) divided by the total number of HRSG bypass vent stacks (12) and multiply by the total number of hours per rolling 12-month period that emissions were vented to each HRSG bypass vent stack as recorded under Section A.III. Sum the total HAP emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total HAP emissions from all HRSG bypass vent stacks per rolling 12-month period combined. *In lieu of the mercury emission factor from AP-42, the allowable mercury emission limitation shall be used in the calculation of total HAP emissions

ttt. Emission Limitation:
8.3 pounds per hour CO emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be

determined using the maximum vent stack flow rate and the CO emission concentration as measured at the inlet of the lime spray dryer absorber Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

uuu. Emission Limitation:
4.8 tons CO per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour CO emission rate established during the most recent CO emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the CO emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total CO emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total CO emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

vvv. Emission Limitation:
39.2 pounds per hour NOx emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the NOx emission concentration as measured at the inlet of the lime spray dryer absorber. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

www. Emission Limitation:
22.6 ton NOx per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour NOx emission rate established during the most recent NOx emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the NOx emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total NOx emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total NOx emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

xxx. Emission Limitation:
24.4 pounds per hour PE emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled PE emission concentration as measured at the inlet of the lime spray dryer absorber . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

yyy. Emission Limitation:
14.1 ton PE per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour PE emission rate established during the most recent PE emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the PE emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total PE emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total PE emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

zzz. Emission Limitation:
24.4 pounds per hour PM_{10} emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled PM_{10} emission concentration as measured at the inlet of the lime spray dryer absorber . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

aaaa. Emission Limitation:
14.1 ton PM_{10} per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour PM_{10} emission rate established during the most recent PM_{10} emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG

bypass vent stack was in use as recorded in Section A.III to obtain the PM_{10} emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total PM_{10} emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total PM_{10} emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

bbbb. Emission Limitation:
431 pounds per hour SO_2 emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled SO_2 emission concentration as measured at the inlet of the lime spray dryer absorber . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

cccc. Emission Limitation:
248.2 ton SO_2 per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour SO_2 emission rate established during the most recent SO_2 emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the SO_2 emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total SO_2 emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total SO_2 emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

dddd. Emission Limitation:
1.8 pounds per hour VOC emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the VOC emission concentration as measured at the inlet of the lime spray dryer absorber. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

eeee. Emission Limitation:
1.0 ton VOC per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour VOC emission rate established during the most recent VOC emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the VOC emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total VOC emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total VOC emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

ffff. Emission Limitation:
20% opacity from the HRSG bypass vent stacks when in use.

Applicable Compliance Method:
If required, compliance shall be demonstrated using Method 9 of 40 CFR Part 60, Appendix A.

gggg. Emission Limitation:
0.081 pound per hour mercury emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled mercury emission concentration as measured at the inlet of the lime spray dryer absorber. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

hhhh. Emission Limitation:
15 pounds mercury per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour mercury emission rate established during the most recent mercury emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the mercury emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total mercury emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total mercury emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

iiii. Emission Limitation:
24.8 pounds HCl emissions per hour from the main stack.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

jjjj. Emission Limitation:
109 tons HCl emissions per rolling 12-month period from the main stack.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

kkkk. Emission Limitation:
4.2 pounds HCl emissions per hour from all HRSG bypass vent stacks combined.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled HCl emission concentration as measured at the inlet of the lime spray dryer absorber. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

llll. Emission Limitation:
2.4 tons HCl emissions per rolling 12-month period from all HRSG bypass vent stacks combined.

Applicable Compliance Method:
For each HRSG bypass vent stack, multiply the pound per hour HCl emission rate established during the most recent HCl emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the HCl emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total HCl emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total HCl emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

2. Emission Testing Requirements

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 no later than 180 days after initial startup of the emissions unit for: the main stack, charging baghouse stacks, pushing baghouse stacks, fugitive charging emissions, and fugitive pushing emissions. The flow rate testing for the HRSG bypass vent stacks shall be conducted during the first scheduled by-pass of a heat recovery steam generator for purposes of the annual heat recovery steam generator inspection and maintenance.

b. The emission testing shall be conducted to demonstrate compliance with the following allowable limitations.

i. Main Stack: PE, PM_{10}, SO2, NOx, CO, VOC, Lead, mercury, and opacity. Opacity observations shall be taken concurrent with PE and PM_{10} emission testing.

ii. Charging baghouse stacks: PM_{10} and opacity.

During each test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges).

Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$$E_p = (C \times Q \times T) / (K)$$

Where:
E_p = Process weighted mass emissions of PM_{10} , lb/hr;
C = Concentration of particulate matter of PM_{10}, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
K = Conversion factor, 7,000 gr/lb.

Opacity observations shall be taken concurrent with PM_{10} emission testing.

iii. Pushing baghouse stacks: PM_{10}, SO2, NOx, CO, VOC, opacity. During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$E_p = (C \times Q \times T) / (K)$

Where:
E_p = Process weighted mass emissions of PM_{10} , lb/hr;
C = Concentration of particulate matter of PM_{10}, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
K = Conversion factor, 7,000 gr/lb.

Opacity observations shall be taken concurrent with PM_{10} emission testing.

iv. Fugitive charging emissions: opacity. Opacity observations shall be taken concurrent with PM_{10} emission testing.

v. Fugitive pushing emissions: opacity. Opacity observations shall be taken concurrent with PM_{10} emission testing.

vi. HRSG bypass vent stacks: flow rate.

c. The emission testing shall be conducted to determine the emissions of Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans, acid gases and metals from the main stack.

d. The permittee shall determine the emission rate of PE, PM_{10}, SO2, NOx, CO, VOC, lead, mercury, Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans, and acid gases at the inlet of the lime spray dryer absorber from the main stack in pounds per hour and pounds per dry standard cubic feet. This testing of the inlet to the lime spray dryer absorber shall be conducted simultaneously with testing of the main stack emissions required under Section V.2. for this emissions unit.

e. The permittee shall determine the maximum vent gas flow rate in dry standard cubic feet per minute through the bypass vent stacks using Method 1 through 4 of 40 CFR Part 60, Appendix A. Using the maximum flow rate through the bypass vent stacks and the emissions concentrations measured at the inlet of the lime spray dryer absorber, the permittee shall determine the maximum emissions of PE, PM_{10}, SO2, NOx, CO, VOC, lead, and mercury from the bypass vent stacks in pounds per hour.

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

Pollutant	Method
PE	Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A

PM_{10}	Method 201and 202 of 40 CFR Part 51, Appendix M
SO_2	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 18, Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Lead	Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A
Opacity	Methods 9 and 22 of 40 CFR Part 60, Appendix A
Mercury	ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

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

Method 23 of 40 CFR Part 60, Appendix A is added to test Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans emissions.

Method 26 of 40 CFR Part 60, Appendix A is added to test acid gas emissions (include HCl, HF, Cl_2, etc.)

Method 29 of 40 CFR Part 60, Appendix A is added to test for metals emissions.

g. The following additional information shall be documented during all emission testing for PE, PM_{10}, SO2, NOx, CO, VOC, Lead, mercury, opacity, Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans, acid gases, metals and flow rate.

i. Hourly wet coal charge rates, in tons/hr and the number of charges per hour to allow a determination of an emission factor in pounds of pollutant per ton of coal processed;

ii. Hourly coke push rates, in tons/hr, and the number of pushes per hour to allow a determination of an emission factor in pounds of pollutant per ton of coke produced;

iii. Pressure drop readings approximately every 15 minutes during the test(s) for:

(a) each charging baghouse when charging emissions are being tested;

(b) the lime spray dryer baghouse when the main stack emissions are being tested;

(c) each pushing baghouse when pushing emissions are being tested.

iv. lime spray dryer operating parameters when the main stack emissions are being tested;

v. main stack baghouse cleaning cycle;

vi. activated carbon injection rate in pounds per hour and pounds per million actual cubic feet of exhaust gases; and

vii. the daily average sulfur content, chlorine content, and mercury content of the coal charged during each of the two days prior to testing and the day of testing using the procedures specified under Section III.12.

h. The permittee shall perform an activated carbon injection study to determine the optimum operating parameters of the activated carbon injections system to maximize the control of mercury emissions. The permittee shall submit to the Toledo Division of Environmental Services and Ohio EPA a carbon injection study plan for approval within 60 days prior to the proposed date of the commencement of the optimization study.

i. The permittee shall provide, or cause to be provided, performance testing facilities as follows for the outlet ducts for charging baghouses, inlet duct for the lime spray dryer, the outlet duct for the main stack, and the outlet ducts for the pushing baghouses:

i. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

j. The outlet ducts for charging baghouses, inlet duct for the lime spray dryer, the outlet duct for the main stack, and the outlet ducts for the pushing baghouses shall be designed in a manner that allows for emissions sampling ports to be installed according to criteria specified in Method 1 of 40 CFR Part 60, Appendix A.

k. 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 Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. 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 Toledo Division of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services.

3. The SO_2 CEMS shall be audited at least once each calendar quarter as outlined under 40 CFR Part 60 Appendix F. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA shall be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B of 40 CFR Part 60 (e.g., PS 2 for SO_2 and NO_x). In addition, analyze the appropriate performance audit samples received from U.S. EPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

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

      ii. Personnel from the Toledo Division of Environmental Services 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.

b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B of 40 CFR Part 60 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of U.S. EPA performance audit samples are also required.

4. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the permittee shall audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA shall always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

5. The permittee shall demonstrate initial compliance with the 12-month rolling mercury emission limitation using sorbent trap monitoring system data according to the following procedures.

a. Calculate the monthly and 12-month rolling mercury emissions as specified in Section A.III.

b. Report the 12-month rolling average mercury emissions rate in the first semi-annual compliance report.

6. See 40 CFR Part 63, Subpart L (40 CFR 63.309)

7. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7320 - 63.7324, 63.7326-63.7328, and 63.7333 - 63.7335)

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(B901) - (2) Nonrecovery coke oven batteries consisting of 84 ovens with heat recovery steam generators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (B901) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: Phosphorus

   TLV (mg/m3): 0.10

   Maximum Hourly Emission Rate (lbs/hr): 1.09

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.41

   MAGLC (ug/m3): 2.4

   Physical changes to or changes in the method of operation of the emissions unit after its

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F001) - Paved Roadways Parking Areas (All roadways & parking areas are paved)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	24.88 tons per year particulate emissions (PE) no visible particulate emissions except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.b through A.I.2.g.)
OAC rules 3745-31-10 through 20	4.85 tons per year particulate matter less than 10 micron (PM_{10}) emissions See section A.I.2.h.
OAC rule 3745-17-07(B)(4)	See section A.I.2.i.
OAC rule 3745-17-08(B) , (B)(8), (B)(9)	See section A.I.2.i.

2. Additional Terms and Conditions

2.a The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

Baghouse and FGD system maintenance and lime supply road
Nut Coke/Breeze Truck Road

paved parking areas:

Main Parking area

2.b The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and flushing at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.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.

2.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.

2.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.

2.g A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.

2.h All roadways and parking areas shall be paved.

2.i The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
daily	

Baghouse and FGD system maintenance and lime supply road
Nut Coke/Breeze Truck Road
Main Parking Area

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 may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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 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.

   The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit 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.

The permittee shall submit these deviation reports to the Toledo Division of Environmental Services quarterly. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

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

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   no visible particulate emissions from paved roadways and parking areas except for one minute during any 60-minute period

   Applicable Compliance Method:
   Compliance with the emission limitation for the paved roadways and parking areas 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," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

   b. Emission Limitation:
   24.88 tons/yr PE and 4.85 tons/yr PM_{10} from paved roadways and parking areas

   Applicable Compliance Method:
   If required, compliance shall be determined using Equation 2 of AP-42 Section 13.2.1 dated 11/06.

   $E = [k(sL/2)^{0.65} (W/3)^{1.5} - C](1-P/4N)(VMT)/2000$

   Where:
   E = emissions, tons/yr
   k = 0.082 pound per vehicle mile traveled for (lb/VMT) PE
   k = 0.016 lb/VMT for PM_{10}
   sL = 9.7 g/m^2
   W = average vehicle weight, tons
   C = 0.00047 lb/VMT for PE
   C = 0.00047 lb/VMT for PM_{10}
   P = 130
   N = 365 days
   VMT = vehicle miles traveled per year

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F001) - Roadways Parking Areas

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F002) - Coke storage piles including load-in and load-out

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Coke storage piles, including load-in and load-out operations with partial enclosure	
OAC rule 3745-31-05(A)(3)	0.3 ton per year of particulate emissions (PE), and see Sections A.2.a. and b.
OAC rules 3745-31-10 thru 20	See Section A.2.c.
Load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)	
OAC rule 3745-31-05(A)(3)	No visible emissions except for one minute in any hour, and see Sections A.I.2.d., A.I.2.e., and A.I.2.h.
OAC rule 3745-17-07(B)(6)	Less stringent than the above-mentioned control measure requirements.
Wind erosion from storage piles (see Section A.2.a for identification of storage piles)	
OAC rule 3745-31-05(A)(3)	No visible emissions except for three minutes in any hour, and see Sections A.I.2.f. through A.I.2.h.
OAC rule 3745-17-08(B), (B)(6)	Less stringent than the above-mentioned control measure requirements.

2. Additional Terms and Conditions

2.a All coke storage piles at this facility are covered by this permit and subject to the above-mentioned requirements.

2.b The annual emission limitation was established for PTI purposes to reflect the potential to emit for the storage piles. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

2.c The combined emissions from all sources comprising this emissions until shall not exceed 0.19 ton of PM_{10} as a rolling, 12-month summation

2.d The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to installing a partial enclosure and watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of 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.

2.f The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering and applying chemical dust suppressant to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.g The above-mentioned control measure(s) shall be employed for wind erosion from each 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. 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.

2.h Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

II. Operational Restrictions

None

III. 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
Coke piles	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
Coke piles	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
Coke piles	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 may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

7. 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 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 7.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.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services in accordance with the reporting requirements of the General Terms and Conditions of this permit. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   0.19 ton of PM_{10} as a rolling, 12-month summation

   Applicable Compliance Method:
   Compliance shall be demonstrated by calculating the sum of the following:

      i. coke pile load-in

      Multiply the maximum tons of coke handled per year (1,440,000 made enforceable by B901) times the 0.00034 pound/ton PM_{10} emission factor times 0.15 (assuming a 85% control efficiency for partial enclosure and wetting) and divide by 2,000 pounds per ton = 0.037 ton/yr. The PM_{10} emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

      ii. coke pile wind erosion

      Multiply the maximum tons of coke stored on the ground (15,000) times the 0.03430 pound/ton particulate emission factor times 0.30 (assuming a 70% control efficiency for the wetting) and divide by 2,000 pounds per ton = 0.077 ton/yr. The PM_{10} emission factor was calculated in accordance with Kentucky's Department of Environmental Protection Study and the control efficiency was obtained from RACM, Table 2.2.1-2, dated 1/80.

      iii. coke pile load-out

      Multiply the maximum tons of coke handled in each of the operations below (1,440,000 made enforceable by B901) times one minus the PM_{10} emission

factor in pounds/ton times the listed control efficiency, and divide by 2,000 pounds per ton. The PM_{10} emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency (85%) was supplied by the permittee. For the following:

coke pile to front end loader with partial enclosure and wetting:
1,440,000*.00034*(1-0.85)/2000 = 0.037
front end loader to conveyor with partial enclosure and wetting:
1,440,000*.00034*(1-0.85)/2000 = 0.037

b. Emission Limitation:
0.3 ton per year of PE

Applicable Compliance Method:
Compliance shall be demonstrated by calculating the sum of the following:

i. coke pile load-in

Multiply the maximum tons of coke handled per year (1,440,000 made enforceable by B901) times the 0.00073 pound/ton particulate emission factor times 0.15 assuming a 85% control efficiency for partial enclosure and wetting and divide by 2,000 pounds per ton = 0.079 ton/yr. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

ii. coke pile wind erosion

Multiply the maximum tons of coke stored on the ground (15,000) times the 0.03430 pound/ton particulate emission factor times 0.30 assuming a 70% control efficiency for the wetting and divide by 2,000 pounds per ton. The particulate emission factor was calculated in accordance with Kentucky's Department of Environmental Protection Study and the control efficiency was obtained from RACM, Table 2.2.1-2, dated 1/80.

iii. coke pile load-out

Multiply the maximum tons of coke handled in each of the operations below (1,440,000 made enforceable by B901) times the emission factor in pounds/ton times one minus the listed control efficiency, and divide by 2,000 pounds per ton. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was obtained from RACM, Table 2.2.1-2, dated 10/80. For the following:

coke pile to front end loader with partial enclosure and wetting:
1,440,000*.00073*(1-0.85)/2000 = 0.079

front end loader to conveyor with partial enclosure and wetting:
1,440,000*.00073*(1-0.85)/2000 = 0.079

c. Emission Limitation:
There shall be no visible emissions except for one minute in any hour.

Applicable Compliance Method:

Compliance with the visible emission 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

d. Emission Limitation:
There shall be no visible emissions except for three minutes in any hour.

Applicable Compliance Method:

Compliance with the visible emission 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

2. Emission Testing Requirements:
The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources .

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

i. opacity: Method 22 of 40 CFR part 60, appendix A :

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation

parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F002) - Coke storage piles including load-in and load-out

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(F003) - Coal unloading and handling

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Coal unloading and handling: railcar dumper with below grade hopper and vibratory feeder to dumper collecting conveyor, controlled by full enclosure and maintaining moisture levels	
OAC rule 3745-31-05(A)(3)	0.28 pound of particulate emissions (PE) per hour, 0.62 ton of PE per year, 0.14 pound of particulate matter less than 10 micron (PM_{10}) per hour, and see section A.I.2.a and 2.b
OAC rule 3745-17-07 (B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.d.
OAC rule 3745-31-10 thru 20	0.3 ton of PM10 as a rolling, 12-month summation.
40 CFR Part 60, Subpart Y	See section A.I.2.c.
Roller screen crusher with full enclosure and below ground level	
OAC rule 3745-31-05(A)(3)	0.2 pound of particulate emissions (PE) per hour, 0.4 ton of PE per year, 0.08 pound of particulate matter less than 10 micron (PM_{10}) per hour, and see section A.I.2.a, 2.b and 2.d
OAC rule 3745-17-07 (B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.2 ton of PM_{10} as a rolling, 12-month summation.
40 CFR Part 60, Subpart Y	See section A.I.2.c.
coal conveying operations controlled by enclosure and maintaining adequate moisture levels	
OAC rule 3745-31-05(A)(3)	0.5 pound per hour of particulate emissions (PE) per hour, 0.6 ton of PE per year, 0.2 pound per hour of particulate matter less than 10 micron (PM_{10})

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	per hour, and see section A.I.2.a, 2.b. and 2.d.
OAC rule 3745-17-07 (B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.3 ton of PM_{10} as a rolling, 12-month summation.
40 CFR Part 60, Subpart Y	See section A.I.2.c.
Coal crushing and screening operation with transfer controlled by full enclosure with a cyclone vented inside the building	
OAC rule 3745-31-05(A)(3)	0.45 pound per hour of particulate emissions (PE) per hour, 0.46 ton of PE per year, 0.14 pound per hour of particulate matter less than 10 micron (PM_{10}) per hour, and see section A.I.2.b, 2.d., 2.e., and 2.g
OAC rule 3745-17-07 (B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.15 ton of PM10 as a rolling, 12-month summation.
Coal storage piles, including load-in and load-out with full enclosure and emissions controlled by a cyclone vented inside the building	
40 CFR Part 60, Subpart Y	See section A.I.2.c.
OAC rule 3745-31-05(A)(3)	0.024 pound per hour and 0.035 ton per year PE as a rolling 12-month summation; 0.014 pound per hour PM10; and See section A.I.2.b, 2.d, 2.e, and 2.g
OAC rule 3745-17-07(B)(1)	See section A.I.2.c.
OAC rule 3745-17-08(B)	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.026 ton of PM_{10} as a rolling, 12-month summation
40 CFR Part 60, Subpart Y	See section A.I.2.c.
Coal stamping with full enclosure vented to a baghouse	
OAC rule 3745-31-05(A)(3)	0.02 pound per hour of particulate emissions (PE) per hour, 0.02 ton of PE per year, 0.01 pound per hour of particulate matter less than 10 micron (PM_{10}) per hour, and see section A.I.2.b., 2.d, 2.e., and 2.f.
OAC rule 3745-17-07 (A)(1)	See section A.I.2.c.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.c.
OAC rule 3745-17-11	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.01 ton of PM10 as a rolling, 12-month summation.
40 CFR Part 60, Subpart Y	See section A.I.2.c.
Coal blending unit with full enclosure and cylcone vented inside	
OAC rule 3745-31-05(A)(3)	0.2 pound of particulate emissions (PE) per hour, 0.4 ton of PE per year, 0.08 pound of particulate matter less than 10 micron (PM10) per hour, and see section A.I.2.a, 2.b and 2.d
OAC rule 3745-17-07 (B)(1)	See section A.I.2.c.
OAC rule 3745-17-08 (B)	See section A.I.2.c.
OAC rule 3745-31-10 thru 20	0.2 ton of PM10 as a rolling, 12-month summation.
40 CFR Part 60, Subpart Y	See section A.I.2.c.

2. Additional Terms and Conditions

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20 and OAC rule 3745-17-08(b).

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.d i. The permittee shall employ best available control measures for all coal handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall

continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse or cyclone), except for 1 minute during any 60 minute observation period.

2.f Visible emissions particulate shall not exceed 5 percent opacity, as a 6-minute average, from any dust collector (e.g., baghouse) stack serving this emissions unit.

2.g The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Company ID/Equipment Description

13 transfer points fully enclosed and inside
2 fully enclosed storage hoppers
Coal crushing, sizing, and blending equipment
All coal storage piles, including load-in and load-out
Coal stamping unit
Coal blending unit

II. Operational Restrictions

1. The permittee shall operate the cyclone whenever the coal crushing operation is in use.

2. The permittee shall operate the baghouse whenever the coal stamping operation is in use.

3. The permittee shall operate the cyclone whenever the coal blending unit is in use.

4. The permittee shall operate the cyclone during storage pile load-in and load-out operations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the cyclone was not in service when the coal crushing operation was in use.

2. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the coal stamping operation was in use.

3. The permittee shall maintain daily records that document any time periods when the cyclone was not in service when the coal blending unit was in use.

4. The permittee shall maintain daily records that document any time periods when the cyclone was not in service during coal storage pile load-in and load-out.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and 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 eliminate the visible emissions.

   The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving the coal stamping unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the cyclone was not in service when the coal crushing operation was in use. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the coal stamping operation was in use. If no deviations occurred during a

calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

3. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the cyclone was not in service when coal blending unit was in use. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the cyclone was not in service during storage pile coal load-in and load-out. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

5. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible fugitive particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

6. The permittee shall submit quarterly written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving the coal stamping unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the railcar dumper hopper, vibratory feeder and dumper collecting conveyor in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   0.28 pound per hour of particulate matter (PE).

   Applicable Compliance Method:
   Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per hour (2000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) times (1- % control efficiency). The control

efficiencies were supplied by the applicant as follows: fully enclosed 85% , fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

2000*(0.00056*(1-0.85) + 0.00056*2*(1-0.95)) = 0.28 lb/hr

b. Emission Limitation:
0.62 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) times (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed 85% , fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

8,760,000*(0.00056*(1-0.85) + 0.00056*2*(1-0.95))/ (2000 lb/ton) = 0.62 ton/yr

c. Emission Limitation:
0.14 pound per hour of particulate matter less than 10 micron (PM10)

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per hour (2000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) times (1- % control efficiency). The control efficiencies were supplied by the applicant as follows: fully enclosed 85% , fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

2000*(0.00027*(1-0.85) + 0.00027*2*(1-0.95)) = 0.14 lb/hr

d. Emission Limitation:
0.3 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4,

Equation (1) dated 11/06 (0.00027 pound/ton for each operation) times (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed 85% , fully enclosed and inside 95%; fully enclosed hopper 99% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

8,760,000*(0.00027*(1-0.85) + 0.00027*2*(1-0.95))/ (2000 lb/ton) = 0.3 ton/yr

2. Compliance with the emission limitation(s) for the coal conveying operations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.5 pound per hour of particulate matter (PE).

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) times (1- % control efficiency). The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95% for:

4 fully enclosed and inside transfer points at 2,000 lbs/hr
3 fully enclosed and inside transfer points at 1,000 lbs/hr
6 fully enclosed and inside transfer points at 500 lbs/hr
2 fully enclosed hoppers with a 4,000 ton capacity

0.00056(1-0.95)(4*2,000 + 3*1,000 + 6*500) +
0.00056(1-0.99)(2*4,000) = 0.4 lb/hr

b. Emission Limitation:
0.6 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period , times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) times (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95%; fully enclosed hopper 99% for:

13 fully enclosed and inside transfer points at 2,058,600 tons/yr
2 fully enclosed hoppers with a 4,000 ton capacity
[0.00056(1-0.95)(13*2,058,600) +0.00056(1-0.99)(2*4,000)(8,760)] / 2000 = 0.6 ton/yr

c. Emission Limitation:
0.2 pound per hour of particulate matter less than 10 micron (PM10),

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) times (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95% for ; fully enclosed hopper 99%:

4 fully enclosed and inside transfer points at 2,000 lbs/hr
3 fully enclosed and inside transfer points at 1,000 lbs/hr
6 fully enclosed and inside transfer points at 500 lbs/hr
2 fully enclosed hoppers with a 4,000 ton capacity

0.00027(1-0.95)(4*2,000 + 3*1,000 + 6*500)+0.00027(1-0.99)(2*4,000) = 0.2 lb/hr

d. Emission Limitation:
0.3 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (2,058,600 enforceable by B901), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) times (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95%; fully enclosed hopper 99% for:

13 fully enclosed and inside transfer points at 2,058,600 tons/yr
2 fully enclosed hoppers with a 4,000 ton capacity

[0.00027(1-0.95)(13*2,058,600) +0.00027(1-0.99)(2*4,000)(8,760)] / 2000 = 0.3 ton/yr

3. Compliance with the emission limitation(s) for the coal crushing and screening or transfer operations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.45 pound per hour of particulate emissions (PE) per hour.

Applicable Compliance Method:
Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (1,000 tons/hr) by the permittee-supplied coal crushing particulate emission factor (0.020 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated

control efficiency of a cyclone vented indoors to determine the emissions from the coal crusher (0.40 lb/hr).

Multiply the maximum processing rate (1,000 tons/hr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) multiplied by 4 transfer points, and multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from coal transfer (0.05 lb/hr).

b. Emission Limitation:
0.46 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (2,058,600 tons/yr) by the permittee-supplied coal crushing particulate emission factor (0.020 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divide by 2000 lbs/ton to determine the emissions from the coal crusher (0.41 ton/yr).

Multiply the maximum processing rate (2,058,600 tons/yr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divided by 2000 lbs/ton to determine the emissions from coal transfer (0.05 ton/yr).

c. Emission Limitation:
0.14 pound of particulate matter less than 10 micron (PM10) per hour

Applicable Compliance Method:
Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (1,000 tons/hr) by the permittee-supplied coal crushing particulate emission factor (0.006 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal crusher (0.12 lb/hr).

Multiply the maximum processing rate (1,000 tons/hr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) multiplied by 4 transfer points, and multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from coal transfer (0.02 lb/hr).

d. Emission Limitation:
0.15 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (2,058,600 tons/yr) by the permittee-supplied coal crushing particulate emission factor (0.006 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divide by 2000 lbs/ton to determine the emissions from the coal crusher (0.12 ton/yr).

Multiply the maximum processing rate (2,058,600 tons/yr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divided by 2000 lbs/ton to determine the emissions from coal transfer (0.02 ton/yr).

4. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   10% opacity as a 3-minute average.

   Applicable Compliance Method:
   If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

   b. Emission Limitation:
   5 percent opacity, as a 6-minute average.

   Applicable Compliance Method:
   If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

   c. Emission Limitation:
   no visible emissions of fugitive dust , except for 1 minute during any 60 minute observation period

   Applicable Compliance Method:
   If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

5. Compliance with the emission limitation(s) for the coal storage piles, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.024 pound per hour PE

Applicable Compliance Method:
Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in
Multiply the maximum tons of coal handled per hour (2,500) by the 0.00056 pound/ton PE emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) = 0.014 lb/hr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

ii. coal pile load-out
Multiply the maximum tons of coal handled per year (550) times the 0.00056 pound/ton emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) times 2 transfer points= 0.006 lb/hr. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

b. Emission Limitation:
0.014 pound per hour PM10 emissions

Applicable Compliance Method:
Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in
Multiply the maximum tons of coal handled per year (2,500) times the 0.00027 pound/ton PM10 emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) = 0.007 lb/hr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

ii. coal pile load-out
Multiply the maximum tons of coal handled per year (550) times the 0.00027 pound/ton PM10 emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) times 2 transfer points = 0.003 lb/hr. The PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

c. Emission Limitation:
0.03 ton of PE as a rolling, 12-month summation

Applicable Compliance Method:
Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in
Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00056 pound/ton PE emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) and divide by 2,000 pounds per ton = 0.0058 ton/yr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

ii. coal pile load-out
Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00056 pound/ton emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors), times 2 transfer points and divide by 2,000 pounds per ton = 0.012 ton/yr. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

d. Emission Limitation:
0.02 ton of PM10 as a rolling, 12-month summation

Applicable Compliance Method:
Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in
Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00027 pound/ton PM10 emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) and divide by 2,000 pounds per ton = 0.003 ton/yr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

ii. coal pile load-out
Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00027 pound/ton PM10 emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) times 2 transfer points, and divide by 2,000 pounds per ton = 0.006 ton/yr. The PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 11/06. The control efficiency was supplied by the permittee.

6. Compliance with the emission limitation(s) for the roller screen crusher operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.2 pound per hour of particulate matter (PE).

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (2,000 tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation), multiplied by 3 transfer points, and multiplied by (1- % control efficiency). The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

0.00056(1-0.95)(3)(2,000) = 0.2 lb/hr

b. Emission Limitation:
0.4 ton of PE per year

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation) multiplied by 3 transfer points, multiplied by (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

0.00056(1-0.95)(3)(8,760,000)/ 2000 = 0.4 ton/yr

c. Emission Limitation:
0.08 pound per hour of particulate matter less than 10 micron (PM10),

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (2,000 tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation) multiplied by 3 transfer points, and multiplied by (1- % control efficiency). The control efficiency supplied by the applicant is 95% for being fully enclosed and inside:.

0.00027(1-0.95)(3)(2,000) = 0.08 lb/hr

d. Emission Limitation:
0.02 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated

11/06 (0.00027 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

0.00027(1-0.95)(3)(8,760,000) / 2000 = 0.2 ton/yr

7. Compliance with the emission limitation(s) for the coal stamping unit in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.02 pound per hour of particulate emissions (PE) per hour.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation), multiplied by 3 transfer points and multiplying by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse to determine the emissions from the coal stamping unit (0.4 lb/hr).

If required, the permittee shall demonstrate compliance based upon emission testing performed in accordance with Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A or an acceptable alternative test method approved in writing by the director of the Ohio EPA.

b. Emission Limitation:
0.02 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.02 ton/yr).

c. Emission Limitation:
0.01 pound of particulate matter less than 10 micron (PM10) per hour

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation), multiplied by 3 transfer points and multiplying by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse to determine the emissions from the coal stamping unit (0.01 lb/hr).

If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:
0.01 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.01 ton/yr).

8. Compliance with the emission limitation(s) for the coal blending unit in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.05 pound per hour of particulate emissions (PE) per hour.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation), multiplied by 4 transfer points and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal blending unit (0.05 lb/hr).

b. Emission Limitation:
0.05 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00056 pound/ton for each operation), multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.05 ton/yr).

c. Emission Limitation:
0.02 pound of particulate matter less than 10 micron (PM10) per hour

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation),

multiplied by 4 transfer points and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal stamping unit (0.02 lb/hr).

d. Emission Limitation:
0.01 ton of PM10 as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the PM10 emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00027 pound/ton for each operation), multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors, and dividing by 2000 lb/ton to determine the emissions from the coal blending unit (0.02 ton/yr).

9. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources .

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

i. opacity: Method 9 of 40 CFR part 60, appendix A :

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation

parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F003) - Coal unloading and handling

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05	Limit(s)

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(F004) - Coke handling

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Coke Sizing Tower (Fully Enclosing the crushing and screening operations) controlled with a cyclone vented indoors	
OAC rule 3745-31-05(A)(3)	0.27 pound per hour of particulate emissions (PE), 0.48 ton of PE per year, 0.09 pound per hour of particulate matter less than 10 micron (PM_{10}), and see section A.I.2.b, 2.c, 2.d
OAC rule 3745-17-07 (B)(1)	See section A.I.2.e.
OAC rule 3745-17-08 (B)	See section A.I.2.e.
OAC rule 3745-31-10 thru 20	0.13 ton of PM10 as a rolling, 12-month summation.
Coke and Breeze Processing - Coke Hopper, Vibratory Feeder, Conveyors, Storage Hoppers, and Load-in & Load- out from Nut Coke & Breeze Hoppers	
OAC rule 3745-31-05(A)(3)	0.2 pound per hour of particulate emissions (PE), 0.24 ton of PE per year, 0.07 pound per hour of particulate matter less than 10 micron (PM10), and see section A.I.2.b, 2.c, 2.d, and 2.f.
OAC rule 3745-17-07 (B)(1)	See section A.I.2.e.
OAC rule 3745-17-08 (B)	See section A.I.2.e.
OAC rule 3745-31-10 thru 20	0.1 ton of PM10 as a rolling, 12-month summation.

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Company ID Equipment Description

Eight (8) partially enclosed transfer points with wetting or chute
Eight (8) fully enclosed and inside transfer points
Three (3) fully enclosed storage hoppers

2.b i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.c No visible emissions of fugitive dust from any full enclosure serving the processes comprising this emissions unit , except for 1 minute during any 60 minute observation period.

2.d The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20 and OAC rule 3745-17-08(B).

2.e The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.f The visible emissions of fugitive dust from any source that is not fully enclosed (as described above) shall not exceed 10% opacity as a 3-minute average.

II. Operational Restrictions

1. All of the equipment comprising the Coke Sizing Tower shall be fully enclosed and all emissions shall be controlled with a cylcone that exhausts to the interior of the sizing tower..

2. The permittee shall operate the Coke Sizing Tower cyclone whenever the respective emission unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the Coke Sizing Tower cyclone was not in service when the respective emissions unit was in operation.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and 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 eliminate the visible emissions.

   The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which a baghouse was not in service when the respective emissions unit was in operation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible fugitive particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
5% opacity, as a six-minute average

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

b. Emission Limitation:
0.09 lbs/hr of PM_{10}

Applicable Compliance Method:
The total hourly PM_{10} emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (500 tons/hr) by the coke crushing emission factor supplied by the permittee (0.006 lb PM_{10}/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (0.06 lb/hr). Multiply the maximum coke processing rate (500 tons/hr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 11/06 (0.00034 lb PM_{10}/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (0.03 lb/hr). Add the emissions from coke crushing (0.06 lb/hr) to the emissions from coke screening and handling (0.03 lb/hr) to obtain the total emissions (0.09 lbs/hr).

c. Emission Limitation:
0.13 ton of PM_{10} per year

Applicable Compliance Method:
The total annual PM_{10} emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (1,440,000 tons/yr) by the coke crushing emission factor supplied by the permittee (0.006 lb PM_{10}/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (172.8 lbs/yr). Multiply the maximum coke processing rate (1,440,000 tons/yr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 11/06 (0.00034 lb PM_{10}/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (88.1 lbs/yr). Add the emissions from coke crushing (172.8 lbs/yr) to the emissions from coke screening and handling (88.1 lbs/yr) and divide by 2000 lbs/ton to obtain the total emissions (0.13 ton/yr).

d. Emission Limitation:
0.27 lb/hr of PE

Applicable Compliance Method:
The total hourly particulate emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (500 tons/hr) by the coke crushing emission factor supplied by the permittee (0.02 lb PE/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (0.2 lb/hr). Multiply the maximum coke processing rate (500 tons/hr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 11/06 (0.00073 lb PE/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (0.066 lb/hr). Add the emissions from coke crushing (0.2 lb/hr) to the emissions from coke screening and handling (0.066 lb/hr) to obtain the total emissions (0.27 lbs/hr).

e. Emission Limitation:
0.48 ton of PE per year.

Applicable Compliance Method:
The total annual particulate emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (1,440,000 tons/yr) by the coke crushing emission factor supplied by the permittee (0.02 lb PE/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (576 lbs/yr). Multiply the maximum coke processing rate (1,440,000 tons/yr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 11/06 (0.00073 lb PE/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (189.2 lbs/yr). Add the emissions from coke crushing (576 lbs/yr) to the emissions from coke screening and handling (189.2 lbs/yr) and divide by 2000 lbs/ton to obtain the total emissions (0.48 ton/yr).

f. Emission Limitation:
10% opacity, as a three-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

g. Emission Limitation:
0.07 lb/hr of PM_{10}

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coke per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06

(0.00034 pound/ton for each operation) times (1- % control efficiency). The control efficiencies are based on the applicant's estimate as follows: partial enclosure and adequate moisture or chutes - 85% and95% for FE and indoors (TDOES is accepting this control estimate based upon compliance with 10 % opacity) for:

Four (4) partially enclosed transfer points with wetting or chute at 210 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 30 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 15 tons/hr
Five (5) fully enclosed and inside transfer points at 210 tons/hr
One (1) fully enclosed and inside transfer point at 500 tons/hr
One (1) fully enclosed and inside transfer point at 30 tons/hr
One (1) fully enclosed and inside transfer point at 15 tons/hr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

This results in the following calculation: [((4 x 210) + (2 x 30) + (2 x 15)) x (1-0.85) x 0.00034) + ((5 x 210) + (1 x 500) + (1 x 30) + (1 x 15)) x (1-0.95) x (0.00034) + ((1 x 2000) + (2 x 1000)) x (1-0.99) x 0.00034/8760)] = 0.07 lb/hr

h. Emission Limitation:
0.1 ton of PM_{10} as a rolling 12-month summation:.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the annual processing rate at each transfer point, times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00034 pound/ton for each operation) times (1- % control efficiency) divided by 2000 pounds per ton. The control efficiencies are based on the applicant's estimate as follows: partial enclosure and adequate moisture - 85% and 95% for FE and indoors (TDOES is accepting this control estimate based upon no visible emissions) for:

Two (2) partially enclosed transfer points with wetting or chute at 1,039,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 57,600 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 43,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 297,840 tons/yr
One (1) fully enclosed and inside transfer points at 61,320 tons/yr
One (1) fully enclosed and inside transfer points at 43,800 tons/yr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

The above hourly capacities are based an annual average

This results in the following calculation: [((2 x 1,039,200) + (2x57,600) + (2x43,200) + (2*718,320)) x (1-0.85) x 0.00034) + ((2 x 718,320) + (2x297,840) + (1x61,320)

+ (1x43,800)) x (1-0.95) x (0.00034) + ((1 x 2000) + (2 x 1000)) x (1-0.99) x (0.00034)] / 2000 = 0.1 ton/yr

i. Emission Limitation:
0.2 lb/hr of PE

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coke per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00073 pound/ton for each operation) times (1- % control efficiency). The control efficiencies were obtained from the company as follows: partial enclosure with adequate moisture or chute - 85%, and 95% for full enclosure and inside (TDOES is accepting this control estimate based upon no visible emissions) for:

Four (4) partially enclosed transfer points with wetting or chute at 210 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 30 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 15 tons/hr
Five (5) fully enclosed and inside transfer points at 210 tons/hr
One (1) fully enclosed and inside transfer point at 500 tons/hr
One (1) fully enclosed and inside transfer point at 30 tons/hr
One (1) fully enclosed and inside transfer point at 15 tons/hr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

This results in the following calculation: [((4 x 210) + (2 x 30) + (2 x 15)) x (1-0.85) x 0.00073) + ((5 x 210) + (1 x 500) + (1 x 30) + (1 x 15)) x (1-0.95) x (0.00073) + ((1 x 2000) + (2 x 1000)) x (1-0.99) x 0.00073/8760)] = 0.2 lb/hr

j. Emission Limitation:
0.24 ton of PE per year.

Applicable Compliance Method:
Compliance shall be demonstrated by the following calculation: multiply the annual processing rate at each transfer point, times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 11/06 (0.00073 pound/ton for each operation) times (1- % control efficiency) divided by 2000 pounds per ton. The control efficiencies were obtained from the company as follows: partial enclosure with adequate moisture or chute - 85%, and 95% for full enclosure and inside (TDOES is accepting this control estimate based upon no visible emissions) for:

Two (2) partially enclosed transfer points with wetting or chute at 1,039,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 57,600 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 43,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 297,840 tons/yr

One (1) fully enclosed and inside transfer points at 61,320 tons/yr
One (1) fully enclosed and inside transfer points at 43,800 tons/yr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

The above hourly capacities are based an annual average

This results in the following calculation: [((2 x 1,039,200) + (2x57,600) + (2x43,200) + (2*718,320)) x (1-0.85) x 0.00073) + ((2 x 718,320) + (2x297,840) + (1x61,320) + (1x43,800)) x (1-0.95) x (0.00073) + ((1 x 2000) + (2 x 1000)) x (1-0.99) x (0.00073)] / 2000 = 0.24 ton/yr

k. Emission Limitation:
no visible emissions of fugitive dust , except for 1 minute during any 60 minute observation period

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

2. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. opacity: Method 9 of 40 CFR part 60, appendix A :

iii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected
facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

e. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in

detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(F004) - Coke handling

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P001) - Quench Tower 1 for B Battery - controlled with internal baffles

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	0.0020 lb/hr Lead 0.2 lb/hr HAPs See section A.I.2.a. 151.38 lbs/hr particulate emissions (PE) 16.82 lbs/hr PM_{10} See section A.I.2.b thru e. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20 and OAC rule 3745-17-11.
OAC rule 3745-31-05(C)	0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emission units P001 and P002. 0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emission units P001 and P002. See section A.I.2.f.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the quench tower shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
OAC rule 3745-17-07(B)(1)	See section A.I.2.g.
OAC rule 3745-17-08(B)	See section A.I.2.g.
OAC rule 3745-17-11(A)(2)	See section A.I.2.g.
OAC rule 3745-31-10 through 20	463.19 TPY PE as a rolling, 12-month summation, combined limit for emission units P001 and P002. 54.5 TPY PM_{10} as a rolling, 12-month summation, combined limit

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	for emission units P001 and P002. See sections A.I.2.h. and A.I.2.i. below.
40 CFR Part 63, Subpart CCCCC	See section A.I.2.i.
40 CFR Part 63, Subpart A	See section A.I.2.j.

2. Additional Terms and Conditions

2.a These hourly emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per hour (336.4, see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations**.**

2.b The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.c There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collection device (i.e., quench tower or baghouse).

2.d Visible emissions particulate shall not exceed 20% percent opacity, as a 6-minute average, from any dust collector (i.e., quench tower) stack serving this emissions unit.

2.e i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.f These annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.g The emission limitation specified by this applicable regulation is less stringent than the emission limitation established by OAC rule 3745-31-05.

2.h These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Compliance with OAC rules 3745-31-05, 3745-31-15 and 40 CFR Part 52.21 shall also be demonstrated by a TDS concentration limit of 1100 mg/L or less and the operation and maintenance of an interior baffle system with coverage of not less than ninety-five per cent of the cross-sectional area of the tower.

2.i [40 CFR 63.7295 (a)(1)(i) or (ii)]
The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L).

2.j [40 CFR 63.7350)]
Table 1 of 40 CFR Part 63, Subpart CCCCC shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply.

II. Operational Restrictions

1. [40 CFR 63.7295 (a)(2)]
The permittee shall use acceptable makeup water for quenching as defined in 40 CFR 63.7352.

2. The permittee shall meet the requirements for quenching as stated in 40 CFR Part 63.7295(b) in regards to equipping the quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky, daily washing of the baffles, inspecting the quench tower monthly and repairing missing or damaged baffles.

3. [40 CFR 63.7295(a)(1)(ii)]
The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

III. Monitoring and/or Recordkeeping Requirements

1. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7295, 63.7332, 63.7342 and 63.7343).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and 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 eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7336, 63.7340, and 63.7341).

2. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.0020 lb/hr Lead

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the lead emission factor in pounds/ton coal charged (5.74×10^{-6} at 1100mg TDS/L), from Jewell test data, January 1999, times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content maintained is at less than or equal to 1100 mg/L.

b. Emission Limitation:
0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the lead emission factor, in pounds/ton coal charged (5.74×10^{-6} at 1100mg TDS/L), from Jewell test data, January 1999, times the wet tons of coal charged per rolling 12-month period (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton.

Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

c. Emission Limitation:
0.2 lb/hr HAPs

Applicable Compliance Method:
Compliance is demonstrated by multiplying the HAP emission factor, in pounds/ton coal charged, (0.00051) lb HAPs per ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods to ensure the TDS content is less than or equal to 1100 mg/L.

d. Emission Limitation:
0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds/ton coal charged, (0.00051 lb HAPs/ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the wet tons of coal charged per rolling 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. Compliance is assured by the monitoring of the analysis of the quench water for TDS in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

e. Emission Limitation:
151.38 lbs/hr PE

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds PE per ton times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

$y = 0.000115x + 0.323$
where:
y = lbs PE/wet ton coal, and
x = total dissolved solids (TDS) concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

f. Emission Limitation:
16.82 lbs/hr PM_{10}

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.05 lb PM_{10} per wet ton coal charged times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The PM_{10} emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is $_{PM10}$).

g. Emission Limitation:
463.19 TPY PE as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds per ton times the maximum wet tons of coal charged per rolling, 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

$y = 0.000115x + 0.323$
where:
y = lbs PE/wet ton coal, and
x = total dissolved solids concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

h. Emission Limitation:
54.5 TPY PM_{10} as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the PM_{10} emission factor of 0.053 pounds/ton coal charged, times the tons of coal charged per year (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. The PM_{10} emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is PM_{10}).

i. Emission Limitation:
The concentration of total dissolved solids (TDS) in the water used for quenching shall not exceed 1,100 milligrams per liter (mg/L).

Applicable Compliance Method:

Compliance shall be demonstrated by using the test methods and procedures in 40 CFR Part 63.7325(a), of Subpart CCCCC, stated in Part II of this permit, section A.48, to demonstrate compliance with the TDS constituent limits for quench water.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.

Applicable Compliance Method:
Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:
10% opacity as a 3-minute average for fugitive dust emissions from all equipment comprising this emissions unit.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:
no visible emissions of fugitive dust from any egress in any building enclosing any process of this emissions unit served by a collection device (i.e., quench tower).

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

3. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7320, 63.7321, 63.7325 - 63.7328, 63.7333, and 63.7334).

4. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources and from all stacks.

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

i. stack opacity: Method 9 of 40 CFR part 60, appendix A :

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P001) - Quench Tower 1 for B Battery - controlled with internal baffles

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P001) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy (''Air Toxic Policy'') was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: Phosphorus

   TLV (mg/m3): 0.10

   Maximum Hourly Emission Rate (lbs/hr): 0.044
   Predicted 1-Hour Maximum Ground-Level
   Concentration (ug/m3): 0.41

   MAGLC (ug/m3): 2.4

   Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact

such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P002) - Quench Tower 2 for B Battery - controlled with internal baffles

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	0.0020 lb/hr Lead 0.2 lb/hr HAPs See section A.I.2.a. 151.38 lbs/hr particulate emissions (PE) 16.82 lbs/hr PM_{10} See section A.I.2.b thru e. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20 and OAC rule 3745-17-11.
OAC rule 3745-31-05(C)	0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emission units P001 and P002. 0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emission units P001 and P002. See section A.I.2.f.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the quench tower shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
OAC rule 3745-17-07(B)(1)	See section A.I.2.g.
OAC rule 3745-17-08(B)	See section A.I.2.g.
OAC rule 3745-17-11(A)(2)	See section A.I.2.g.
OAC rule 3745-31-10 through 20	463.19 TPY PE as a rolling, 12-month summation, combined limit for emission units P001 and P002.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	54.5 TPY PM_{10} as a rolling, 12-month summation, combined limit for emission units P001 and P002. See sections A.I.2.h. and A.I.2.i. below.
40 CFR Part 63, Subpart CCCCC	See section A.I.2.i.
40 CFR Part 63, Subpart A	See section A.I.2.j.

2. Additional Terms and Conditions

2.a These hourly emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per hour (336.4, see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations**.**

2.b The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.c There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collection device (i.e., quench tower or baghouse).

2.d Visible emissions particulate shall not exceed 20% percent opacity, as a 6-minute average, from any dust collector (i.e., quench tower) stack serving this emissions unit.

2.e i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.f These annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Therefore, it is not

necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.g The emission limitation specified by this applicable regulation is less stringent than the emission limitation established by OAC rule 3745-31-05.

2.h These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Compliance with OAC rules 3745-31-05, 3745-31-15 and 40 CFR Part 52.21 shall also be demonstrated by a TDS concentration limit of 1100 mg/L or less and the operation and maintenance of an interior baffle system with coverage of not less than ninety-five per cent of the cross-sectional area of the tower.

2.i [40 CFR 63.7295 (a)(1)(i) or (ii)]
The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L).

2.j [40 CFR 63.7350)]
Table 1 of 40 CFR Part 63, Subpart CCCCC shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply.

II. Operational Restrictions

1. [40 CFR 63.7295 (a)(2)]
The permittee shall use acceptable makeup water for quenching as defined in 40 CFR 63.7352.

2. The permittee shall meet the requirements for quenching as stated in 40 CFR Part 63.7295(b) in regards to equipping the quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky, daily washing of the baffles, inspecting the quench tower monthly and repairing missing or damaged baffles.

3. [40 CFR 63.7295(a)(1)(ii)]
The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

III. Monitoring and/or Recordkeeping Requirements

1. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7295, 63.7332, 63.7342 and 63.7343).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and 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 eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7336, 63.7340, and 63.7341).

2. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.0020 lb/hr Lead

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the lead emission factor in pounds/ton coal charged ($5.74x10^{-6}$ at 1100mg TDS/L), from Jewell test data, January 1999, times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content maintained is at less than or equal to 1100 mg/L.

b. Emission Limitation:
0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the lead emission factor, in pounds/ton coal charged ($5.74x10^{-6}$ at 1100mg TDS/L), from Jewell test data, January 1999, times the wet tons of coal charged per rolling 12-month period (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. Compliance

is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

c. Emission Limitation:
0.2 lb/hr HAPs

Applicable Compliance Method:
Compliance is demonstrated by multiplying the HAP emission factor, in pounds/ton coal charged, (0.00051) lb HAPs per ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods to ensure the TDS content is less than or equal to 1100 mg/L.

d. Emission Limitation:
0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor, in pounds/ton coal charged, (0.00051 lb HAPs/ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the wet tons of coal charged per rolling 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. Compliance is assured by the monitoring of the analysis of the quench water for TDS in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

e. Emission Limitation:
151.38 lbs/hr PE

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds PE per ton times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

$y = 0.000115x + 0.323$
where:
y = lbs PE/wet ton coal, and
x = total dissolved solids (TDS) concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

f. Emission Limitation:
16.82 lbs/hr PM_{10}

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.05 lb PM_{10} per wet ton coal charged times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The PM_{10} emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is $_{PM10}$).

g. Emission Limitation:
463.19 TPY PE as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds per ton times the maximum wet tons of coal charged per rolling, 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

$y = 0.000115x + 0.323$
where:
y = lbs PE/wet ton coal, and
x = total dissolved solids concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

h. Emission Limitation:
54.5 TPY PM_{10} as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the PM_{10} emission factor of 0.053 pounds/ton coal charged, times the tons of coal charged per year (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. The PM_{10} emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is PM_{10}).

i. Emission Limitation:
The concentration of total dissolved solids (TDS) in the water used for quenching shall not exceed 1,100 milligrams per liter (mg/L).

Applicable Compliance Method:

Compliance shall be demonstrated by using the test methods and procedures in 40 CFR Part 63.7325(a), of Subpart CCCCC, stated in Part II of this permit, section A.48, to demonstrate compliance with the TDS constituent limits for quench water.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.

Applicable Compliance Method:
Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:
10% opacity as a 3-minute average for fugitive dust emissions from all equipment comprising this emissions unit.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:
no visible emissions of fugitive dust from any egress in any building enclosing any process of this emissions unit served by a collection device (i.e., quench tower).

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

3. See 40 CFR Part 63, Subpart CCCCC (40 CFR 63.7320, 63.7321, 63.7325 - 63.7328, 63.7333, and 63.7334).

4. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources and from all stacks.

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

i. stack opacity: Method 9 of 40 CFR part 60, appendix A :

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P002) - Quench Tower 2 for B Battery - controlled with internal baffles

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05	Limit(s)

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P002) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's “Review of New Sources of Air Toxic Emissions” policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

   Pollutant: Phosphorus

   TLV (mg/m3): 0.10

   Maximum Hourly Emission Rate (lbs/hr): 0.044
   Predicted 1-Hour Maximum Ground-Level
   Concentration (ug/m3): 0.41

   MAGLC (ug/m3): 2.4

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P003) - Lime silo controlled by fabric filtration

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	0.04 pound of particulate emissions (PE) per hour, 0.2 ton of PE per year, 0.04 pound of particulate matter less than 10 micron (PM10) per hour, and see sections A.I.2.a, 2.b, 2.c and 2.d.
OAC rule 3745-17-07(A)(1)	See section A.I.2.e.
OAC rule 3745-17-11(A)(2)	See section A.I.2.f.
OAC rule 3745-31-10 thru 20	0.2 ton of PM10 as a rolling, 12-month summation.

2. Additional Terms and Conditions

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse).

2.c Visible emissions of particulate shall not exceed 5 percent opacity, as a 6-minute average, from the stack serving this emissions unit.

2.d i. The permittee shall employ best available control measures for all lime handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are)

necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20.

2.f The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall operate the baghouse whenever the lime handling operation is in use.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the lime handling operation was in use.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions and/or stack particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and 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 eliminate the visible emissions.

   The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the lime handling operation was in use. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

   These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the lime handling operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   0.04 pound of particulate emissions (PE) per hour.

   Applicable Compliance Method:
   Compliance shall be demonstrated by multiplying the uncontrolled particulate emission factor for lime transfer and conveying from Table 11.17-4 of AP-42 Section 11.17 dated 2/98 (2.2 lb/ton) by the maximum transfer rate (2 tons/hr), multiply by 1 transfer point, and multiply by one minus the percentage control efficiency of the baghouse (1-0.99).

   b. Emission Limitation:
   0.2 ton of PE per year.

   Applicable Compliance Method:
   This emission limitation was developed by multiplying the allowable PE emission limitation (0.04 pound of PE per hour) 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 hourly limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:
   0.04 pound of particulate matter less than 10 micron (PM_{10}) per hour.

   Applicable Compliance Method:
   Compliance shall be demonstrated by multiplying the uncontrolled particulate emission factor for lime transfer and conveying from Table 11.17-4 of AP-42 Section 11.17 dated 2/98 (2.2 lb/ton) by the maximum transfer rate (2 tons/hr), multiply by 1 transfer point, and multiply by one minus the percentage control efficiency of the baghouse (1-0.99).

   d. Emission Limitation:
   0.2 ton of PM_{10} as a rolling, 12-month summation.

Applicable Compliance Method:
This emission limitation was developed by multiplying the allowable PM_{10} emission limitation (0.04 pound of PM_{10} per hour) 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 hourly limitation, compliance shall also be shown with the annual emission limitation.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
10% opacity as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:
5 percent opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:
no visible emissions of fugitive dust

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P003) - Lime silo controlled by fabric filtration

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P004) - Flue gas desulfurization silo controlled by fabric filtration

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	0.004 pound of particulate emissions (PE) per hour, 0.02 ton of PE per year, 0.002 pound of particulate matter less than 10 micron (PM10) per hour, and see sections A.I.2.a thru 2.e.
OAC rule 3745-17-07(A)(1)	See section A.I.2.f.
OAC rule 3745-17-11(A)(2)	See section A.I.2.f.
OAC rule 3745-31-10 thru 20	0.009 ton of PM10 as a rolling, 12-month summation.

2. Additional Terms and Conditions

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse).

2.c Visible emissions of particulate shall not exceed 5 percent opacity, as a 6-minute average, from the stack serving this emissions unit.

2.d i. The permittee shall employ best available control measures for all desulfurization dust handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the

monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20.

2.f The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall operate the baghouse whenever the desulfurization dust handling operation is in use.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the desulfurization dust handling operation was in use.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions and/or stack particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and 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 eliminate the visible emissions.

   The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the

desulfurization dust handling operation was in use. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

   These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the desulfurization dust handling operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   0.004 pound of particulate matter (PE) per hour.

   Applicable Compliance Method:
   Compliance shall be demonstrated by multiplying the controlled particulate emission factor for unloading to elevated silo from Table 11.12-2 of AP-42 Section 11.12 dated 6/06 (0.00099 lb/ton) by the maximum transfer rate (2.09 tons/hr), and multiply by 2 transfer points.

   b. Emission Limitation:
   0.02 ton of PE per year.

   Applicable Compliance Method:
   This emission limitation was developed by multiplying the allowable PE emission limitation (0.004 pound of PE per hour) 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 hourly limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:
   0.002 pound of particulate matter less than 10 micron (PM_{10}) per hour.

   Applicable Compliance Method:
   Compliance shall be demonstrated by multiplying the controlled particulate emission factor for unloading to elevated silo from Table 11.12-2 of AP-42 Section 11.12-2 dated 6/06 (0.00034 lb/ton) by the maximum transfer rate (2.09 tons/hr), and multiply by 2 transfer points.

d. Emission Limitation:
0.009 ton of PM_{10} as a rolling, 12-month summation.

Applicable Compliance Method:
This emission limitation was developed by multiplying the allowable PM_{10} emission limitation (0.002 pound of PM_{10} per hour) 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 hourly limitation, compliance shall also be shown with the annual emission limitation.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
10% opacity as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:
5 percent opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:
no visible emissions of fugitive dust

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -(P004) - Flue gas desulfurization silo controlled by fabric filtration

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None