



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

Mailing Address:

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

**RE: DRAFT PERMIT TO INSTALL
SCIOTO COUNTY
Application No: 07-00466**

CERTIFIED MAIL

Y	TOXIC REVIEW
Y	PSD
Y	SYNTHETIC MINOR
Y	CEMS
40 CFR Part 63, Subpart L	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 6/1/00

Bearcat Coke Company, Haverhill Works
Christopher P Allen
PO Box 10388 1111 N Shore Dr
Knoxville, TN 379194005

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the 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 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 may be issued in proposed or 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 a fee of **\$11400** 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, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA
West Virginia

PCHD

Kentucky



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 07-00466

Application Number: 07-00466

APS Premise Number: 0773000182

Permit Fee: **To be entered upon final issuance**

Name of Facility: Bearcat Coke Company, Haverhill Works

Person to Contact: Christopher P Allen

Address: PO Box 10388 1111 N Shore Dr
Knoxville, TN 379194005

Location of proposed air contaminant source(s) [emissions unit(s)]:

**NW corner Gallia Pike & Ironton Ave
Haverhill, Ohio**

Description of proposed emissions unit(s):

Three 268 oven nonrecovery coke batter facilities, six quench towers, paved roads, coal handling, storage piles, coke processing.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 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 to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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. 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.

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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, 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, reopening 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 this Permit To Install.

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 of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens 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 To Install 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping 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 quarterly, i.e., 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. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install 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.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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 prove to be inadequate or cannot meet applicable standards.

7. 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.

8. 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).

9. 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.

10. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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.

11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable 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., 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**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM/PM ₁₀ (stack)	2212.10
PM (fugitive)	62.25
PM ₁₀ (fugitive)	22.68
SO ₂	3071.31
NOx	3354.27
CO	997.20
VOC	824.19
Lead	0.45
HAP	9.9
HAPS	24.9

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

PSD REQUIREMENTS

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:

United States Environmental Protection Agency
Environmental Appeals Board
401 M. Street, SW (MC-113do)
Washington, DC 20460

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

Ambient Air Monitoring for Particulate Matter 10 Microns and Smaller in Diameter (PM₁₀), Sulfur Dioxide (SO₂) and Periodic Sampling for Hazardous Air Pollutants (HAPS)

The permittee shall establish and operate ambient PM₁₀, SO₂, and HAP monitoring sites for this facility. The number and location of monitoring sites shall be based on accepted modeling practice and shall adequately monitor areas of maximum impact of the facility emissions and the background concentrations. Determination of the sampling locations shall be coordinated with, and subject to the prior approval of, the Ohio EPA. Within 45 days after the effective date of this permit, the permittee shall submit a plan describing the proposed network. This plan shall include, but not limited to, one (1) HAP monitoring site to be located near the housing subdivision which is adjacent to the proposed facility location, one (1) HAP monitoring site each to be located upwind and downwind of the proposed facility location, and one (1) meteorological site to be located close to the proposed facility location.

Following approval of the PM₁₀, SO₂ and Periodic HAP sampling network plan, 90 days will be allowed to locate the samplers in accordance with the plan. All samplers shall be sited and located in accordance with the requirements of the 40 CFR Part 58 and any subsequent amendments.

The sites shall be equipped with PM₁₀ or SO₂ samplers meeting the reference methods specified in 40 CFR Parts 50 and 53 with the additional requirement that each particulate (PM₁₀) instrument shall be equipped with a continuous flow meter (recording transducer), unless the instrument uses volumetric flow control.

PM₁₀ Operation

The permittee shall operate one of the PM₁₀ monitoring sites, specified by Ohio EPA, on an every other day schedule. The other sites will run on the same schedule as the Ohio air sampling network [one day in six] and in accordance with the following requirements:

1. The operating procedures identified in 40 CFR Parts 50 and 58 and the "Quality Assurance Handbook for Air Pollution Measurement Systems" Volume I - Principles (EPA-600/9-76-005) and Volume II - Ambient Air Specific Methods (EPA-600/4-77-027a) and the manufacturer's operating manual shall be followed.
2. The flow rate of each PM₁₀ sampler shall be calibrated after every 500 hours of operation and after any instance of major repair or maintenance.
3. An operator's log book shall be maintained for each site location with a format and content as specified in guidance provided by the Ohio EPA.

The PM₁₀ monitoring network shall be in operation at least six months prior to plant start up.

Sulfur Dioxide Instrument Operation

The SO₂ ambient monitors will run continuously 24 hours per day, 365 days per year to measure ambient air except during maintenance, repair, calibration or periodic checks.

The SO₂ monitoring network shall be in operation at least six months prior to plant start up.

Hazardous Air Pollutant Operation

Hazardous Air Pollutant sampling will follow US EPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air Method TO-15 for sampling Volatile Organic Compounds and Method TO-13 (The Determination of Benzo(a)pyrene [B(a)P] and other Polynuclear Aromatic Hydrocarbons (PAHs) in Ambient Air Using Gas Chromatographic (GC) and High Performance Liquid Chromatographic (HPLC) Analysis). The samples will be collected for a minimum of 24 hours. The collection frequency will be no less than once every 12 days in accordance with the USEPA Urban Air Toxics Monitoring Program.

The compounds sampled for will include at least the following 51 compounds as provided for by Method TO-15. Those compounds include:

METHOD TO-15 (VOCS)*

No.	Hazardous Air Pollutants	No.	Hazardous Air Pollutants
1	1,2-Dibromoethane	27	Cumene
2	1,2-Dichloroethane (EDC)	28	Ethyl acrylate
3	1,3-Butadiene	29	Ethylbenzene
4	1,1-Dichloroethane	30	Ethylene Oxide ***
5	1,1,2,2-Tetrachloroethane	31	Hexachlorobenzene
6	1,2,4-Trichlorobenzene	32	Hexachlorobutadiene
7	1,1,2-Trichloroethane	33	Hexachlorocyclopentadiene
8	1,2-Dichloropropane (propylene dichloride)	34	Hexachloroethane
9	1,3-Dichloropropene	35	m-Xylene
10	1,1,1-Trichloroethane	36	Methyl ethyl ketone
11	1,1-Dichloroethylene	37	Methyl isobutyl ketone
12	1,4-Dichlorobenzene	38	Methyl tert-butyl ether (MTBE)
13	2,2,4-Trimethylpentane	39	Methyl methacrylate
14	2-Chloro-1,3-butadiene (chloroprene)	40	Methylene Chloride
15	Acetonitrile	41	n-Hexane
16	Acrylonitrile	42	o-Xylene
17	Allyl chloride	43	p-Xylene
18	Benzene	44	Styrene
19	Benzyl chloride+	45	Tetrachloroethylene (PCE)
20	Bromoform (tribromomethane)	46	Toluene
21	Bromomethane (methyl bromide)	47	Trichloroethylene (TCE)
22	Carbon Tetrachloride	48	Vinyl chloride
23	Chlorobenzene	49	Vinyl acetate
24	Chloroethane (ethyl chloride)	50	Vinyl bromide
25	Chloroform	51	Xylene (mixed)
26	Chloromethane (methyl chloride)		

Method TO-13 sampling will include the follow PAHs and any other coke oven emission HAP detectable by TO-13:

Acenaphthen

Benzo(e)pyrene

Fluorene

Acenaphthylene

Benzo(g,h,i)perylene

Indeno(1,2,3-cd)pyrene

Anthracene

Benzo(k)fluoranthene

Naphthalene

Benzo(a)anthracene

Dibenzo(a,h)anthracene

Phenanthrene

Benzo(a)pyrene

Fluoranthene

Pyrene

Benzo(b)fluoranthene

Chrysene

Quality Assurance

The permittee shall meet the quality assurance activities specified in 40 CFR Part 58, Appendix B except that at least 25% of the total number of PM₁₀ sites shall be collocated with a duplicate sampler. One of the collocated sites shall be at the site with the highest expected 24-hour pollutant concentration. The collocated monitor(s) shall run on a one day in six schedule. Equipment siting and performance specifications must be in accordance with "Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)," (EPA-450/4-80-012).

Other quality assurance activities that are specified in 40 CFR Part 58, Appendix B include quarterly instruments accuracy audits of all of the PM₁₀ and SO₂ monitors and precision checks performed at least bi-weekly on the SO₂ monitors. Additional information and guidance about these activities is available from the Ohio EPA Air Monitoring Section.

The Air Monitoring Section and Ohio EPA District Office and local air agency personnel shall be provided with access to each site location. The site operator and/or supervisor shall accompany the Air Monitoring Section, Ohio EPA District Office and/or local air agency personnel on any site inspection or audit, and respond to inquiries regarding instrument operations and maintenance.

Appropriate corrective actions must be taken by the permittee following the identification of any problem by the independent auditor, or Air Monitoring Section, Ohio EPA District Office and/or local air agency personnel.

Data Capture

Data capture shall be no less than 75% of the total possible samples to be collected on a quarterly basis. The following table summarizes the sample numbers by pollutant:

<u>Pollutant</u>	<u>Total Samples/Quarter/Site</u>	<u>Required Minimum Samples</u>
SO ₂	2208 / 1 hr sample	1656
PM ₁₀	45 / 24 hr. samples Every-other-day sampler	34
PM ₁₀	15 / 24 hr. samples 1-in- 6 day sampler	12
PM ₁₀ Collocated	15 / 24 hr. sampler 1-in-6 day sampler	12
HAP	10 / 24 hr. samples	7

Reporting Requirements for the PM₁₀, SO₂ and HAPs Ambient Air Monitoring Network Audit and Quality Assurance Results

All air quality measurement data shall be reported to the Air Monitoring Section of the Ohio EPA, Division of Air Pollution Control in Columbus, within 18 days after the end of each calendar quarter, beginning with the first quarter after commencement of monitor operation. For HAPs measurements the data shall be reported within 45 days of the end of the calendar quarter. All ambient data shall be submitted on magnetic media (diskettes) or via e-mail in Aerometric Information Retrieval System (AIRS) format in a manner compatible for direct entry into the Ohio EPA Ambient Air Quality Data Handling System.

Independent audit (accuracy) results and precision results must be submitted quarterly to the Air Monitoring Section of the Ohio EPA, Division of Air Pollution Control in Columbus, and the appropriate Ohio EPA District Office or local air agency, within 45 days after the end of each calendar quarter, beginning with the first quarter after commencement of monitor operation.

Continued Operation

The permittee shall continue to operate the PM₁₀ and SO₂ ambient monitoring network as described in the permit condition for at least five years after commence of operation. The HAPs monitoring network shall continue operation at least two years after commencement of operation at the facility. The permittee can then request the Director to examine the ambient air quality data collected by the permittee's HAPs and criteria pollutant ambient monitoring network to determine if further ambient monitoring is necessary. The Director shall have at least one year to make a decision on the need for continued operation of the monitoring network. In determining the further need for the continued operation of the monitoring network, the Director shall consider the concentrations measured by the monitors, the trends in air quality concentrations, and the value of the air quality data in fulfilling the goals and requirements of the federal Clean Air Act and Chapter 3704 of the Ohio Revised Code.

Ohio EPA Air Toxics Policy

The following emissions units are subject to the OEPA air toxics policy: P901, P902, P903, P001, P002, P003, P004, P005 and P006. To ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxics Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxics Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: arsenic

TLV (Ug/m3): 10

Maximum Hourly Emission Rate (lbs/hr): 0.481

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.146

MAGLC (Ug/m3): 0.238

Pollutant: benzene

TLV (Ug/m3): 32,000

Maximum Hourly Emission Rate (lbs/hr): 0.823

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.25

MAGLC (Ug/m3): 762

Pollutant: mercury

TLV (Ug/m3): 10

Maximum Hourly Emission Rate (lbs/hr): 0.497

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.151

MAGLC (Ug/m3): 0.238

Pollutant: naphthalene

TLV (Ug/m3): 52,000

Maximum Hourly Emission Rate (lbs/hr): 0.548

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.166

MAGLC (Ug/m3): 1,240

Pollutant: phosphorus

TLV (Ug/m3): 100

Maximum Hourly Emission Rate (lbs/hr): 1.23

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.373

MAGLC (Ug/m3): 2.38

Pollutant: toluene

TLV (Ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 0.794

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 0.241

MAGLC (Ug/m3): 4,480

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a “modification” as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a “modification”:

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate {not including an increase in an “allowable” emission limitation specified in the terms and conditions of this permit}, reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a “modification” requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a “modification” under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determined that the changed emissions unit still satisfies the Air Toxics Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a “modification” as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

- a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and ,
- b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
268 Oven Nonrecovery Coke Battery Facility #1 (Batteries A-D): Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion	OAC rule 3745-31-05(A)(3)	43.89 lbs/hr PM / PM ₁₀ ** 192.24 TPY PM / PM ₁₀ ** 594 lbs/hr SO ₂ 968.42 TPY SO ₂ 675 lbs/hr NOx 1100.48 TPY NOx 55.84 lbs/hr CO 244.58 TPY CO 11.97 lbs/hr VOC 52.43 TPY VOC 0.09 lb/hr Lead 0.15 TPY Lead 0.023 lb HAPs / ton coal See A.I.2.a. below See A.I.2.b. below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	192.24 TPY PM/PM10 * ** 968.42 TPY SO ₂ * 1100.48 TPY NOx * 244.58 TPY CO * 52.43 TPY VOC * See A.I.2.d. below 0.88 lb SO ₂ / ton coal 265 lbs/hr, three hour average, SO ₂ 1 lb NOx / ton coal

Charging Operations with
baghouse with traveling
hood

		20 ppm CO 10 ppm VOC
		See A.I.2.k.1. below
	OAC rule 3745-17-07(A)(1)	See A.I.2.e. below
	OAC rule 3745-17-10(C)(1)	0.10 pound of particulate per mmBtu actual heat input
	OAC rule 3745-18-06(E)(2)	2359.1 lbs/hr SO ₂ (less stringent than 40 CFR Part 52.21 and 3745-31-05)
	OAC rule 3745-21-08(B)	See A.I.2.m. below
	OAC rule 3745-23-06(B)	See A.I.2.n. below
	OAC rule 3745-31-05(D)	3.05 TPY HAPS * See A.I.2.o. below
	40 CFR Part 63, Subpart L	See A.I.2.j. below
	OAC rule 3745-31-05(A)(3)	See A.I.2.c. below 5.47 lbs/hr fugitive PM 1.64 lbs/hr fugitive PM ₁₀ 8.91 TPY fugitive PM 2.67 TPY fugitive PM ₁₀ 1.20 lbs/hr PM/PM ₁₀ from each charging baghouse ** 1.98 TPY PM/PM ₁₀ from charging baghouses ** 0.20 lb/hr SO ₂ 0.33 TPY SO ₂ 1.35 lbs/hr VOC 2.20 TPY VOC 1.89 lbs/hr CO 3.08 TPY CO
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	See A.I.2.f. below 1.98 TPY PM/PM ₁₀ stack emissions * ** 8.91 TPY PM fugitive emissions * 2.67 TPY PM ₁₀ fugitive emissions * 0.33 TPY SO ₂ * 2.20 TPY VOC * 3.08 TPY CO *

Pushing Operations with
baghouse with shed

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-11

40 CFR Part 63, Subpart L

OAC rule 3745-31-05(A)(3)

40 CFR Part 52.21 and
OAC rule 3745-31-10 through 20

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-11

OAC rule 3745-21-08(B)

OAC rule 3745-31-05(D)

See A.I.2.k.3. below

See A.I.2.e. below

72.6 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

See A.I.2.1. below

See A.I.2.c. below

See A.I.2.h. below

26.33 lbs/hr PM/PM₁₀ **

42.92 TPY PM/PM₁₀ **

33.75 lbs/hr SO₂

55.02 TPY SO₂

10.8 lbs/hr NOx

17.61 TPY NOx

135 lbs/hr VOC

220.10 TPY VOC

51.98 lbs/hr CO

84.74 TPY CO

0.00024 lb HAPs /ton coal

See A.I.2.g. below

42.92 TPY PM/PM₁₀ * **

17.61 TPY NOx *

55.02 TPY SO₂ *

220.10 TPY VOC *

84.74 TPY CO *

0.077 lb CO / ton coal

0.20 lb VOC / ton coal

See A.I.2.k.2. below

See A.I.2.e. below

72.6 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

A.I.2.m below

0.26 TPY HAPS *

See A.I.2.o below

* the TPY mass emission rate
limitations are based on a rolling, 12-

month summation of the monthly emissions

** note all PM₁₀ emissions are assumed to be PM emissions

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from the waste gas exhaust stack(s) shall not exceed 10% opacity as a 6-minute average.
- 2.b** No visible emissions shall be permitted from the waste gas common duct or its associated piping.
- 2.c** Except as otherwise provided in these terms and conditions, visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
- 2.d.** Particulate emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases.
- 2.e** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.f** Particulate emissions from each charging baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases (4 charging units/facility).
- 2.g** Particulate emissions from the pushing baghouse exhaust shall not exceed 0.039 lb PM₁₀ / ton coal.
- 2.h** The emissions control system for the pushing operation(s) shall maintain a minimum capture efficiency of 98%.
- 2.i** The emission limitations set forth in 40 CFR Part 63, Subpart L shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Administrator and shall not exceed 180 days.

- 2.j** The coke oven emissions from the nonrecovery coke oven batteries shall not exceed 0.0 percent leaking coke oven doors, as determined by the procedures in 40 CFR Part 63, Section 63.309(d)(1); or the permittee shall monitor and record, once per day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under a negative pressure.
- 2.k** Compliance with OAC rule 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by the following best available control technologies:
- i. The waste gas from coking shall be processed by the use of a lime spray dryer with a manufacturer's design control efficiency of 92% for SO₂ control, staged combustion for NO_x control, combustion optimization for CO and VOC control, and a baghouse for PM control.
 - ii. The pushing operations shall employ a baghouse with a shed for PM control and work practices for CO and VOC control.
 - iii. The charging operations shall employ a baghouse with a traveling hood for PM control.
- 2.l** For charging operations, the permittee shall install, operate and maintain an emission control system for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operation.
- 2.m** Except as provided by rule, all new stationary carbon monoxide emission sources shall minimize carbon monoxide emissions by the use of the best available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and conditions A.I.2.k.1 and A.I.2.k.2 above to minimize carbon monoxide emissions.
- 2.n** Except as provided by rule, all stationary nitrogen oxide emission sources shall minimize nitrogen oxide emissions by the use of the latest available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and condition A.I.2.k.1 above to minimize nitrogen oxide emissions.
- 2.o** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust and pushing stacks) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

1. The pressure drop across the pushing baghouse shall be maintained within the manufacturer’s written recommended range of 3 - 12 inches of water while the emissions unit is in operation.

The pushing emissions which escape the cokeside oven door shall be minimized by collecting in a stationary shed, which runs the length of the coke oven battery. The shed shall be visually examined weekly for areas potentially needing repair.

2. The pressure drop across the charging baghouse shall be maintained within the manufacturer’s written recommended range of 3 - 12 inches of water while the emissions unit is in operation.
3. The pressure drop across the waste gas exhaust baghouse shall be maintained within the manufacturer’s written recommended range of 3 - 12 in inches of water while the emissions unit is in operation.
4. The permittee shall operate and maintain common duct temperatures in a range between 1400 ° F and 2200 ° F established in the Work Practice Plan to ensure emission limits for the waste gas exhaust are not exceeded.
5. The maximum hourly charging/pushing rate for this emissions unit shall not exceed 15 ovens per hour.
6. The maximum daily wet coal usage rate for this emissions unit shall not exceed 6,030 wet tons coal.
7. The maximum annual wet coal usage rate for this emissions unit shall not exceed 2,200,950 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		183,412
1-2		366,825
1-3		550,238
1-4		733,650
1-5		917,063
1-6		1,100,475
1-7		1,283,888
1-8		1,467,300

1-9	1,650,712
1-10	1,834,125
1-11	2,017,538
1-12	2,200,950

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

8. The lime spray dryer and baghouse associated with the battery waste gas exhaust shall begin operation within forty (40) days after start-up of the first coke battery.
9. At all times including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery and its pollution control equipment required under 40 CFR Part 63, Subpart L, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR Part 63, Subpart L. Failure to adhere to the requirements of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be assessable within 3 working days to the Administrator for a period of at least five years from the date of the monitoring sample, measurement, report or application.
2. The permittee shall prepare and submit to the Administrator a written emission control work practice plan for each coke oven battery, in accordance with 40 CFR Part 63, Subpart L, Section 63.306.
3. During any period of time that the permittee is required to implement the provisions of the work practice plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any record keeping requirement(s) under 63.311(f)(4) for the emission point during a particular day is a single violation.
4. The permittee shall implement the provisions of the coke oven emission control work practice plan in accordance with 40 CFR Section 63.306(c).
5. Revisions to the work practice emission control plan are governed by the provisions of 40 CFR Part 63, Sections 63.306(a)(2) and 63.306(d).
6. The permittee of a coke oven battery shall develop and implement a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup,

shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.

7. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
 - a. does not address a startup, shutdown, or malfunction event that has occurred
 - b. fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or
 - c. does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

8. If the permittee demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
 - a. constitute a violation of relevant requirements of 40 CFR Part 63, Subpart L;
 - b. be used in any compliance determination under 40 CFR Part 63, Section 63.309; or
 - c. be considered for purposes of 40 CFR Part 63, Section 63.306, until the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 40 CFR Part 63, Section 63.306, regardless of whether the permittee further contests such determination. The permittee's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 40 CFR Part 63, Subpart 63.306, as written notification from the certified observer that an exceedance has occurred.

9. Copies of the work practice plan developed under 40 CFR Part 63, Section 63.306 and the startup, shutdown, and malfunction plan developed under 40 CFR Part 63, Section 63.310 shall be kept onsite at all times. The permittee shall maintain the following information:
 - a. records of daily pressure monitoring, according to 40 CFR Part 63, Section 63.303(b)(1)(ii);
 - b. records demonstrating the performance of work practice requirements according to 40 CFR Part 63, Section 63.306(b)(7);

- c. design characteristics of each emission control system for the capture and collection of charging emissions, as required by 40 CFR Part 63, Section 63.303(b)(2).
 - d. a copy of the work practice plan required by 40 CFR Part 63, Section 63.306 and any revision to the plan;
 - e. records required to be maintained and reports required to be filed with the Administrator, with a copy to the Ohio EPA District Office or local air agency, under 40 CFR Part 63, Subpart L shall be made available in accordance with the requirements of this paragraph by the permittee to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying.
 - i. requests under this term and condition shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;
 - ii. the permittee shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under part 2 of the CFR, chapter 40;
 - iii. nothing in this term and condition shall require the production for inspection or copying of any portion of a document that contains trade secret or confidential business information that the Administrator would be prohibited from disclosing to the public under part 2 of the CFR, chapter 40; and;
 - iv. the inspection or copying of document under this term and condition shall not in any way affect any property right of the permittee in such document under the laws for the protection of intellectual property, including the copyright laws.
10. The permittee shall maintain a record of internal reports which form the basis of each malfunction notification under term and condition IV.4.
11. The permittee shall monitor and record, once per day for each day of operation, the pressure in the common battery tunnel to ensure that the ovens are operated under a negative pressure.
12. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the pushing baghouse 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 the baghouse on a once per shift basis.
13. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the charging baghouse 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 the baghouse on a once per shift basis.
 14. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the waste gas baghouse 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 the baghouse on a once per shift basis.
 15. The permittee shall operate and maintain equipment to continuously monitor and record SO₂ from the waste gas stack in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
 16. The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to, parts per million SO₂ on a 1-hour basis, and in units of pounds per hour on a one hour and three hour average basis and results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
 17. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system designed to ensure continuous valid and representative readings of SO₂. 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 SO₂ monitoring system must be kept on site and available for inspection during regular office hours.
 18. The permittee shall maintain daily records of the coal usage rate, in wet tons, in this emissions unit.
 19. The permittee shall maintain hourly records of the charging/pushing rate, in number of charges/pushes per hour, for this emissions unit.
 20. The permittee shall maintain monthly records of the following information:
 - a. the wet coal usage rate for each month; and,
 - b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal usage rate for each calendar month.

21. The permittee shall monitor and record the temperature of the common duct tunnel on a once per shift basis.
22. To satisfy the requirements of 40 CFR Part 63, Section 63.310 to develop a startup, shutdown, and malfunction plan, the permittee may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for 40 CFR Part 63, Section 63.310 and is made available for inspection at reasonable times when requested by the Administrator.

IV. Reporting Requirements

1. The permittee shall provide a written statement(s) to certify compliance to the Administrator within 45 days of the applicable compliance date for the emission limitations or requirements in 40 CFR Part 63, Subpart L. The permittee shall include the following information in the initial compliance certification:
 - a. statement, signed by the permittee, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in 40 CFR Part 63, Section 63.310.
2. The permittee shall provide written notification(s) to the Administrator of:
 - a. intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and construction of a greenfield coke oven battery), including the anticipated date of startup.
3. The permittee shall include the following information in the semiannual compliance certification:
 - a. certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for the coke oven battery during the reporting period or that a startup, shutdown, event did occur and a report was submitted according to the requirements in 40 CFR Part 63, Section 63.310(e); and,
 - b. certification, signed by the permittee, that work practices were implemented if applicable under 40 CFR Part 63, Section 63.306.
4. In order for the provisions of term and condition III.8. to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the permittee;
 - a. if practicable, to the certified observer if the observer is at the facility during the occurrence; or

- b. to the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification was not made, an explanation of why no such notification was made.
5. Within 14 days of the original notification made under term and condition IV.4. or after a startup or shutdown, the permittee shall submit a written report to the Portsmouth Local Air Agency that:
 - a. describes the times and circumstances of the startup, shutdown, or malfunction;
 - b. describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.
6. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the pushing baghouse did not comply with the allowable range specified above.
7. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the charging baghouse did not comply with the allowable range specified above.
8. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the waste gas exhaust baghouse did not comply with the allowable range specified above.
9. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative wet coal usage levels.

10. The permittee shall submit common tunnel duct temperature deviation (excursion) reports that identify all periods of during which the temperature in the common tunnel duct did not comply with the manufacturer's written recommendation range . These reports shall include the time of the temperature deviation, the duration of the exceedance and the corrective action taken.
11. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
12. The permittee shall submit deviation (excursion) reports which identify all exceedances of the hourly charging/pushing rate limitation.
13. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
14. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable limit(s) specified OAC Chapter 3745-18, the daily SO₂ emission rates and/or the annual SO₂ emission rates. These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).

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 any continuous SO₂ 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 analyzer 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 analyzer 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 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for the waste gas exhaust and pushing baghouse associated with 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.
- b. The emission testing shall be conducted to demonstrate compliance with the particulate, SO₂, NO_x, VOC, CO, and HAPS (waste gas stack only) emissions limits.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A, for SO₂, Method 6 of 40 CFR Part 60, Appendix A, Method 7 of 40 CFR Part 60, Appendix A, for NO_x, for CO, Method 10 of 40 CFR Part 60, Appendix A, for VOC, Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, for HAPs, Method 18 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

A particulate emissions test shall also be conducted at the inlet of the Pushing baghouse to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A, shall be employed.

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

Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid

characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

2. Certification

Prior to the installation of the continuous SO₂ 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 6 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate, the permittee shall conduct certification tests of the continuous SO₂ monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6. Personnel from the Portsmouth 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. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the Portsmouth Local Air Agency within 30 days after the test is completed. Copies of the test results shall be sent to the Portsmouth Local Air Agency and the Ohio EPA, Central Office. Certification of the continuous SO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

3. 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:

10 % opacity as a 6-minute average from the waste gas exhaust stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

43.89 lbs/hr PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the waste gas exhaust baghouse.

d. Emission Limitation:

594 lbs/hr SO₂ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

e. Emission Limitation:

675 lbs/hr NO_x from waste gas stack

55.84 lbs/hr CO from waste gas stack

11.97 lbs/hr VOC

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

f. Emission Limitation:

0.09 lb/hr lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton wet coal charged by the wet tons coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency).

g. Emission Limitation:

192.24 TPY PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per year divided by 2000 lbs/ton.

h. Emission Limitation:

968.42 TPY SO₂ from waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven Waste Gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar year, as measured by the SO₂ CEM.

i. Emission Limitation:

1100.48 TPY NO_x from waste gas stack

244.58 TPY CO from waste gas stack

52.43 TPY VOC from waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven Waste Gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

j. Emission Limitation:

0.15 TPY lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton coal charged by the tons wet coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency) by the tons of wet coal charged per month and divide by 2000 lbs/ton.

k. Emission Limitation:

33.75 lbs/hr SO₂ from pushing
10.8 lbs/hr NO_x from pushing
135 lbs/hr VOC from pushing
51.98 lbs/hr CO from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

l. Emission Limitation:

26.33 lbs/hr PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the Pushing baghouse.

m. Emission Limitation:

42.92 TPY PM/ PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM/PM₁₀ for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

n. Emission Limitation:

55.02 TPY SO₂ from pushing
17.61 TPY NO_x from pushing
220.10 TPY VOC from pushing
84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

o. Emission Limitation:

5.47 lbs/hr fugitive PM from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate).

p. Emission Limitation:

1.64 lbs/hr fugitive PM₁₀ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be PM₁₀.

q. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate).

r. Emission Limitation:

2.67 TPY fugitive PM₁₀ emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be PM₁₀.

s. Emission Limitation:

1.20 lbs/hr PM/PM₁₀ from each charging baghouse

Applicable Compliance Method:

Compliance shall be determined by multiplying the grain loading of each charging baghouse of 0.008 gr PM/dscf of exhaust gases by the maximum air flow of the exhaust gas (17,434 dscf/min) by the number of minutes to charge each oven by the number of charges per hour divided by 7000 grains per lb.

t. Emission Limitation:

1.98 TPY PM/PM₁₀ combined from charging baghouses

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per year by 4 charging baghouses per facility divided by 2000 lbs per ton.

u. Emission Limitation:

0.20 lb/hr SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/ wet ton coal charged, October 1989 Jewell stack test, by the tons of wet coal charged per hour

v. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

w. Emission Limitation:

1.35 lbs/hr VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

x. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the tons of coal charged per year divided by 2000 lbs per ton.

y. Emission Limitation:

1.89 lbs/hr CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

z. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

aa. Emission Limitation:

0.023 lb HAPS / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 18 of 40 CFR Part 60, Appendix A for the Waste Gas exhaust . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

bb. Emission Limitation

3.05 TPY HAPS from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs HAPS/ ton coal from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

cc. Emission Limitation:

192.24 TPY PM/ PM₁₀ from the waste gas stack *

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

dd. Emission Limitation:

968.42 TPY SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven waste gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar month, as measured by the SO₂ CEM; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ee. Emission Limitation:

1100.48 TPY NO_x from the waste gas stack

244.58 TPY CO from the waste gas stack

52.43 TPY VOC from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven waste gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ff. Emission Limitation:

0.008 gr/dscf of exhaust gases from the waste gas spray dryer baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

gg. Emission Limitation:

0.88 lb SO₂ / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 6 of 40 CFR Part 60, Appendix A.

hh. Emission Limitation:

265 lbs/hr, three hour average, SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the three hour average lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

ii. Emission Limitation:

1 lb NO_x / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 7 of 40 CFR Part 60, Appendix A.

jj. Emission Limitation:

20 ppm CO from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

kk. Emission Limitation:

10 ppm VOC from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

ll. Emission Limitation:

20 % opacity as a 6-minute average, except as provided by rule from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

mm. Emission Limitation:

0.10 pound of particulate per mmBtu actual heat input from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(9) determined according to Method 5 of 40 CFR Part 60, Appendix A.

nn. Emission Limitation:

2359.1 lbs/hr SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-18-04(A)

oo. Emission Limitation:

0.0 percent leaking oven doors

Applicable Compliance Method:

Compliance shall be determined by the monitoring/recordkeeping requirements in Section A.I.2.j. of this permit.

pp. Emission Limitation:

0.008 gr/dscf of exhaust gases from each charging baghouse

Applicable Compliance Method:

Compliance shall be demonstrated by the manufacturer guaranteed emission limitations.

qq. Emission Limitation:

1.98 TPY PM/PM₁₀ combined from charging baghouses *

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per month by 4 charging baghouses per facility divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

rr. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of charged per month divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate); adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ss. Emission Limitation:

2.67 TPY fugitive PM₁₀ emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per month by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to by PM₁₀; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

tt. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

uu. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

vv. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

ww. Emission Limitation:

72.6 lbs/hr PM from charging

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

xx. Emission Limitation:

0.039 lb PM₁₀/ ton coal from the pushing baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

yy. Emission Limitation:

0.077 lb CO / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

zz. Emission Limitation:

0.20 lb VOC / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

aaa. Emission Limitation:

72.6 lbs/hr PM from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

bbb. Emission Limitation:

42.92 TPY PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM /PM₁₀ for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ccc. Emission Limitation:

55.02 TPY SO₂ from pushing

17.61 TPY NO_x from pushing

220.10 TPY VOC from pushing

84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent

performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ddd. Emission Limitation:

0.00024 lb/ton HAPs from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00024 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

eee. Emission Limitation:

0.26 TPY HAPS from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00026 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
268 Oven Nonrecovery Coke Battery Facility #1 (Batteries A-D):	OAC 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.
Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion		
Charging Operations with baghouse with traveling hood		
Pushing Operations with baghouse with shed		

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
268 Oven Nonrecovery Coke Battery Facility #1 (Batteries E-F):		
Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion	OAC rule 3745-31-05(A)(3)	43.89 lbs/hr PM/PM ₁₀ ** 192.24 TPY PM/PM ₁₀ ** 594 lbs/hr SO ₂ 968.42 TPY SO ₂ 675 lbs/hr NOx 1100.48 TPY NOx 55.84 lbs/hr CO 244.58 TPY CO 11.97 lbs/hr VOC 52.43 TPY VOC 0.09 lb/hr Lead 0.15 TPY Lead 0.023 lb HAPs / ton coal
		See A.I.2.a below See A.I.2.b below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	192.24 TPY PM/PM ₁₀ * ** 968.42 TPY SO ₂ * 1100.48 TPY NOx * 244.58 TPY CO * 52.43 TPY VOC * See A.I.2.d below 0.88 lb SO ₂ / ton coal 265 lbs/hr, three hour average, SO ₂ 1 lb NOx / ton coal 20 ppm CO 10 ppm VOC

Charging Operations with
baghouse with traveling
hood

OAC rule 3745-17-07(A)(1)

See A.I.2.k.1 below

OAC rule 3745-17-10(C)(1)

See A.I.2.e below

OAC rule 3745-18-06(E)(2)

0.10 pound of particulate per mmBtu
actual heat input

OAC rule 3745-21-08(B)

2359.1 lbs/hr SO₂ (less stringent than
40 CFR Part 52.21 and 3745-31-05)

OAC rule 3745-23-06(B)

See A.I.2.m below

OAC rule 3745-31-05(D)

See A.I.2.n below

40 CFR Part 63, Subpart L

3.05 TPY HAPS *
See A.I.2.o below

OAC rule 3745-31-05(A)(3)

See A.I.2.j below

See A.I.2.c below
5.47 lbs/hr fugitive PM
1.64 lbs/hr fugitive PM₁₀
8.91 TPY fugitive PM
2.67 TPY fugitive PM₁₀
1.20 lbs/hr PM/PM₁₀ from each
charging baghouse **
1.98 TPY PM/PM₁₀ from charging
baghouses **
0.20 lb/hr SO₂
0.33 TPY SO₂
1.35 lbs/hr VOC
2.20 TPY VOC
1.89 lbs/hr CO
3.08 TPY CO

40 CFR Part 52.21 and
OAC rule 3745-31-10 through 20

See A.I.2.f below
See A.I.k.3 below
1.98 TPY PM/PM₁₀ stack emissions *
**
8.91 TPY PM fugitive emissions *
2.67 TPY PM₁₀ fugitive emissions *
0.33 TPY SO₂ *
2.20 TPY VOC *
3.08 TPY CO *

OAC rule 3745-17-07(A)(1)

See A.I.2.e below

Pushing Operations with
baghouse with shed

OAC rule 3745-17-11

40 CFR Part 63, Subpart L

OAC rule 3745-31-05(A)(3)

40 CFR Part 52.21 and
OAC rule 3745-31-10 through 20

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-11

OAC rule 3745-21-08(B)

OAC rule 3745-31-05(D)

72.6 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

See A.I.2.1 below

See A.I.2.c below

See A.I.2.h below

26.33 lbs/hr PM/PM₁₀ **

42.92 TPY PM/PM₁₀ **

33.75 lbs/hr SO₂

55.02 TPY SO₂

10.8 lbs/hr NOx

17.61 TPY NOx

135 lbs/hr VOC

220.10 TPY VOC

51.98 lbs/hr CO

84.74 TPY CO

0.00024 lb HAPs/ton coal

See A.I.2.k.2 below

See A.I.2.g below

42.92 TPY PM/PM₁₀ * **

17.61 TPY NOx *

55.02 TPY SO₂ *

220.10 TPY VOC *

84.74 TPY CO *

0.077 lb CO / ton coal

0.20 lb VOC / ton coal

See A.I.2.e below

72.6 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

A.I.2.m below

0.26 TPY HAPS *

See A.I.2.o below

* the TPY mass emission rate
limitations are based on a rolling, 12-
month summation of the monthly
emissions

** note all PM₁₀ emissions are assumed
to be PM emissions

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from the waste gas exhaust stack(s) shall not exceed 10% opacity as a 6-minute average.
- 2.b** No visible emissions shall be permitted from the waste gas common duct or its associated piping.
- 2.c** Except as otherwise provided in these terms and conditions, visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
- 2.d.** Particulate emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases.
- 2.e** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.f** Particulate emissions from each charging baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases (4 charging units/facility).
- 2.g** Particulate emissions from the pushing baghouse exhaust shall not exceed 0.039 lb PM₁₀ / ton coal.
- 2.h** The emissions control system for the pushing operation(s) shall maintain a minimum capture efficiency of 98%.
- 2.i** The emission limitations set forth in 40 CFR Part 63, Subpart L shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Administrator and shall not exceed 180 days.
- 2.j** The coke oven emissions from the nonrecovery coke oven batteries shall not exceed 0.0 percent leaking coke oven doors, as determined by the procedures in 40 CFR Part 63, Section 63.309(d)(1); or the permittee shall monitor and record, once per day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under a negative pressure.
- 2.k** Compliance with OAC rule 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by the following best available control technologies:
 - i.** The waste gas from coking shall be processed by the use of a lime spray dryer with a manufacturer's design control efficiency of 92% for SO₂ control, staged combustion for NO_x control, combustion optimization for CO and VOC control, and a baghouse for PM control.

- ii. The pushing operations shall employ a baghouse with a shed for PM control and work practices for CO and VOC control.
 - iii. The charging operations shall employ a baghouse with a traveling hood for PM control.
- 2.l** For charging operations, the permittee shall install, operate and maintain an emission control system for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operation.
- 2.m** Except as provided by rule, all new stationary carbon monoxide emission sources shall minimize carbon monoxide emissions by the use of the best available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and conditions A.I.2.k.1 and A.I.2.k.2 above to minimize carbon monoxide emissions.
- 2.n** Except as provided by rule, all stationary nitrogen oxide emission sources shall minimize nitrogen oxide emissions by the use of the latest available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and condition A.I.2.k.1 above to minimize nitrogen oxide emissions.
- 2.o** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust and pushing stacks) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

1. The pressure drop across the pushing baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 inches of water while the emissions unit is in operation.

The pushing emissions which escape the cokeside oven door shall be minimized by collecting in a stationary shed, which runs the length of the coke oven battery. The shed shall be visually examined weekly for areas potentially needing repair.
2. The pressure drop across the charging baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 inches of water while the emissions unit is in operation.
3. The pressure drop across the waste gas exhaust baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 inches of water while the emissions unit is in operation.

4. The permittee shall operate and maintain common duct temperatures in a range between 1400 ° F and 2200 ° F established in the Work Practice Plan to ensure emission limits for the waste gas exhaust are not exceeded.
5. The maximum hourly charging/pushing rate for this emissions unit shall not exceed 15 ovens per hour.
6. The maximum daily wet coal usage rate for this emissions unit shall not exceed 6,030 wet tons coal.
7. The maximum annual wet coal usage rate for this emissions unit shall not exceed 2,200,950 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		183,412
1-2		366,825
1-3		550,238
1-4		733,650
1-5		917,063
1-6		1,100,475
1-7		1,283,888
1-8		1,467,300
1-9		1,650,712
1-10		1,834,125
1-11		2,017,538
1-12		2,200,950

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

8. The lime spray dryer and baghouse associated with the battery waste gas exhaust shall begin operation within forty (40) days after start-up of the first coke battery.
9. At all times including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery and its pollution control equipment required under 40 CFR Part 63, Subpart L, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR Part 63, Subpart L. Failure to adhere to the requirements of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be assessable within 3 working days to the Administrator for a period of at least five years from the date of the monitoring sample, measurement, report or application.
2. The permittee shall prepare and submit to the Administrator a written emission control work practice plan for each coke oven battery, in accordance with 40 CFR Part 63, Subpart L, Section 63.306.
3. During any period of time that the permittee is required to implement the provisions of the work practice plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any record keeping requirement(s) under 63.311(f)(4) for the emission point during a particular day is a single violation.
4. The permittee shall implement the provisions of the coke oven emission control work practice plan in accordance with 40 CFR Section 63.306(c).
5. Revisions to the work practice emission control plan are governed by the provisions of 40 CFR Part 63, Sections 63.306(a)(2) and 63.306(d).
6. The permittee of a coke oven battery shall develop and implement a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.
7. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
 - a. does not address a startup, shutdown, or malfunction event that has occurred
 - b. fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or
 - c. does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
8. If the permittee demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
 - a. constitute a violation of relevant requirements of 40 CFR Part 63, Subpart L;
 - b. be used in any compliance determination under 40 CFR Part 63, Section 63.309; or

- c. be considered for purposes of 40 CFR Part 63, Section 63.306, until the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 40 CFR Part 63, Section 63.306, regardless of whether the permittee further contests such determination. The permittee's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 40 CFR Part 63, Subpart 63.306, as written notification from the certified observer that an exceedance has occurred.
9. Copies of the work practice plan developed under 40 CFR Part 63, Section 63.306 and the startup, shutdown, and malfunction plan developed under 40 CFR Part 63, Section 63.310 shall be kept onsite at all times. The permittee shall maintain the following information:
 - a. records of daily pressure monitoring, according to 40 CFR Part 63, Section 63.303(b)(1)(ii);
 - b. records demonstrating the performance of work practice requirements according to 40 CFR Part 63, Section 63.306(b)(7);
 - c. design characteristics of each emission control system for the capture and collection of charging emissions, as required by 40 CFR Part 63, Section 63.303(b)(2).
 - d. a copy of the work practice plan required by 40 CFR Part 63, Section 63.306 and any revision to the plan;

- e. records required to be maintained and reports required to be filed with the Administrator, with a copy to the Ohio EPA District Office or local air agency, under 40 CFR Part 63, Subpart L shall be made available in accordance with the requirements of this paragraph by the permittee to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying.
 - i. requests under this term and condition shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;
 - ii. the permittee shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under part 2 of the CFR, chapter 40;
 - iii. nothing in this term and condition shall require the production for inspection or copying of any portion of a document that contains trade secret or confidential business information that the Administrator would be prohibited from disclosing to the public under part 2 of the CFR, chapter 40; and;
 - iv. the inspection or copying of document under this term and condition shall not in any way affect any property right of the permittee in such document under the laws for the protection of intellectual property, including the copyright laws.
- 10. The permittee shall maintain a record of internal reports which form the basis of each malfunction notification under term and condition IV.4.
- 11. The permittee shall monitor and record, once per day for each day of operation, the pressure in the common battery tunnel to ensure that the ovens are operated under a negative pressure.
- 12. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the pushing baghouse 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 the baghouse on a once per shift basis.
- 13. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the charging baghouse 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 the baghouse on a once per shift basis.

14. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the waste gas baghouse 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 the baghouse on a once per shift basis.
15. The permittee shall operate and maintain equipment to continuously monitor and record SO₂ from the waste gas stack in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
16. The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to, parts per million SO₂ on a 1-hour basis, and in units of pounds per hour on a one hour and three hour average basis and results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
17. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system designed to ensure continuous valid and representative readings of SO₂. 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 SO₂ monitoring system must be kept on site and available for inspection during regular office hours.
18. The permittee shall maintain daily records of the coal usage rate, in wet tons, in this emissions unit.
19. The permittee shall maintain hourly records of the charging/pushing rate, in number of charges/pushes per hour, for this emissions unit.
20. The permittee shall maintain monthly records of the following information:
 - a. the wet coal usage rate for each month; and,
 - b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal usage rate for each calendar month.

21. The permittee shall monitor and record the temperature of the common duct tunnel on a once per shift basis.
22. To satisfy the requirements of 40 CFR Part 63, Section 63.310 to develop a startup, shutdown, and malfunction plan, the permittee may use the standard operating procedures manual for the

battery, provided the manual meets all the requirements for 40 CFR Part 63, Section 63.310 and is made available for inspection at reasonable times when requested by the Administrator.

IV. Reporting Requirements

1. The permittee shall provide a written statement(s) to certify compliance to the Administrator within 45 days of the applicable compliance date for the emission limitations or requirements in 40 CFR Part 63, Subpart L. The permittee shall include the following information in the initial compliance certification:
 - a. statement, signed by the permittee, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in 40 CFR Part 63, Section 63.310.
2. The permittee shall provide written notification(s) to the Administrator of:
 - a. intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and construction of a greenfield coke oven battery), including the anticipated date of startup.
3. The permittee shall include the following information in the semiannual compliance certification:
 - a. certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for the coke oven battery during the reporting period or that a startup, shutdown, event did occur and a report was submitted according to the requirements in 40 CFR Part 63, Section 63.310(e); and,
 - b. certification, signed by the permittee, that work practices were implemented if applicable under 40 CFR Part 63, Section 63.306.
4. In order for the provisions of term and condition III.8. to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the permittee;
 - a. if practicable, to the certified observer if the observer is at the facility during the occurrence; or
 - b. to the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification was not made, an explanation of why no such notification was made.
5. Within 14 days of the original notification made under term and condition IV.4. or after a startup or shutdown, the permittee shall submit a written report to the Portsmouth Local Air Agency that:
 - a. describes the times and circumstances of the startup, shutdown, or malfunction;

- b. describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.
6. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the pushing baghouse did not comply with the allowable range specified above.
7. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the charging baghouse did not comply with the allowable range specified above.
8. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the waste gas exhaust baghouse did not comply with the allowable range specified above.
9. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative wet coal usage levels.
10. The permittee shall submit common tunnel duct temperature deviation (excursion) reports that identify all periods of during which the temperature in the common tunnel duct did not comply with the range demonstrated by the most recent performance test which demonstrated compliance with the waste gas exhaust emission limitations. These reports shall include the time of the temperature deviation, the duration of the exceedance and the corrective action taken.
11. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
12. The permittee shall submit deviation (excursion) reports which identify all exceedances of the hourly charging/pushing rate limitation.
13. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
14. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable limit(s) specified OAC Chapter 3745-18, the daily SO₂ emission rates and/or the annual SO₂ emission rates. These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).

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 any continuous SO₂ 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 analyzer 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 analyzer 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 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for the waste gas exhaust and pushing baghouse associated with 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.
- b. The emission testing shall be conducted to demonstrate compliance with the particulate, SO₂, NO_x, VOC, CO, and HAPS (waste gas stack only) emissions limits.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A, for SO₂, Method 6 of 40 CFR Part 60, Appendix A, Method 7 of 40 CFR Part 60, Appendix A, for NO_x, for CO, Method 10 of 40 CFR Part 60,

Appendix A, for VOC, Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, for HAPs, Method 18 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

A particulate emissions test shall also be conducted at the inlet of the Pushing baghouse to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A, shall be employed.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

2. Certification

Prior to the installation of the continuous SO₂ 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 6 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate, the permittee shall conduct certification tests of the continuous SO₂ monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6. Personnel from the Portsmouth 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. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the Portsmouth Local Air Agency within 30 days after the test is completed. Copies of the test results shall be sent to the Portsmouth Local Air Agency and the Ohio EPA, Central Office. Certification of the continuous SO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office

that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

3. 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:

10 % opacity as a 6-minute average from the waste gas exhaust stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

- b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(3).

- c. Emission Limitation:

43.89 lbs/hr PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the waste gas exhaust baghouse.

- d. Emission Limitation:

594 lbs/hr SO₂ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

- e. Emission Limitation:

675 lbs/hr NO_x from waste gas stack

55.84 lbs/hr CO from waste gas stack

11.97 lbs/hr VOC

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

f. Emission Limitation:

0.09 lb/hr lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton wet coal charged by the wet tons coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency).

g. Emission Limitation:

192.24 TPY PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per year divided by 2000 lbs/ton.

h. Emission Limitation:

968.42 TPY SO₂ from waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven Waste Gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar year, as measured by the SO₂ CEM.

i. Emission Limitation:

1100.48 TPY NO_x from waste gas stack

244.58 TPY CO from waste gas stack

52.43 TPY VOC from waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven Waste Gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

j. Emission Limitation:

0.15 TPY lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton coal charged by the tons wet coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency) by the tons of wet coal charged per month and divide by 2000 lbs/ton.

k. Emission Limitation:

33.75 lbs/hr SO₂ from pushing
10.8 lbs/hr NO_x from pushing
135 lbs/hr VOC from pushing
51.98 lbs/hr CO from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

l. Emission Limitation:

26.33 lbs/hr PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the Pushing baghouse.

m. Emission Limitation:

42.92 TPY PM/ PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM/PM₁₀ for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton

coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

n. Emission Limitation:

55.02 TPY SO₂ from pushing
17.61 TPY NO_x from pushing
220.10 TPY VOC from pushing
84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

o. Emission Limitation:

5.47 lbs/hr fugitive PM from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate).

p. Emission Limitation:

1.64 lbs/hr fugitive PM₁₀ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to by PM₁₀.

q. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate).

r. Emission Limitation:

2.67 TPY fugitive PM₁₀ emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be PM₁₀.

s. Emission Limitation:

1.20 lbs/hr PM/PM₁₀ from each charging baghouse

Applicable Compliance Method:

Compliance shall be determined by multiplying the grain loading of each charging baghouse of 0.008 gr PM/dscf of exhaust gases by the maximum air flow of the exhaust gas (17,434 dscf/min) by the number of minutes to charge each oven by the number of charges per hour divided by 7000 grains per lb.

t. Emission Limitation:

1.98 TPY PM/PM₁₀ combined from charging baghouses

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per year by 4 charging baghouses per facility divided by 2000 lbs per ton.

u. Emission Limitation:

0.20 lb/hr SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/ wet ton coal charged, October 1989 Jewell stack test, by the tons of wet coal charged per hour

v. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

w. Emission Limitation:

1.35 lbs/hr VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

x. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the tons of coal charged per year divided by 2000 lbs per ton.

y. Emission Limitation:

1.89 lbs/hr CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

z. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

aa. Emission Limitation:

0.023 lb HAPS / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 18 of 40 CFR Part 60, Appendix A for the Waste Gas exhaust . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

bb. Emission Limitation

3.05 TPY HAPS from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs HAPS/ ton coal from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

cc. Emission Limitation:

192.24 TPY PM/ PM₁₀ from the waste gas stack *

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

dd. Emission Limitation:

968.42 TPY SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven waste gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar month, as measured by the SO₂ CEM; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ee. Emission Limitation:

1100.48 TPY NO_x from the waste gas stack

244.58 TPY CO from the waste gas stack

52.43 TPY VOC from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven waste gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ff. Emission Limitation:

0.008 gr/dscf of exhaust gases from the waste gas spray dryer baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

gg. Emission Limitation:

0.88 lb SO₂ / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 6 of 40 CFR Part 60, Appendix A.

hh. Emission Limitation:

265 lbs/hr, three hour average, SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the three hour average lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

ii. Emission Limitation:

1 lb NO_x / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 7 of 40 CFR Part 60, Appendix A.

jj. Emission Limitation:

20 ppm CO from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

kk. Emission Limitation:

10 ppm VOC from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

ll. Emission Limitation:

20 % opacity as a 6-minute average, except as provided by rule from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

mm Emission Limitation:

0.10 pound of particulate per mmBtu actual heat input from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(9) determined according to Method 5 of 40 CFR Part 60, Appendix A.

nn. Emission Limitation:

2359.1 lbs/hr SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-18-04(A)

oo. Emission Limitation:

0.0 percent leaking oven doors

Applicable Compliance Method:

Compliance shall be determined by the monitoring/recordkeeping requirements in Section A.I.2.j of this permit.

pp. Emission Limitation:

0.008 gr/dscf of exhaust gases from each charging baghouse

Applicable Compliance Method:

Compliance shall be demonstrated by the manufacturer guaranteed emission limitations.

qq. Emission Limitation:

1.98 TPY PM/PM₁₀ combined from charging baghouses *

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per month by 4 charging baghouses per facility divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

rr. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of charged per month divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate); adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ss. Emission Limitation:

2.67 TPY fugitive PM₁₀ emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per month by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be by PM₁₀; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

tt. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

uu. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

vv. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

ww. Emission Limitation:

72.6 lbs/hr PM from charging

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

xx. Emission Limitation:

0.039 lb PM₁₀/ ton coal from the pushing baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

yy. Emission Limitation:

0.077 lb CO / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

zz. Emission Limitation:

0.20 lb VOC / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

aaa. Emission Limitation:

72.6 lbs/hr PM from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

bbb. Emission Limitation:

42.92 TPY PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM /PM₁₀ for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ccc. Emission Limitation:

55.02 TPY SO₂ from pushing
17.61 TPY NO_x from pushing
220.10 TPY VOC from pushing
84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ddd. Emission Limitation:

0.00024 lb/ton HAPs from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00024 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

eee. Emission Limitation:

0.26 TPY HAPS from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00026 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

VI. Miscellaneous Requirements

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Bearcat Coke Company, Haverhill Works

PTI Application: 07-00466

Issued: To be entered upon final issuance

Facility ID: 0773000182

Emissions Unit ID: P902

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
268 Oven Nonrecovery Coke Battery Facility #1 (Batteries E-H): Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion Charging Operations with baghouse with traveling hood Pushing Operations with baghouse with shed	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.

2. Additional Terms and Conditions

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) [Continued]

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 268 Oven Nonrecovery Coke Battery Facility #1 (Batteries I-L):	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion	OAC rule 3745-31-05(A)(3)	43.89 lbs/hr PM/PM ₁₀ ** 192.24 TPY PM/PM ₁₀ ** 594 lbs/hr SO ₂ 968.42 TPY SO ₂ 675 lbs/hr NO _x 1100.48 TPY NO _x 55.84 lbs/hr CO 244.58 TPY CO 11.97 lbs/hr VOC 52.43 TPY VOC 0.09 lb/hr Lead 0.15 TPY Lead 0.023 lb HAPs / ton coal See A.I.2.a below See A.I.2.b below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	192.24 TPY PM/PM ₁₀ * ** 968.42 TPY SO ₂ * 1100.48 TPY NO _x * 244.58 TPY CO * 52.43 TPY VOC * See A.I.2.d below 0.88 lb SO ₂ / ton coal 265 lbs/hr, three hour average, SO ₂ 1 lb NO _x / ton coal 20 ppm CO 10 ppm VOC

Charging Operations with
baghouse with traveling
hood

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-10(C)(1)

OAC rule 3745-18-06(E)(2)

OAC rule 3745-21-08(B)

OAC rule 3745-23-06(B)

OAC rule 3745-31-05(D)

40 CFR Part 63, Subpart L

OAC rule 3745-31-05(A)(3)

40 CFR Part 52.21 and
OAC rule 3745-31-10 through 20

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-11

See A.I.2.k.1 below

See A.I.2.e below

0.10 pound of particulate per mmBtu
actual heat input

2359.1 lbs/hr SO₂ (less stringent than
40 CFR Part 52.21 and 3745-31-05)

See A.I.2.m below

See A.I.2.n below

3.05 TPY HAPS *
See A.I.2.o below

See A.I.2.j below

See A.I.2.c below
5.47 lbs/hr fugitive PM
1.64 lbs/hr fugitive PM₁₀
8.91 TPY fugitive PM
2.67 TPY fugitive PM₁₀
1.20 lbs/hr PM/PM₁₀ from each
charging baghouse **
1.98 TPY PM/PM₁₀ from charging
baghouses **
0.20 lb/hr SO₂
0.33 TPY SO₂
1.35 lbs/hr VOC
2.20 TPY VOC
1.89 lbs/hr CO
3.08 TPY CO

See A.I.2.f below
1.98 TPY PM/PM₁₀ stack emissions *
**

8.91 TPY PM fugitive emissions *
2.67 TPY PM₁₀ fugitive emissions *
0.33 TPY SO₂ *
2.20 TPY VOC *
3.08 TPY CO *

See A.I.2.e below

Pushing Operations with
baghouse with shed

40 CFR Part 63, Subpart L

OAC rule 3745-31-05(A)(3)

40 CFR Part 52.21 and
OAC rule 3745-31-10 through 20

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-11

OAC rule 3745-21-08(B)

OAC rule 3745-31-05(D)

85.4 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

See A.I.2.l below

See A.I.2.c below

See A.I.2.h below

26.33 lbs/hr PM/PM₁₀ **

42.92 TPY PM/PM₁₀ **

33.75 lbs/hr SO₂

55.02 TPY SO₂

10.8 lbs/hr NO_x

17.61 TPY NO_x

135 lbs/hr VOC

220.10 TPY VOC

51.98 lbs/hr CO

84.74 TPY CO

0.00024 lb HAPs/ton coal

See A.I.2.g below

42.92 TPY PM/PM₁₀ * **

17.61 TPY NO_x *

55.02 TPY SO₂ *

220.10 TPY VOC *

84.74 TPY CO *

0.077 lb CO / ton coal

0.20 lb VOC / ton coal

See A.I.2.e below

72.6 lbs/hr PM (less stringent than 40
CFR Part 52.21 and 3745-31-05)

A.I.2.m below

0.26 TPY HAPS *

See A.I.2.o below

* the TPY mass emission rate
limitations are based on a rolling, 12-
month summation of the monthly
emissions

** note all PM₁₀ emissions are
assumed to be PM emissions

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from the waste gas exhaust stack(s) shall not exceed 10% opacity as a 6-minute average.
- 2.b** No visible emissions shall be permitted from the waste gas common duct or its associated piping.
- 2.c** Except as otherwise provided in these terms and conditions, visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
- 2.d.** Particulate emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases.
- 2.e** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.f** Particulate emissions from each charging baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases (4 charging units/facility).
- 2.g** Particulate emissions from the pushing baghouse exhaust shall not exceed 0.039 lb PM₁₀ / ton coal.
- 2.h** The emissions control system for the pushing operation(s) shall maintain a minimum capture efficiency of 98%.
- 2.i** The emission limitations set forth in 40 CFR Part 63, Subpart L shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Administrator and shall not exceed 180 days.
- 2.j** The coke oven emissions from the nonrecovery coke oven batteries shall not exceed 0.0 percent leaking coke oven doors, as determined by the procedures in 40 CFR Part 63, Section 63.309(d)(1); or the permittee shall monitor and record, once per day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under a negative pressure.
- 2.k** Compliance with OAC rule 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by the following best available control technologies:
 - i. The waste gas from coking shall be processed by the use of a lime spray dryer with a manufacturer's design control efficiency of 92% for SO₂ control, staged combustion for NO_x control, combustion optimization for CO and VOC control, and a baghouse for PM control.
 - ii. The pushing operations shall employ a baghouse with a shed for PM control and work practices for CO and VOC control.

iii. The charging operations shall employ a baghouse with a traveling hood for PM control.

- 2.i** For charging operations, the permittee shall install, operate and maintain an emission control system for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operation.
- 2.m** Except as provided by rule, all new stationary carbon monoxide emission sources shall minimize carbon monoxide emissions by the use of the best available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and conditions A.I.2.k.1 and A.I.2.k.2 above to minimize carbon monoxide emissions.
- 2.n** Except as provided by rule, all stationary nitrogen oxide emission sources shall minimize nitrogen oxide emissions by the use of the latest available control techniques and operating practices in accordance with best current technology. The permittee shall employ the best available control technologies described in term and condition A.I.2.k.1 above to minimize nitrogen oxide emissions.
- 2.o** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust and pushing stacks) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

1. The pressure drop across the pushing baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 in inches of water while the emissions emissions unit is in operation.

The pushing emissions which escape the cokeside oven door shall be minimized by collecting in a stationary shed, which runs the length of the coke oven battery. The shed shall be visually examined weekly for areas potentially needing repair.

2. The pressure drop across the charging baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 inches of water while the emissions unit is in operation.
3. The pressure drop across the waste gas exhaust baghouse shall be maintained within the manufacturer's written recommended range of 3 - 12 in inches of water while the emissions unit is in operation.
4. The permittee shall operate and maintain common duct temperatures in a range between 1400 ° F and 2200 ° F established in the Work Practice Plan to ensure emission limits for the waste gas exhaust are not exceeded.

5. The maximum hourly charging/pushing rate for this emissions unit shall not exceed 15 ovens per hour.
6. The maximum daily wet coal usage rate for this emissions unit shall not exceed 6,030 wet tons coal.
7. The maximum annual wet coal usage rate for this emissions unit shall not exceed 2,200,950 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		183,412
1-2		366,825
1-3		550,238
1-4		733,650
1-5		917,063
1-6		1,100,475
1-7		1,283,888
1-8		1,467,300
1-9		1,650,712
1-10		1,834,125
1-11		2,017,538
1-12		2,200,950

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

8. The lime spray dryer and baghouse associated with the battery waste gas exhaust shall begin operation within forty (40) days after start-up of the first coke battery.
9. At all times including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery and its pollution control equipment required under 40 CFR Part 63, Subpart L, in a manner consistent with good air pollution control

practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR Part 63, Subpart L. Failure to adhere to the requirements of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be assessable within 3 working days to the Administrator for a period of at least five years from the date of the monitoring sample, measurement, report or application.
2. The permittee shall prepare and submit to the Administrator a written emission control work practice plan for each coke oven battery, in accordance with 40 CFR Part 63, Subpart L, Section 63.306.
3. During any period of time that the permittee is required to implement the provisions of the work practice plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any record keeping requirement(s) under 63.311(f)(4) for the emission point during a particular day is a single violation.
4. The permittee shall implement the provisions of the coke oven emission control work practice plan in accordance with 40 CFR Section 63.306(c).
5. Revisions to the work practice emission control plan are governed by the provisions of 40 CFR Part 63, Sections 63.306(a)(2) and 63.306(d).
6. The permittee of a coke oven battery shall develop and implement a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.
7. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
 - a. does not address a startup, shutdown, or malfunction event that has occurred
 - b. fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or
 - c. does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

8. If the permittee demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
 - a. constitute a violation of relevant requirements of 40 CFR Part 63, Subpart L;
 - b. be used in any compliance determination under 40 CFR Part 63, Section 63.309; or
 - c. be considered for purposes of 40 CFR Part 63, Section 63.306, until the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 40 CFR Part 63, Section 63.306, regardless of whether the permittee further contests such determination. The permittee's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 40 CFR Part 63, Subpart 63.306, as written notification from the certified observer that an exceedance has occurred.

9. Copies of the work practice plan developed under 40 CFR Part 63, Section 63.306 and the startup, shutdown, and malfunction plan developed under 40 CFR Part 63, Section 63.310 shall be kept onsite at all times. The permittee shall maintain the following information:
 - a. records of daily pressure monitoring, according to 40 CFR Part 63, Section 63.303(b)(1)(ii);
 - b. records demonstrating the performance of work practice requirements according to 40 CFR Part 63, Section 63.306(b)(7);
 - c. design characteristics of each emission control system for the capture and collection of charging emissions, as required by 40 CFR Part 63, Section 63.303(b)(2).
 - d. a copy of the work practice plan required by 40 CFR Part 63, Section 63.306 and any revision to the plan;
 - e. records required to be maintained and reports required to be filed with the Administrator, with a copy to the Ohio EPA District Office or local air agency, under 40 CFR Part 63, Subpart L shall be made available in accordance with the requirements of this paragraph by the permittee to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying.
 - i. requests under this term and condition shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;

- ii. the permittee shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under part 2 of the CFR, chapter 40;
 - iii. nothing in this term and condition shall require the production for inspection or copying of any portion of a document that contains trade secret or confidential business information that the Administrator would be prohibited from disclosing to the public under part 2 of the CFR, chapter 40; and;
 - iv. the inspection or copying of document under this term and condition shall not in any way affect any property right of the permittee in such document under the laws for the protection of intellectual property, including the copyright laws.
10. The permittee shall maintain a record of internal reports which form the basis of each malfunction notification under term and condition IV.4.
11. The permittee shall monitor and record, once per day for each day of operation, the pressure in the common battery tunnel to ensure that the ovens are operated under a negative pressure.
12. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the pushing baghouse 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 the baghouse on a once per shift basis.
13. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the charging baghouse 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 the baghouse on a once per shift basis.
14. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the waste gas baghouse 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 the baghouse on a once per shift basis.
15. The permittee shall operate and maintain equipment to continuously monitor and record SO₂ from the waste gas stack in units of the applicable standard(s). Such continuous

monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

16. The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to, parts per million SO₂ on a 1-hour basis, and in units of pounds per hour on a one hour and three hour average basis and results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
17. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system designed to ensure continuous valid and representative readings of SO₂. 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 SO₂ monitoring system must be kept on site and available for inspection during regular office hours.
18. The permittee shall maintain daily records of the coal usage rate, in wet tons, in this emissions unit.
19. The permittee shall maintain hourly records of the charging/pushing rate, in number of charges/pushes per hour, for this emissions unit.
20. The permittee shall maintain monthly records of the following information:
 - a. the wet coal usage rate for each month; and
 - b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal usage rate for each calendar month.

21. The permittee shall monitor and record the temperature of the common duct tunnel on a once per shift basis.
22. To satisfy the requirements of 40 CFR Part 63, Section 63.310 to develop a startup, shutdown, and malfunction plan, the permittee may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for 40 CFR Part 63, Section 63.310 and is made available for inspection at reasonable times when requested by the Administrator.

IV. Reporting Requirements

1. The permittee shall provide a written statement(s) to certify compliance to the Administrator within 45 days of the applicable compliance date for the emission limitations or requirements in 40 CFR Part 63, Subpart L. The permittee shall include the following information in the initial compliance certification:
 - a. statement, signed by the permittee, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in 40 CFR Part 63, Section 63.310.
2. The permittee shall provide written notification(s) to the Administrator of:
 - a. intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and construction of a greenfield coke oven battery), including the anticipated date of startup.
3. The permittee shall include the following information in the semiannual compliance certification:
 - a. certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for the coke oven battery during the reporting period or that a startup, shutdown, event did occur and a report was submitted according to the requirements in 40 CFR Part 63, Section 63.310(e); and,
 - b. certification, signed by the permittee, that work practices were implemented if applicable under 40 CFR Part 63, Section 63.306.
4. In order for the provisions of term and condition III.8. to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the permittee;
 - a. if practicable, to the certified observer if the observer is at the facility during the occurrence; or
 - b. to the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification was not made, an explanation of why no such notification was made.
5. Within 14 days of the original notification made under term and condition IV.4. or after a startup or shutdown, the permittee shall submit a written report to the Portsmouth Local Air Agency that:
 - a. describes the times and circumstances of the startup, shutdown, or malfunction;
 - b. describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.

6. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the pushing baghouse did not comply with the allowable range specified above.
7. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the charging baghouse did not comply with the allowable range specified above.
8. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the waste gas exhaust baghouse did not comply with the allowable range specified above.
9. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative wet coal usage levels.
10. The permittee shall submit common tunnel duct temperature deviation (excursion) reports that identify all periods of during which the temperature in the common tunnel duct did not comply with the range demonstrated by the most recent performance test which demonstrated compliance with the waste gas exhaust emission limitations. These reports shall include the time of the temperature deviation, the duration of the exceedance and the corrective action taken.
11. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
12. The permittee shall submit deviation (excursion) reports which identify all exceedances of the hourly charging/pushing rate limitation.
13. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
14. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable limit(s) specified OAC Chapter 3745-18, the daily SO₂ emission rates and/or the annual SO₂ emission rates. These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).

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 any continuous SO₂ 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 analyzer 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 analyzer 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 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for the waste gas exhaust and pushing baghouse associated with 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.
- b. The emission testing shall be conducted to demonstrate compliance with the particulate, SO₂, NO_x, VOC, CO, and HAPS (waste gas stack only) emissions limits.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A, for SO₂, Method 6 of 40 CFR Part 60, Appendix A, Method 7 of 40 CFR Part 60, Appendix A, for NO_x, for CO, Method 10 of 40 CFR Part 60, Appendix A, for VOC, Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, for HAPs, Method 18 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

A particulate emissions test shall also be conducted at the inlet of the Pushing baghouse to determine the uncontrolled mass rate of emission for the emission

unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A, shall be employed.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

2. Certification

Prior to the installation of the continuous SO₂ 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 6 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate, the permittee shall conduct certification tests of the continuous SO₂ monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6. Personnel from the Portsmouth 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. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the Portsmouth Local Air Agency within 30 days after the test is completed. Copies of the test results shall be sent to the Portsmouth Local Air Agency and the Ohio EPA, Central Office. Certification of the continuous SO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

3. 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:

10 % opacity as a 6-minute average from the waste gas exhaust stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

43.89 lbs/hr PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the waste gas exhaust baghouse.

d. Emission Limitation:

594 lbs/hr SO₂ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

e. Emission Limitation:

675 lbs/hr NO_x from waste gas stack
55.84 lbs/hr CO from waste gas stack
11.97 lbs/hr VOC

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

f. Emission Limitation:

0.09 lb/hr lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton wet coal charged by the wet tons coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency).

g. Emission Limitation:

192.24 TPY PM/ PM₁₀ from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per year divided by 2000 lbs/ton.

h. Emission Limitation:

968.42 TPY SO₂ from waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven Waste Gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar year, as measured by the SO₂ CEM.

i. Emission Limitation:

1100.48 TPY NO_x from waste gas stack

244.58 TPY CO from waste gas stack

52.43 TPY VOC from waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven Waste Gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

j. Emission Limitation:

0.15 TPY lead from waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, Draft AP-42, May 1995, Table 4-22, of 0.0034 lb lead/ton coal charged by the tons wet coal charged per hour by the baghouse control factor of 0.04 (96 % efficiency) by the tons of wet coal charged per month and divide by 2000 lbs/ton.

k. Emission Limitation:

33.75 lbs/hr SO₂ from pushing

10.8 lbs/hr NO_x from pushing

135 lbs/hr VOC from pushing

51.98 lbs/hr CO from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor , in lbs of pollutant/wet ton coal charged, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per hour.

l. Emission Limitation:

26.33 lbs/hr PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the Pushing baghouse.

m. Emission Limitation:

42.92 TPY PM/ PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM/PM₁₀ for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

n. Emission Limitation:

55.02 TPY SO₂ from pushing
17.61 TPY NO_x from pushing
220.10 TPY VOC from pushing
84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven Pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per year divided by 2000 lbs per ton.

o. Emission Limitation:

5.47 lbs/hr fugitive PM from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate).

p. Emission Limitation:

1.64 lbs/hr fugitive PM₁₀ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per hour by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be PM_{10} .

q. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate).

r. Emission Limitation:

2.67 TPY fugitive PM_{10} emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per year by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to be PM_{10} .

s. Emission Limitation:

1.20 lbs/hr PM/ PM_{10} from each charging baghouse

Applicable Compliance Method:

Compliance shall be determined by multiplying the grain loading of each charging baghouse of 0.008 gr PM/dscf of exhaust gases by the maximum air flow of the exhaust gas (17,434 dscf/min) by the number of minutes to charge each oven by the number of charges per hour divided by 7000 grains per lb.

t. Emission Limitation:

1.98 TPY PM/ PM_{10} combined from charging baghouses

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per year by 4 charging baghouses per facility divided by 2000 lbs per ton.

u. Emission Limitation:

0.20 lb/hr SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the tons of wet coal charged per hour

v. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

w. Emission Limitation:

1.35 lbs/hr VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

x. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the tons of coal charged per year divided by 2000 lbs per ton.

y. Emission Limitation:

1.89 lbs/hr CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

z. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per year divided by 2000 lbs per ton.

aa. Emission Limitation:

0.023 lb HAPS / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 18 of 40 CFR Part 60, Appendix A for the Waste Gas exhaust . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

bb. Emission Limitation

3.05 TPY HAPS from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs HAPS/ ton coal from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

cc. Emission Limitation:

192.24 TPY PM/ PM₁₀ from the waste gas stack *

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the Waste Gas exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per month divided by 2000 lbs/ton ; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

dd. Emission Limitation:

968.42 TPY SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY limitations for SO₂ from the coke oven waste gas exhaust shall be determined by adding the SO₂ emissions rate for each day of the calendar month, as measured by the SO₂ CEM; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ee. Emission Limitation:

1100.48 TPY NO_x from the waste gas stack

244.58 TPY CO from the waste gas stack

52.43 TPY VOC from the waste gas stack

Applicable Compliance Method:

Compliance with the TPY emissions limitations for NO_x, CO and VOC for the coke oven waste gas exhaust shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ff. Emission Limitation:

0.008 gr/dscf of exhaust gases from the waste gas spray dryer baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

gg. Emission Limitation:

0.88 lb SO₂ / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 6 of 40 CFR Part 60, Appendix A.

hh. Emission Limitation:

265 lbs/hr, three hour average, SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be determined from the three hour average lbs/hr SO₂ emission rate obtained from the SO₂ continuous emissions monitor (CEM) on the Lime Spray Dryer for the coke oven battery waste gas exhaust.

ii. Emission Limitation:

1 lb NO_x / ton coal from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 7 of 40 CFR Part 60, Appendix A.

jj. Emission Limitation:

20 ppm CO from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

kk. Emission Limitation:

10 ppm VOC from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

ll. Emission Limitation:

20 % opacity as a 6-minute average, except as provided by rule from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

mm. Emission Limitation:

0.10 pound of particulate per mmBtu actual heat input from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(9) determined according to Method 5 of 40 CFR Part 60, Appendix A.

nn. Emission Limitation:

2359.1 lbs/hr SO₂ from the waste gas stack

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-18-04(A)

oo. Emission Limitation:

0.0 percent leaking oven doors

Applicable Compliance Method:

Compliance shall be determined by the monitoring/recordkeeping requirements in Section A.I.2.j of this permit.

pp. Emission Limitation:

0.008 gr/dscf of exhaust gases from each charging baghouse

Applicable Compliance Method:

Compliance shall be demonstrated by the manufacturer guaranteed emission limitations.

qq. Emission Limitation:

1.98 TPY PM/PM₁₀ combined from charging baghouses *

Applicable Compliance Method:

Compliance shall be determined by multiplying the guaranteed manufacturer emission limitation of 0.008 gr/dscf of exhaust gases by the dscf/min baghouse air flow by the number of minutes taken to charge an oven by the number of charges per hour divided by 7000 grains per lb to arrive at a lbs per hour emission rate for each charging baghouse. Divide the lbs per hour emission rate by the wet tons of coal charged per hour to calculate a lb per wet ton coal charged emission factor multiplied by the wet tons of coal charged per month by 4 charging baghouses per facility divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months. (* note all PM₁₀ emissions are assumed to be PM emissions)

rr. Emission Limitation:

8.91 TPY fugitive PM emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM / ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of charged per month divided by 2000 lbs per ton multiplied by the capture factor of 0.3 (70 % capture rate); adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ss. Emission Limitation:

2.67 TPY fugitive PM₁₀ emissions from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.027 lb PM/ton coal charged, Draft AP-42, May 1995, Table 12.2-12, by the wet tons of coal charged per month by the capture factor of 0.3 (70 % capture rate) by 30% fraction of TSP estimated to by PM₁₀; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

tt. Emission Limitation:

0.33 TPY SO₂ from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0003 lb SO₂/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

uu. Emission Limitation:

2.20 TPY VOC from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0020 lb VOC/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

vv. Emission Limitation:

3.08 TPY CO from charging

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.0028 lb CO/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

ww. Emission Limitation:

72.6 lbs/hr PM from charging

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

xx. Emission Limitation:

0.039 lb PM₁₀ / ton coal from the pushing baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

yy. Emission Limitation:

0.077 lb CO / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 10 of 40 CFR Part 60, Appendix A.

zz. Emission Limitation:

0.20 lb VOC / ton coal from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 25 or 25A, of 40 CFR Part 60, Appendix A, as appropriate.

aaa. Emission Limitation:

72.6 lbs/hr PM from pushing

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.

bbb. Emission Limitation:

42.92 TPY PM/PM₁₀ from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for PM /PM₁₀ for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of PM /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ccc. Emission Limitation:

55.02 TPY SO₂ from pushing

17.61 TPY NO_x from pushing

220.10 TPY VOC from pushing

84.74 TPY CO from pushing

Applicable Compliance Method:

Compliance with the TPY emissions limitations for SO₂, NO_x, CO and VOC for the coke oven pushing baghouse shall be determined by multiplying the emission factor, in lbs of pollutant /wet ton coal charged, calculated from the most recent performance test which demonstrated compliance, by the amount of wet tons of coal charged per month; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

ddd. Emission Limitation:

0.00024 lb/ton HAPs from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00024 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of coal charged per hour.

eee. Emission Limitation:

0.26 TPY HAPS from pushing

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.00026 lb HAPs/wet ton coal charged, October 1989 Jewell stack test, by the wet tons of

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coal charged per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
268 Oven Nonrecovery Coke Battery Facility #1 (Batteries I-L):	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.
Waste Gas from Coking Process with dry scrubber with baghouse and staged combustion		
Charging Operations with baghouse with traveling hood		
Pushing Operations with baghouse with shed		

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries A & B with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs/ton coal
		See A.I.2.a & b below
	OAC rule 3745-31-05(D)	0.314 TPY HAPs * See A.I.2.d below
	OAC rule 3745-17-07	See A.I.2.c below
	OAC rule 3745-17-11	64.4 lbs/hr PM
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).
- 2.b. Compliance with OAC rules 3745-31-05 and 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c** Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.
- 2.d** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

- 1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
- 2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
- 3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
- 4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650

1-9	825,356
1-10	917,062
1-11	1,008,769
1-12	1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per hour for Batteries A & B.

b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where y = lbs PM/wet ton coal, and x = total

dissolved solids (TDS) concentration of quench water (mg/L)) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb PM₁₀/ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM₁₀ per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

1. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries A & B with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries C & D with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs/ton coal
	OAC rule 3745-31-05(D)	See A.I.2.a & b below
	OAC rule 3745-17-07	0.314 TPY HAPs * See A.I.2.d below
	OAC rule 3745-17-11	See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	64.4 lbs/hr PM See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).

- 2.b.** Compliance with OAC rules 3745-31-05 and 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c** Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.
- 2.d** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

- 1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
- 2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
- 3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
- 4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650
1-9		825,356

1-10	917,062
1-11	1,008,769
1-12	1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per hour for Batteries A & B.

b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM_{10}

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM_{10} /wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM_{10} per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb PM_{10} /ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM_{10} per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

l. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries C & D with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.

2. **Additional Terms and Conditions**

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries E & F with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs/ton coal
	OAC rule 3745-31-05(D)	See A.I.2.a & b below
	OAC rule 3745-17-07	0.314 TPY HAPs * See A.I.2.d below
	OAC rule 3745-17-11	See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	64.4 lbs/hr PM See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).

- 2.b.** Compliance with OAC rules 3745-31-05 and 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c** Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.
- 2.d** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

- 1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
- 2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
- 3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
- 4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650

1-9	825,356
1-10	917,062
1-11	1,008,769
1-12	1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per hour for Batteries A & B.

- b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

- c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

- d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM_{10}

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM_{10} /wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM_{10} per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb PM_{10} /ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM_{10} per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

l. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries E & F with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries G & H with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs/ton coal
	OAC rule 3745-31-05(D)	See A.I.2.a & b below
	OAC rule 3745-17-07	0.314 TPY HAPs * See A.I.2.d below
	OAC rule 3745-17-11	See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	64.4 lbs/hr PM See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).

2.b. Compliance with OAC rules 3745-31-05 and 3745-31-15 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.

II. Operational Restrictions

1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coat Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650
1-9		825,356
1-10		917,062
1-11		1,008,769
1-12		1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of :

$y = 0.000115x + 0.323$, where y = lbs PM/wet ton coal, and x = total dissolved solids (TDS) concentration of quench water (mg/L)) by the wet tons of coal charged per hour for Batteries A & B.

b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of :

$y = 0.000115x + 0.323$, where y = lbs PM/wet ton coal, and x = total dissolved solids (TDS) concentration of quench water (mg/L)) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM_{10}

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM_{10} /wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM_{10} per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb/ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM_{10} per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

l. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries G & H with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, see term B.

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries I & J with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs /ton coal
	OAC rule 3745-31-05(D)	See A.I.2.a & b below 0.314 TPY HAPs *
	OAC rule 3745-17-07	See A.I.2.d below
	OAC rule 3745-17-11	See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	64.4 lbs/hr PM See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).

- 2.b.** Compliance with OAC rules 3745-31-05 and 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c** Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.
- 2.d** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

- 1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
- 2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
- 3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
- 4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coat Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650

1-9	825,356
1-10	917,062
1-11	1,008,769
1-12	1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per hour for Batteries A & B.

- b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

- c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

- d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojociechowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM_{10}

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM_{10} /wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM_{10} per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb PM_{10} /ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM_{10} per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

l. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries I & J with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, see term B.

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries K & L with baffles	OAC rule 3745-31-05(A)(3)	151.88 lbs/hr PM 247.61 TPY PM 16.88 lbs/hr PM ₁₀ 27.51 TPY PM ₁₀ 0.00057 lb HAPs / ton coal
	OAC rule 3745-31-05(D)	See A.I.2.a & b below
	OAC rule 3745-17-07	0.314 TPY HAPs * See A.I.2.d below
	OAC rule 3745-17-11	See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	64.4 lbs/hr PM See A.I.2.a & b below 247.61 TPY PM * 27.51 TPY PM ₁₀ * 0.05 lb PM ₁₀ / ton coal
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a. The concentration of the total dissolved solids (TDS) of the water employed to quench coke at each quench tower shall not exceed 1100 milligrams per liter (mg/L).

- 2.b.** Compliance with OAC rules 3745-31-05 and 3745-31-15 and 40 CFR Part 52.21 shall be demonstrated by a TDS concentration limit of 1100 mg/L 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.c** Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.
- 2.d** Hazardous Air Pollutant (HAP) emissions shall not exceed 9.9 tons per year for any single HAP and/or 24.9 tons per year for total combined HAPs for emissions units P901, P902, P903, (waste gas exhaust) and P001, P002, P003, P004, P005, P006 (quench towers) combined.

II. Operational Restrictions

- 1. The permittee shall operate and maintain an interior baffle system for each tower. Each interior baffle system shall be designed and maintained in accordance with good engineering practice and provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
- 2. The permittee shall employ clean quench water with a TDS concentration of equal to or less than 1100 mg/l of water during the coke quenching operation.
- 3. The maximum daily wet coal usage rate for this emissions unit shall not exceed 3015 wet tons coal.
- 4. The maximum annual wet coal usage rate for this emissions unit shall not exceed 1,100,475 tons, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Wet Coal Usage</u>
1		91,706
1-2		183,412
1-3		275,119
1-4		366,825
1-5		458,531
1-6		550,238
1-7		641,944
1-8		733,650
1-9		825,356
1-10		917,062
1-11		1,008,769

1-12

1,100,475

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect a weekly sample of the water employed in each quench tower which shall be analyzed for concentration of total dissolved solids.
2. The permittee shall maintain daily records of the wet tons coal produced in this emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative wet coal usage rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit TDS deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the daily wet coal usage rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month wet coal usage rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative wet coal usage levels.
4. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

151.88 lbs/hr PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per hour for Batteries A & B.
 - b. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.450 (based on the following equation from Ed Wojocieczowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.
 - c. Emission Limitation:

16.88 lbs/hr PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per hour for Batteries A & B.

d. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged per year for Batteries A & B divided by 2000 lbs per ton.

e. Emission Limitation:

20 % opacity, as a six minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

64.4 lbs/hr PM *

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower; (emission limitation from OAC rule 3745-17-11, Table I: $E = 55(P)^{0.11} - 40$; where E is the allowable rate of particulate emissions in units of pounds per hour and P is the process weight rate in tons per hour).

g. Emission Limitation:

TDS concentration of 1100 mg/l

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03 (B)(10)(c).

h. Emission Limitation:

247.61 TPY PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.455 (based on the following equation from Ed Wojocichowski, U. S. EPA, Region 5, of : $y = 0.000115x + 0.323$, where $y = \text{lbs PM/wet ton coal}$, and $x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)}$) by the wet tons of coal charged per month for Batteries A & B divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

i. Emission Limitation:

27.51 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 0.05 lb PM₁₀/wet ton coal charged (AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, emission factor of 0.54 lbs PM/ton coal charged, where 9.8 % of PM is PM₁₀ per Table 12.2-4) by the wet tons of coal charged for Batteries A & B per month divided by 2000 lbs per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

j. Emission Limitation:

0.05 lb/ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by compliance with the TDS concentration limit of 1100 mg/L and baffles which provide coverage of not less than ninety-five per cent of the cross-sectional area of the tower based on emission factor of 0.54 lbs PM/ton coal charged, AP-42 5th edition, Table 12.2-2, quenching with baffles and clean water, where 9.8 % of PM is PM₁₀ per Table 12.2-4, quenching with baffles and clean water.

k. Emission Limitation:

0.00057 lb HAPs / ton coal

Applicable Compliance Method:

Compliance shall be demonstrated by analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods.

1. Emission Limitation:

0.314 TPY HAPs

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor in lb HAPs/wet ton coal charged, from most recent water analysis which demonstrated compliance, by the wet tons of coal charged per month divided by 2000 lbs per ton; adding the current month's emission rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Quench Tower for Batteries K & L with baffles	OAC rule 3745-31-05(A)(3)	Compliance with OEPA Air Toxics Policy; see Part II, term B.

2. Additional Terms and Conditions

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paved Roadways & Parking Areas	OAC rule 3745-31-05(A)(3) 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	8.01 TPY PM 1.56 TPY PM ₁₀ * no visible particulate emissions except for 1 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..2.b through A..2.g) * the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

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:

- Facility #1
- Facility #2
- Facility #3
- Coke & Coal Handling

paved parking areas:

Main Gate

- 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 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 permittee shall employ best available control measures on the unpaved shoulders of all paved roadways 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 unpaved shoulders of all paved roadways with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d.** 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.e.** 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.f.** 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.g.** 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.

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 paved roadways and parking areas in accordance with the following frequencies:

<u>paved roadways</u>	<u>minimum inspection frequency</u>
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Facility #1	Daily
Facility #2	Daily
Facility #3	Daily
Coal & Coke Handling	Daily

<u>paved parking areas</u>	<u>minimum inspection frequency</u>
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Main Gate	Daily
-----------	-------

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

no visible particulate emissions except for 1 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:

8.01 TPY PM

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i through iii below:

 - i. multiply the vehicle miles traveled (VMT) per year for light duty gasoline vehicles times the 0.0653 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) divided by 2,000 pounds/ton;

- ii. multiply the vehicle miles traveled (VMT) per year for heavy duty gasoline vehicles times the 0.9046 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) divided by 2,000 pounds/ton; and
- iii. multiply the vehicle miles traveled (VMT) per year for heavy duty diesel vehicles times the 9.1194 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) divided by 2,000 pounds/ton.

c Emission Limitation:

1.56 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i through iii below:

- i. multiply the vehicle miles traveled (VMT) per month for light duty gasoline vehicles times the 0.0127 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) divided by 2000 pounds/ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months;
- ii. multiply the vehicle miles traveled (VMT) per month for heavy duty gasoline vehicles times the 0.1765 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) divided by 2000 pounds/ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; and
- iii. multiply the vehicle miles traveled (VMT) per month for heavy duty diesel vehicles times the 1.7794 pounds/VMT emission factor (calculated in accordance with AP-42, 13.2.1) ; divided by 2000 pounds/ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months..

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paved Roadways and Parking Areas	None	None

2. **Additional Terms and Conditions**

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
load-in and load-out of storage piles (see Section B.I.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3) 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	4.0 TPY PM no visible emissions except for 1 minute in any hour best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f) 1.98 TPY PM ₁₀ * * the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20 are listed below:

coal storage piles
coke storage piles

- 2.b 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 load-in coal, coke, and coke breeze with a stacking tube and load-in of coal with sufficient water sprays and/or any other suitable dust suppression chemicals to

ensure compliance. The load-out of coal via an under pile gravity feed and water spray. The load-out of coke via under pile gravity feed. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** 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.d** 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 treat each coal storage pile with water and/or other suitable dust suppression chemicals via the spray tower at sufficient treatment frequencies 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 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.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 requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.

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:

- 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 deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and,
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

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

no visible emissions except for 1 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.
 - b. Emission Limitation:

4.0 TPY PM

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below:

- i. coal load-in: multiply the tons of coal handled per year divided by the number of coal piles times the number of transfer points times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% efficiency estimate for enclosed points (stacking tube) and wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; plus

coal pile: multiply the area of coal storage piles, in acres, times the 366, the maximum number of days per year, times the 7.99 pound/day/acre emission factor (calculated in accordance with AP-40, Section 4, Equation 5) times the 0.05 control factor (95% control efficiency for enclosure (dome structure) and wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; plus

coal load-out: multiply the tons of coal handled per year divided by the number of storage piles times the number of transfer points times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency for enclosed points (under pile gravity feed to conveyor) and wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton.

- ii. coke load-in: multiply the tons of coal handled per year divided by the number of coal piles times the number of transfer points times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for enclosed points (stacking tube) from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; plus

coke pile: multiply the area of coal storage piles, in acres, times the 366, the maximum number of days per year, times the 1.74 pound/day/acre emission factor (calculated in accordance with AP-40, Section 4, Equation 5) divided by 2,000 pounds per ton; plus

coke load-out: multiply the tons of coal handled per year divided by the number of storage piles times the number of transfer points times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.20 control factor (80% control efficiency for fully enclosed points (under pile gravity feed to conveyor) from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton.

c Emission Limitation:

1.98 TPY PM₁₀

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below:

- i. coal load-in: multiply the tons of coal handled per month divided by the number of coal piles times the number of transfer points times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency for fully enclosed points (stacking tube) and wet suppression from RACM, Table 2.2.1-2) adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; plus

coal pile: multiply the area of coal storage piles, in acres, times the 366, the maximum number of days per year, times the 3.99 pound/day/acre emission factor (calculated in accordance with AP-40, Section 4, Equation 5) times the 0.05 control factor (95% control efficiency for enclosure (dome structure) and wet suppression from RACM, Table 2.2.1-2) divided by 12 months per year divided by 2,000 pounds per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; plus

coal load-out: multiply the tons of coal handled per month divided by the number of storage piles times the number of transfer points times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency for fully enclosed points (under pile gravity feed to conveyor) and wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; and,

- ii. coke load-in: multiply the tons of coal handled per month divided by the number of coal piles times the number of transfer points times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for fully enclosed points (stacking tube) from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; plus

coke pile: multiply the area of coal storage piles, in acres, times the 366, the maximum number of days per year, times the 0.87 pound/day/acre emission factor (calculated in accordance with AP-40, Section 4, Equation

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Emissions Unit ID: F002

5) divided by 12 months per year; divided by 2,000 pounds per ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months; plus

coke load-out: multiply the tons of coal handled per month divided by the number of storage piles times the number of transfer points times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.20 control factor (80% control efficiency for fully enclosed points (under pile gravity feed to conveyor); adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
load-in and load-out of storage piles (see Section B.I.2.a for identification of storage piles)	None	None

2. **Additional Terms and Conditions**

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coal Handling, Conveying and Transfer	<p>OAC rule 3745-31-05(A)(3)</p> <p>40 CFR Part 52.21 and OAC rule 3745-31-10 through 20</p>	<p>7.95 TPY PM fugitive emissions</p> <p>See A.I.2.a below.</p> <p>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c through A.2.e)</p> <p>3.77 TPY PM₁₀ fugitive emissions *</p> <p>* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions</p>

2. Additional Terms and Conditions

- 2.a. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average
- 2.b. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - coal unloading via rail car bottom dumping
 - coal conveying via belt conveyor
 - coal transfer points via belt conveyor to belt conveyor
- 2.c. The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
rail car bottom dumping	enclosure and chemical wet suppression
belt conveyors	enclosure and watering
transfer points (belt conveyor to belt conveyor)	enclosure and watering

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

- 2.d.** 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 the use of the control measure(s) is unnecessary.
- 2.e.** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

II. Operational Restrictions

- 1. The maximum annual wet coal usage rate for this emissions unit shall not exceed 6,602,850, based upon a rolling, 12-month summation of the wet coal usage rates.

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

<u>Month</u>	<u>Maximum Allowable</u>	<u>Cumulative Production</u>
1		550,238
1-2		1,100,475
1-3		1,650,713
1-4		2,200,950
1-5		2,751,188
1-6		3,301,425
1-7		3,851,663
1-8		4,401,900
1-9		4,952,138

1-10	5,502,375
1-11	6,052,613
1-12	6,602,850

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

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The wet coal usage rate for each month.
 - b. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal usage rates.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal usage rate for each calendar month.

2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
facility #1 oven coal conveyors	daily
facility #2 oven coal conveyors	daily
facility #3 oven coal conveyors	daily

3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the Portsmouth 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.
5. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and,

- d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 5.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

None

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:

20% opacity as a 3-minute average

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements of OAC rule 3745-17-03(B)(3).

- b. Emission Limitation:

7.95 TPY PM fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below:

- i. coal transfer points: multiply the tons of coal handled per year divided by 3, the number of facilities, times 28, the number of transfer points, times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency estimate based on 70% for enclosed points and 50% for wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; and,
- ii. coal unloading: multiply the tons of coal unloaded per year, times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency estimate based on 70% for enclosed points and 80% for chemical wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton.

- c. Emission Limitation:

3.77 TPY PM₁₀ fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below:

- i. coal transfer points: multiply the tons of coal handled per year divided by 3, the number of facilities, times 28, the number of transfer points, times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency estimate based on 70% for enclosed points and 50% for wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; and
- ii. coal unloading: multiply the tons of coal unloaded per year, times the 0.0005 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.05 control factor (95% control efficiency estimate based on 70% for enclosed points and 80% for chemical wet suppression from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coal Handling, Conveying and Transfer	None	None

2. **Additional Terms and Conditions**

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) [Continued]

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coke and Breeze Handling/Conveying/Transfer, and Coke and Breeze Crushing/Screening with baghouse	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11	68.6 lbs/hr of PM (less stringent than the limits established per 40 CFR Part 52.21 and OAC rule 375-31-15)
	OAC rule 3745-31-05(A)(3)	3.43 lbs/hr PM/PM ₁₀ and 15.02 TPY PM/PM ₁₀ stack emissions 15.56 TPY PM fugitive emissions See A.I.2.c below
	40 CFR Part 52.21 and OAC rule 3745-31-10 through 20	See A.I.2.b below 15.02 TPY PM/PM ₁₀ stack emissions* 7.36 TPY PM ₁₀ fugitive emissions *
		* the TPY mass emission rate limitations are based on a rolling, 12-month summation of the monthly emissions

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b Particulate emissions from the coke crushing/screening baghouse exhaust shall not exceed 0.008 gr/dscf of exhaust gases.
- 2.c Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
- 2.d The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

coke unloading
coke conveying via belt conveyor
coke transfer points via belt conveyor to belt conveyor

2.e The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
coke unloading	partial enclosure
belt conveyors	partial enclosure
transfer points (belt conveyor to belt conveyor)	partial enclosure

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

2.f 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 the use of the control measure(s) is unnecessary.

2.g Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the coke crushing/screening baghouse shall be maintained within the range established during the most recent emission test that demonstrated compliance, in inches of water, while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the coke crushing/screening baghouse 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 the coke crushing/screening baghouse on a once per shift basis.

- 2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
coke unloading	daily
belt conveyors	daily
transfer points (belt conveyor to belt conveyor)	daily

- 3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 4. The permittee may, upon receipt of written approval from the Portsmouth 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.
- 5. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and,
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 5.d. shall be kept separately for each material handling operation identified above, 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 pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the coke crushing/screening baghouse did not comply with the allowable range specified above.
- 2. 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; and,
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
3. These deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

V. Testing Requirements

1. 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.
- b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60 , Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

A particulate emissions test shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR Part 60, Appendix A, shall be employed.

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

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

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

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

2. 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:

20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in OAC rule 3745-17-03(B)(1) determined according to Method 9 of 40 CFR Part 60, Appendix A.
 - b. Emission Limitation:

0.008 gr/dscf of exhaust gases from the coke crushing/screening baghouse

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures of Method 5 of 40 CFR Part 60, Appendix A.
 - c. Emission Limitation:

15.02 TPY PM/PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the coke crushing/screening baghouse exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of operation per year divided by 2000 lbs/ton.
 - d. Emission Limitation:

3.43 lbs/hr PM/PM₁₀

Applicable Compliance Method:

Compliance shall be determined by the results of the most recent performance test, which demonstrated compliance, of the coke crushing/screening baghouse.

e. Emission Limitation:

15.66 TPY PM fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i through v below:

- i. coke transfer points: multiply the tons of coke handled per year divided by 3, the number of facilities, times 37, the number of transfer points, times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for enclosed points from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton;
- ii. coke load-out: multiply the tons of coke handled per year divided by 3, the number of facilities, times 3, the number of transfer points, times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for enclosed points from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton;
- iii. coke breeze silo: multiply the tons of coke breeze handled per year times 2, the number of transfer points (load-out and load-in), times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for enclosed points from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton; and
- iv. oversize coke silo: multiply the tons of oversized coke handled per year times 2, the number of transfer points (load-out and load-in), times the 0.0010 pound/ton emission factor (calculated in accordance with AP-42; 13.2.4) times the 0.30 control factor (70% control efficiency for enclosed points from RACM, Table 2.2.1-2) divided by 2,000 pounds per ton.

f. Emission Limitation:

15.02 TPY PM/PM₁₀

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs PM/hr emission rate from the coke crushing/screening baghouse exhaust, calculated from the results of the most recent performance test which demonstrated compliance, by the hours of

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operation per month divided by 2000 lbs/ton; adding the current month's emissions rate to the emission rate for the preceding eleven calendar months.

g. Emission Limitation:

68.6 lbs/hr PM

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements of OAC rule 3745-17-03(B)(10) and with the methods and procedures of Method 5, 40 CFR Part 60, Appendix A.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control measures</u>
Coke and Breeze Handling/Conveying/Transfer, and Coke and Breeze Crushing/Screening with baghouse	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None