



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: **FINAL PERMIT TO INSTALL MODIFICATION CERTIFIED MAIL**

LUCAS COUNTY

Application No: 04-01056

DATE: 10/24/2002

FirstEnergy Corporation
Peter Robinson
76 South Main Street
Akron, OH 44308

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
OOO	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

TDES



FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 04-01056

Application Number: **04-01056**

APS Premise Number: **0448020006**

Permit Fee: **\$0**

Name of Facility: **FirstEnergy Corporation Robinson**

Person to Contact: **Peter**

Address: **76 South Main Street
Akron, OH 44308**

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4701 Bay Shore Rd
Oregon, OHIO**

Description of modification:

Administrative modification to existing PTI for the Circulating Fluidized Bed (CFB) Boiler burning petroleum coke and/or coal.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

FirstEnergy Corporation

PTI Application: 04-01056

Modification Issued: 10/24/2002

Facility ID: **0448020006**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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.

SOURCE OPERATION AND OPERATING PERMIT REQUIREMENTS AFTER COMPLETION OF CONSTRUCTION

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).

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.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for **FirstEnergy Corporation (aka Toledo Edison Company, Bay shore station)** located in Lucas County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
O h i o EPA Source Number	Source Identification/ Description	BAT Determination	Applicable Federal and OAC Rules	Permit Allowable Mass Emissions and/ or Control & Usage Requirements
B006	Circulating fluidized bed (CFB) boiler fired primarily with petroleum coke (1736 MMBtu/hr rating) and use of coal (1764 MMBtu/hr rating) as a backup fuel	A maximum of: 278.6 lbs CO/hr ^{1,5} . 0.28 lb CO/ MMBtu heat input at 979 MMBtu/hr (half load) ^{1,5} . 0.20 lb CO/ MMBtu heat input at 1393.4 MMBtu/ hr (Three quarter load) ^{1,5} . 0.13 lb CO/ MMBtu heat input at 1764 MMBtu/ hr (full load) ^{1,5} . 529.3 lbs NO _x /hr ^{1,3} . 1.6 lb/megawatt-hour gross energy output. ^{1,4} 0.03 lb particulate/ MMBtu heat input and baghouse with 99 % overall reduction. ^{1,3} 0.025 lb PM ₁₀ /MMBtu heat input. ^{1,3} 1897.6 lbs SO ₂ /hr ^{2,3} . 0.73 lb SO ₂ /MMBtu heat input and 90%	3745-31-05 40 CFR Part 60 Subpart Da 3745-17-07(A) 3745-18-54(A) 3745-21-08(B) 40 CFR 52.21 3745-31-10 through 20	A maximum of: 278.6 lbs CO/hr ^{1,5} . 0.28 lb CO/ MMBtu heat input at 979 MMBtu/hr (half load) ^{1,5} . 0.20 lb CO/ MMBtu heat input at 1393.4 MMBtu/ hr (Three quarter load) ^{1,5} . 0.13 lb CO/ MMBtu heat input at 1764 MMBtu/ hr (full load) ^{1,5} . 1220 tons CO per year ^{1,5} . 529.3 lbs/hr and 1546 TPY NO _x ^{1,4} . 0.20 lb NO _x /MMBtu heat input ^{1,4} . 1.6 lb NO _x /megawatt-hr gross energy output ^{1,4,6} . 0.03 lb particulate/ MMBtu heat input and 99% reduction. ^{1,3} 232 tons particulate per year ¹ . 0.025 lb PM ₁₀ /MMBtu heat input. ^{1,3} . 193 tons PM ₁₀ per year ¹ . 1897.6 lbs SO ₂ /hr ^{2,3} . 0.73 lb SO ₂ /MMBtu heat input and 90% reduction except that

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		reduction except that 70% reduction is allowable for all heat inputs less than 0.60 lb SO ₂ /MMBtu ^{2,4} . 4.4 lbs OC/hr ¹ .		70% reduction is allowable for all heat inputs less than 0.60 lb SO ₂ /MMBtu ^{2,4} . 5541 tons SO ₂ per year ² . 4.4 lbs OC/hr ¹ . 19.3 tons OC per year ¹ .
F006	Coke Truck Dump	20% opacity as a 3-minute average		1.28 tons particulate/year. 0.64 ton PM ₁₀ /year. Also Additional Special Terms and Conditions.
F007	Coke Rail Car Unloading	Adequate enclosure, 20% opacity and no visible stack emissions; vented to fabric filter	3745-17-07(B)(7)(B) 3745-17-08(B) 3745-31-05	1.28 tons particulate/year. 0.64 ton PM ₁₀ /year. also Terms and Conditions.
F008	Coke Storage	Dust suppression, minimize drop heights	3745-17-07(A)(1) 3745-17-08(B) 3745-31-05	11.26 tons particulate/year. 2.63 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F009	Limestone Truck Dump	Adequate enclosure, 20% opacity and no visible stack emissions; vented to fabric filter	3745-17-07(B)(1) 3745-17-08(B)(6) 3745-31-05 3745-17-07(A)(1) 3745-17-08(B)	0.03 tons particulate/year. 0.01 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
F010	Limestone Crushing, Sizing and Conveying Operation. Modification of PTI 04-1056 previously modified June 3,1999	See 1.a through 1.c. of Special Terms and Conditions for unit F010.	3745-31-05 3745-31-05(A)(3); 3745-17-07(B) A(1); 3745-17-08(B); 40CFR Part 60 Subpart OOO	14.2 tons particulate emissions (PE)/year. 12.8 tons PM ₁₀ /year. Also Additional Special Terms and Conditions for unit F010.
F011	Coke and Fly ash Transferring and Conveying Operation	Adequate enclosure, 20% opacity and no visible stack emissions; vented to fabric filter	3745-17-07(A)(1) 3745-17-08(B) 3745-31-05	12.0 tons particulate/year. 6.79 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F012	Bed Ash Truck Load-Out Station	Adequate enclosure, 20% opacity and no visible stack emissions; vented to fabric filter	3745-17-07(A)(1) 3745-17-08(B) 3745-31-05	2.22 tons particulate/year. 0.78 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F013	Fly Ash Truck Load-Out Station	Adequate enclosure, 20% opacity and no visible stack emissions; vented to fabric filter	3745-17-07(A)(1) 3745-17-08(B) 3745-31-05	2.1 tons particulate/year. 0.74 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F014	Coke Truck Load-Out Station at Transfer House #1	20% opacity as a 3-minute average	3745-17-07(B)(7)(B) 3745-17-08(B) 3745-31-05	5.48 tons particulate/year. 2.74 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F015		20% opacity as a 3-minute average		3.02 tons particulate/year. 1.34 tons PM ₁₀ /year.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
F001	Coke Truck Load-Out Station from the Coke Storage Pile	Dust suppression, cover open body vehicles, cleaning, 10 mph speed limit, no visible emissions.	3745-17-08(B)	Also Additional Special Terms and Conditions.
	Roadways and Parking Lots		3745-31-05	1.98 tons particulate/year. 0.43 tons PM ₁₀ /year. Also Additional Special Terms and Conditions.
F016	Coke/Coal Crushing and Sizing Operation	Enclosure and emissions vented to a fabric filter	3745-31-05	3.78 tons particulate/year. 3.4 tons PM ₁₀ /year. 20% opacity as a 6-minute average. Also Additional Special Terms and Conditions.
F017	Emergency Limestone Storage Pile	Dust suppression, minimize drop heights	3745-17-07(A)(1)	*
			3745-17-08(B)	*
			3745-31-05	load-in and load out of storage piles: 0.009 tons particulate/year; 0.004 tons PM ₁₀ /year; and, no visible emissions except for thirteen minutes in any hour; and, best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Additional Special Term and Condition Q)

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
F018	Emergency Ash Storage Pile	Dust suppression, minimize drop heights, maximum of 28 days usage per year	3745-17-07(B)(6) 3745-17-08(B) 3745-31-05	wind erosion from storage piles: 0.37 ton/yr particulate; 0.14 ton PM ₁₀ /yr; and, no visible emissions except for thirteen minutes in any hour; and, best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Additional Special Term and Condition Q) * * Maximum pile life of 28 days per 12-month period load-in and load out of storage piles: 0.005 ton particulate/year; 0.002 ton PM ₁₀ ; and, no visible emissions except for thirteen minutes in any hour; and, best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Additional Special Term and Condition Q) wind erosion from storage

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				piles: 0.22 ton particulate/year; 0.11 ton PM ₁₀ ; and, no visible emissions except for thirteen minutes in any hour; and, best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Additional Special Term and Condition Q)
F019		Enclosure and emissions vented to a fabric filter		*
	Rail Car Load-Out from Skid Mounted Rail Car Feeder		3745-17-07(B)(6)	*
			3745-17-08(B)	0.94 tons particulate/year. 0.84 tons PM ₁₀ /year; 20% opacity as a 6-minute average;
			3745-31-05	Also Additional Special Terms and Conditions.
P001		Use of natural gas or use of No. 2 fuel oil not exceeding 0.39% sulfur content		*
	Limestone Dryer		3745-17-07(A)(1)	*
			3745-17-08(B)	1.01 lb/hr and 4.4 TPY CO; 1.74 lb/hr and 7.63 TPY NO _x ;
			3745-31-05	0.002 lb/hr and 0.008 TPY PM; 0.001 lb/hr and 0.004 TPY PM-10; 4.83 lb/hr and 21.15 TPY SO ₂ ;

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				0.07 lb/hr and 0.31 TPY VOC; 20% opacity as a 6-minute average
				*
			3745-17-07(A)(1)	*
			3745-17-10	*
			3745-21-08(B)	*
			3745-18-06	*
			3745-23-06(B)	

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>	<u>Net Emission Increase</u>
CO	1224.4	1153.4
NO _x	1553.6	-2274.4
PM	292.2	-39.4
PM10	227.0	4.7
SO _x	5562.2	-3.85
VOC	19.6	19.61

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

1. Calculations based upon firing coal, which generates the worst case emissions for this pollutant. Coal will be used as a backup-fuel.
 2. Calculations based upon firing coke, which generates the worst case emissions for this pollutant.
 3. Compliance shall be determined in accordance with 40 CFR 60.8(f). See Compliance Methods.
 4. Thirty-day average. See Compliance Methods.
 5. For boiler CO, the highest emissions rate results at three quarter load (75% firing rate), and this is reflected in the emission allowables, including the tons/yr CO calculation.
 6. B006 generates process steam in combination with electrical generation; therefore compliance with output based standard is determined using the procedure outlined under 40 CFR Part 60.74a(k)(1) through (k)(3).
- * This limit is less stringent than, or equivalent to, the limit established by OAC 3745-31-05.

Additional Terms and Conditions

A. Operational Restrictions for Emissions Unit B006

1. The use of number 2 fuel oil shall be limited to start-up, shut-down and during periods of operation at lower loads when it is needed for flame stabilization, of this emissions unit.

B. Monitoring and Record Keeping Requirements for Emissions Unit B006

1. Opacity Monitoring System
 - a. The permittee shall install, operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
 - b. Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.
 - c. Within 60 days of achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to ORC section 3704.03(I) and 40 CFR

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Part 60, Appendix B, Performance Specification 1. Personnel from the Toledo Division of Environmental Services shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to the Toledo Division of Environmental Services pursuant to OAC rule 3745-15-04 within 30 days after the test is completed. Certification of the continuous opacity 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 1 including section 5.1.9 (mandatory).

2. Sulfur Dioxide Monitoring System

- a. The permittee shall install, operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.
- b. Prior to the installation of the continuous sulfur dioxide monitoring system, the permittee shall submit information detailing the proposed locations of the sampling sites in accordance with the siting requirements in 40 CFR Part 75 for approval by the Ohio EPA, Central Office.
- c. Within 60 days of achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests of the continuous sulfur dioxide monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 75. Personnel from the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services within 30 days after the test is completed. Copies of the test results shall be sent to the Toledo Division of Environmental Services and the Ohio EPA, Central Office. Certification of the continuous sulfur dioxide 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 75.
- d. The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: emissions of sulfur dioxide in lb/MMBtu actual heat input on an hourly average basis, emissions of sulfur dioxide in lb/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Fuel Sampling and Record Keeping Requirements for Fuel Usage and Quality

- a. The permittee shall collect daily samples of the fuel (petroleum coke or coal) burned in this emissions unit. The individual samples for each day shall be collected from the hopper. The fuel sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. Alternative, equivalent methods may be used upon written approval from the Ohio EPA Central Office or Toledo Division of Environmental Services.
- b. Each daily sample of fuel shall be analyzed for sulfur content (percent), and heat content (Btu/pound of fuel). The analytical methods for sulfur content and heat content shall be ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke; ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter; ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA Central Office or Toledo Division of Environmental Services.
- c. The permittee shall maintain daily records of the total weight of fuel burned, and the results of the analyses for sulfur and heat content.

4. Nitrogen Oxides Monitoring System

- a. The permittee shall install, operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. Data reported to meet the requirements of 40 CFR 60.49a shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.
- b. The procedures specified in paragraphs b.i. to b.iii. of this section shall be used to determine gross heat rate for demonstrating compliance with the output-based standard under 40 CFR 60.44a(d)(1).
 - i. The permittee shall install, calibrate maintain, and operate a watt meter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- ii. The permittee shall install, calibrate, maintain and operate meters for steam flow, temperature, and pressure; measure gross process steam output in joules per hour (or Btu per hour) on a continuous basis; and record the output of the monitor.
 - iii. When generating process steam in combination with electrical generation, the gross energy output is determined from the gross electrical output measured in accordance with b.i. of this section plus 50 percent of the gross thermal output of the process steam measured in accordance with paragraph b.ii. of this section.
- c. The permittee shall install, certify, operate and maintain a continuous flow monitoring system, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- d. Prior to the installation of the continuous nitrogen oxides monitoring system, the permittee shall submit information detailing the proposed locations of the sampling sites in accordance with the siting requirements in 40 CFR Part 75 for approval by the Ohio EPA, Central Office.
- e. Within 60 days of achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests of the continuous nitrogen oxides monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 75. Personnel from the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services within 30 days after the test is completed. Copies of the test results shall be sent to the Toledo Division of Environmental Services and the Ohio EPA, Central Office. Certification of the continuous nitrogen oxides 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 75.
- f. The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in pounds per megawatt-hour gross energy output on an hourly average basis, emissions of nitrogen oxides in lb/hr on an hourly average basis, emissions of nitrogen oxides in lb/MMBtu actual heat input on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

5. Carbon Monoxide Monitoring System

- a. The permittee shall install, operate and maintain equipment to continuously monitor and record carbon monoxide emissions from this emissions unit 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.
- b. Prior to the installation of the continuous carbon monoxide monitoring system, the permittee shall submit information detailing the proposed locations of the sampling sites in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4, for approval by the Ohio EPA, Central Office.
- c. Within 60 days of achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests of the continuous carbon monoxide monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4. Personnel from the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services within 30 days after the test is completed. Copies of the test results shall be sent to the Toledo Division of Environmental Services and the Ohio EPA, Central Office. Certification of the continuous nitrogen oxides 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 4.
- d. The permittee shall maintain records of the following data obtained by the continuous carbon monoxide monitoring system: emissions of carbon monoxide in lb/MMBtu actual heat input on an hourly average basis, emissions of carbon monoxide in lb/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

6. Carbon Dioxide Monitoring System

- a. The permittee shall install, operate and maintain equipment to continuously monitor and record carbon dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- b. Prior to the installation of the continuous carbon dioxide monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3 for approval by the Ohio EPA, Central Office.
- c. Within 60 days of achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests of the continuous carbon dioxide monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 75. Personnel from the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services within 30 days after the test is completed. Copies of the test results shall be sent to the Toledo Division of Environmental Services and the Ohio EPA, Central Office. Certification of the continuous carbon dioxide 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 75.
- d. The permittee shall maintain records of the following data obtained by the continuous carbon dioxide monitoring system: emissions of carbon dioxide in lb/MMBtu actual heat input on an hourly average basis, emissions of carbon dioxide in lb/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

7. Common Requirements

- a. Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- b. The permittee shall maintain a certification letter from the U.S. EPA or the Ohio EPA documenting that each continuous monitoring system has been certified in accordance with the requirements of 40 CFR Part 60 or 75. The letter of certification shall be made available to the Director upon request.
- c. 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.
- d. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

October 30 of each year and shall address the data obtained during the previous calendar quarter.

C. Reporting Requirements for Emissions Unit B006

1. Opacity

- a. The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity as a 6-minute average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- b. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting all instances of opacity values in excess of the limitations specified in 40 CFR Part 60.42a(b) and OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).
- c. The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity 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 be included in the quarterly report.

2. SO₂

- a. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any), of all 3-hour average sulfur dioxide values in excess of the applicable sulfur dioxide emission rate (lb/hr) and actual tons of SO₂/quarter. The permittee shall report, under 40 CFR 60.49a(b), the average sulfur dioxide emission rate (lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and description of corrective actions taken.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- b. The reports shall also document any continuous sulfur dioxide 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 be included in the quarterly report.
- c. The permittee shall report, under 60.49a(b), the percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken. The NSPS limitation is specified in 40 CFR Part 60.43a(a), and the Best Available Technology Determination for sulfur reduction requirement is 0.73 lb SO₂/MMBtu heat input and 90 percent reduction except that 70 percent reduction is allowable for all heat inputs less than 0.60 lb SO₂/MMBtu.

3. Oxides of Nitrogen

- a. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any), of all 30-day average nitrogen oxides values in excess of the applicable nitrogen oxides emission rate (pounds per megawatt-hour gross energy output, pounds per hour, pounds per million BTU heat input and tons per year) and actual tons of NO_x/quarter. The permittee shall report, under 40 CFR 60.49a(b) and (c), the average nitrogen oxides emission rate (pounds per megawatt-hour gross energy output) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and description of corrective actions taken.
- b. The reports shall also document any continuous nitrogen oxides 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 be included in the quarterly report.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

4. CO₂

- a. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting all instances of continuous carbon dioxide 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 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 be included in the quarterly report.

5. CO

- a. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any), of all 3-hour average carbon monoxide values in excess of the applicable carbon monoxide emission rate (lb/hr)
- b. The reports shall also document any continuous carbon monoxide 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 be included in the quarterly report.

D. Operation Restrictions for F006, F007 and F011

The combined tons of coke loaded-in to the premises by emissions units F006, F007 and F011 shall not exceed 730,000 tons/yr per rolling 12-month period.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the usage level listed in the following table for emissions units F006, F007 and F011 combined.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

<u>Month(s)</u>	<u>Maximum Cumulative Tons Loaded-in</u>
1	150,000
1-2	300,000
1-3	450,000
1-4	600,000
1-5	730,000
1-6	730,000
1-7	730,000
1-8	730,000
1-9	730,000
1-10	730,000
1-11	730,000
1-12	730,000

After the first 12 calendar months of operation, compliance with the limitation shall be based upon a rolling, 12-month summation of the tons of coke loaded-in to the premises by emissions units F006, F007 and F011 combined.

E. Monitoring and/or Recordkeeping Requirements for F006, F007 and F011

The permittee shall maintain monthly records of the tons of coke loaded into the premises by emissions units F006, F007 and F011 combined of the following information:

- a. The production rate for each month.
- b. The rolling, 12-month summation of the production rates.

F. Reporting Requirements for F006, F007 and F011

The permittee shall submit semi-annual deviation (excursion) reports that identify all exceedances of the rolling, 12-month summation of the coke loaded-in by emissions units F006, F007 and F011 combined. These reports are due by the date by January 31 and July 31 of each year for the previous six calendar months.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

G. Compliance Methods and Testing Requirements for Emissions Units B006, F007, F009-F013

1. Visible Emission Limitations

- a. The continuous opacity monitoring data shall be used to demonstrate compliance with the requirements of 40 CFR Part 60.42a(b) and OAC rule 3745-17-07(A)(1). Compliance with the visible emission limitations in 40 CFR Part 60.42a(b) and OAC rule 3745-17-07(A)(1) may also be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in 40 CFR Part 60.48a and OAC rule 3745-17-03(B)(1) as long as the emissions units B002-B005 are off-line, otherwise the continuous opacity monitoring system serving B006 shall be used to determine compliance with the requirements of 40 CFR 60.42a(b) pursuant to 40 CFR Part 60.11(e)(5). In the event of a discrepancy between the continuous opacity monitoring system data and observations performed (while emissions units B002-B005 are off-line) in accordance with 40 CFR Part 60, Appendix A, Method 9 during the same period, the Method 9 data will take precedence for that time period.

The permittee shall be deemed in compliance with 40 CFR 60.42a(b) and OAC rule 3745-17-07(A)(1) if less than 1.5 percent of nonexempt* 6-minute average opacity values during a calendar quarter exceed 20 percent opacity. (Historical continuous opacity monitoring data for coal-fired boilers equipped with electrostatic precipitators or baghouses indicate that an excess emissions level of 1.5 percent (nonexempt emissions) is representative of good operation and maintenance of the emissions unit and the associated control equipment).

*exempt emissions are defined in OAC rule 3745-17-07

2. Sulfur Dioxide Limitations

- a. Compliance with the sulfur dioxide lb/MMBtu emission limitation shall be based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the methods and procedures specified in 40 CFR Parts 60.46a and 60.48a.
- b. Compliance with the sulfur dioxide lb/hr emission limitation shall be based upon the 3-hour average data obtained by the continuous sulfur dioxide monitoring system. Or, if required, the permittee shall demonstrate compliance with the sulfur dioxide lb/hr emission limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 or alternative approved method.
- c. Compliance with the sulfur dioxide percent reduction requirements shall be based upon a rolling 30-day average of the inlet and outlet sulfur dioxide mass emission rates. The inlet SO₂ emission rate shall be determined by the daily fuel sampling described under the Monitoring and Record Keeping Requirements for Emissions Unit B006. The mass emission rates of sulfur dioxide shall

be determined in accordance with the methods and procedures specified in 40 CFR Part 60.48a(c)(1).

3. Oxides of Nitrogen Limitations

- a. Compliance with the allowable mass emission rate for nitrogen oxides shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60.46a, 60.47a and 60.48a.
- b. Compliance with the nitrogen oxides pounds per megawatt-hour gross energy output, pounds per hour, and pounds per million BTU heat input emission limitations shall be based upon the 30-day average data obtained by the continuous nitrogen oxides monitoring system. Or, if required, the permittee shall demonstrate compliance with the nitrogen oxides lb/hr emission limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 7 or alternative approved method.

4. Particulate Matter Limitations

- a. Compliance with the allowable mass emission rate for particulates specified in 40 CFR Part 60.42(a)(1) shall be determined in accordance with the procedures in 40 CFR Parts 46a(a) and 60.48a(b)(2).
- b. Compliance with the particulate matter emission limitation under 40 CFR Part 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under 40 CFR Part 60.42a(2) and (3).

5. PM₁₀ Limitation

Compliance with the particulate matter less than 10 microns emission limitation shall be demonstrated by multiplying the results of the emissions tests conducted for particulate matter in accordance with 40 CFR Part 60.48a by a factor of 0.83. The 0.83 factor was derived based on particulate size distribution data from a coal-fired fluidized bed boiler and was developed by the Electric Power Research Institute.

6. Carbon Monoxide Limitations

- a. Compliance with the carbon monoxide lb/MMBtu emission limitation shall be based upon the data from the performance stack test and the heat input data derived from the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 19 or alternative approved method.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Performance stack testing shall be conducted at half load, three quarter load and full load or stack testing at one appropriate load and use of the certified CEM to verify compliance with the other two load limits.

- b. Compliance with the carbon monoxide lb/hr emission limitation shall be based upon the hourly average data obtained by the continuous carbon monoxide monitoring system. Or, if required, the permittee shall demonstrate compliance with the carbon monoxide lb/hr emission limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 10 or alternative approved method.

7. Organic Compounds

Compliance with the organic compounds (OC) emission limitation shall be calculated by multiplying the 0.0025 lb/MMBtu emission factor (provided by the manufacturer in the permit application) by the heat input (MMBtu) of the fuel burned each month. Compliance with the annual OC limit shall be calculated by summing the monthly OC emissions.

8. Initial Test Procedures

Within 60 days after achieving the maximum production rate at which B006 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct performance tests pursuant to 40 CFR Part 60.8 The permittee shall use as reference methods and procedures the applicable methods in 40 CFR Part 60, Appendix A, or the methods as specified in 40 CFR Part 60.48a or alternative approved method.

9. Visible Emission Limitation and Opacity Exemption Provision

- a. Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average except for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 27 percent opacity, as a 6-minute average, as specified in D.1 above.
- b. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP/baghouse (a) during all periods of start-up until the ESP/baghouse is operational or until the inlet temperature of the ESP/baghouse achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods of shutdown until the inlet temperature of the ESP/baghouse drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i).

- c. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

10. Quality Assurance/Quality Control Requirements

- a. Within 180 days of initial startup, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
- b. Within 180 days of initial startup, the permittee shall develop a written quality assurance/quality control plan for the continuous carbon monoxide monitoring system designed to ensure continuous valid and representative readings of carbon monoxide. 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 carbon monoxide monitoring system must be kept on site and available for inspection during regular office hours.
- c. A logbook dedicated to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours.
- d. A logbook dedicated to the continuous nitrogen oxides monitoring system must be kept on site and available for inspection during regular office hours.
- e. A logbook dedicated to the continuous carbon dioxide monitoring system must be kept on site and available for inspection during regular office hours.

11. Number 2 Fuel Oil Provisions

- a. The use of number 2 fuel oil shall be permitted for the start-up, shut-down and during periods of operation at lower loads when it is needed for flame stabilization, of this emissions unit. This unit shall comply with the allowable emissions limits, except as otherwise provided for during periods of start-up and shut-down.
- b. The quality of the oil burned in this emissions unit shall meet a sulfur content of no greater than

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

0.5 percent and that is sufficient to comply with the allowable emission limitation of 0.73 lb sulfur dioxide/MMBtu actual heat input.

- c. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lb/MMBtu.
- d. The permittee shall notify the Director (the Toledo Division of Environmental Services) in writing of any record which shows a deviation of the fuel specification above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Director Office or Toledo Division of Environmental Services) within 45 days after the deviation occurs.
- e. When firing fuel oil, compliance with the sulfur dioxide emission limitation shall be based upon the record keeping as specified above and the formula referenced in OAC rule 3745-18-04(F)(2).
- f. When firing fuel oil, compliance with the particulate matter emission limitation shall be based upon an emission factor of 2 lbs/1000 gallons. Compliance with the CO emission limitation shall be based upon an emission factor of 0.068 lb/MMBtu. Compliance with the NO_x emission limitation shall be based upon an emission factor of 0.24 lb/MMBtu and compliance with the VOC emission limitation shall be based upon an emission factor of 0.252 lb/1000 gallons. These emission factors are specified in U.S. EPA reference document AP-42, Fourth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-2 (for PM) and Table 1.3-4 (for TOC), and in the application supplement provided as manufacturer's estimates (CO and NO_x). If required, the permittee shall demonstrate compliance with these emission limitations in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

12. Parametric Monitoring

- a. The data from the continuous opacity monitoring system serving B006 shall be used to ensure that the electrostatic precipitator and baghouse associated with B006 continues to operate in a manner that allows compliance with the visible emission and particulate matter limitations to be achieved.
- b. Visible emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B) shall be used to ensure that the baghouses associated with emissions units F007, F009-F013 are operated in a manner that allows compliance with the visible emission and particulate matter limitations to be achieved.

H. Operational restrictions for emissions Unit F008

1. There shall be no visible particulate emissions from any storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period, in accordance with OAC rule 3745-17-07.
2. Moisture content shall be sufficient to eliminate the visible emissions of fugitive dust, or equivalent.
3. The drop height of the loader shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the elevator loading area.

I. Compliance Methods and Testing Requirements for Emissions Unit F008

1. Visible and Particulate Emissions Limitations
 - a. compliance shall be determined by OAC 3745-17-03(B)(3) and OAC 3745-17-08(C).

J. Operational Restrictions for Emissions Unit F001

1. There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any 60-minute observation period, in accordance with OAC rule 3745-17-07.
2. There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed 13 minutes during any 60-minute observation period, in accordance with OAC rule 3745-17-07.
3. The permittee shall sweep the paved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. The permittee shall not be required to sweep during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
4. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water or an approved chemical dust suppressant shall be used as the dust suppressant. The dust suppressant shall be applied to the unpaved surfaces, as needed. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
5. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

6. A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.
7. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

K. Monitoring and Recordkeeping Requirements for Emissions Unit F001

1. Visible and Particulate Emissions Limitations

The permittee shall maintain records which shall include the following:

- a. The date of each sweeping;
- b. an identification of the area swept;
- c. the name of the equipment operator;
- d. The date of dust suppressant application;
- e. the type of dust suppressant used, and the area of application; and,
- f. the name of the equipment operator responsible for treatment application.

L. Compliance Methods and Testing Requirements for Emissions Unit F001

1. Visible and Particulate Emissions Testing

- a. compliance shall be determined by OAC 3745-17-03(B)(4).

M. Shut Down of Coal Fired Boiler Number 1, B001

The existing coal fired boiler identified as number 1 shall be shut-down upon start-up of this new boiler, B006, in accordance with the netting requirements of this permit.

N. Miscellaneous

1. Stack Modification

On October 21, 1997, Centerior Energy requested a modification to this permit to install to allow the use of an alternative stack to the one originally proposed and approved with this PTI. The review of the

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

revised modeling submitted indicates that the alternative stack, of at least 300 feet in height, is acceptable. This PTI modification allows the use of the alternative stack.

2. Emission Limits

The emission allowables for the new boiler stated in this permit were developed by the permittee using manufacturer's information and good engineering judgement, to estimate as accurately as possible the maximum emissions that could be expected. Since performance stack testing is required to be conducted on the unit upon startup, Ohio EPA will accept and review a request for permit modification from the permittee if it is determined by testing that the allowable emission rates are inaccurate. Ohio EPA will modify the permit, in accordance with the stack testing results and the permittee's request, and replace the current allowables with new emission rates that the Ohio EPA finds to be acceptable. All federal and state requirements must be met by any modification.

O. Operational Restrictions for F016

1. The permittee shall operate the dust collection system whenever this emissions unit is in operation.

P. Monitoring and Recordkeeping Requirements for F016

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
2. The permittee shall maintain daily records that document any time periods when the dust collection system was not in service when the emissions unit was in operation.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Q. Reporting Requirements for F016

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which any visible particulate emissions were observed from the stack serving this emissions unit and a description of any corrective actions taken to eliminate the visible particulate emissions.
 - b. An identification of each day during which the dust collection system was not in service when the emissions unit was in operation.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

R. Testing Requirements for F016

1. Emission Limitation:

Less than or equal to 20 percent opacity, as a 6-minute average, from the stack, except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emissions limitation from stack shall be based upon the record keeping requirements for F016. If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1)
2. Emission Limitation:

3.78 tons per year of particulate matter and 3.4 tons per year PM₁₀ and, if required, Method 5 of 40 CFR Part 60, Appendix A..

Applicable Compliance Method:

Compliance with the particulate emissions limitation shall be based upon the record keeping requirements for F016.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

S. Additional Terms and Conditions for F017

1. 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. The permittee shall use water to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
2. 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.
3. 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. The permittee shall use water to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
4. 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.
5. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

T. Operational Restrictions for F017

None

U. Monitoring and/or Recordkeeping Requirements for F017

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:

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: 0448020006

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
Emergency limestone storage pile	Weekly

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
Emergency limestone storage pile	Weekly

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

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
Emergency limestone storage pile	Weekly

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

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

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

7. The permittee shall maintain records of the following information:
- 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;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- 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.

V. Reporting Requirements for F017

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.

W. Testing Requirements for F017

1. 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.

X. Additional Terms and Conditions for F018

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

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

2. 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.
3. 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. The permittee shall use water to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
4. 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.
5. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

Y. Operational Restrictions for F018

The permittee shall not allow the emergency bed ash storage pile to exist for more than 28 days in any 12-month period.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Days of Storage Pile Existence</u>
1	28
1-2	28
1-3	28
1-4	28
1-5	28
1-6	28

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

1-7	28
1-8	28
1-9	28
1-10	28
1-11	28
1-12	28

After the first 12 calendar months of operation, compliance with the limitation shall be based upon a rolling, 12-month summation of the monthly days of storage pile existence.

Z. Monitoring and/or Recordkeeping Requirements for F018

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:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
Emergency bed ash storage pile	Daily

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
Emergency bed ash storage pile	Daily

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

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
Emergency bed ash storage pile	Daily

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

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (I) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

8. The permittee shall record each day that there is a bed ash storage pile and maintain monthly records indicating the number of days a bed ash storage pile existed in the previous calendar month. The permittee shall maintain a rolling, 12-month summation of the number of days that a bed ash storage pile existed.

AA. Reporting Requirements for F018

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

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
 - c. any day that the bed ash storage pile existed in excess of the limitations specified under the Operational Restrictions for F018.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

BB. Testing Requirements for F018

1. 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.

CC. Operational Restrictions for F019

1. The permittee shall operate the dust collection system whenever this emissions unit is in operation.

DD. Monitoring and Recordkeeping Requirements for F019

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
2. The permittee shall maintain daily records that document any time periods when the dust collection system was not in service when the emissions unit was in operation.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

EE. Reporting Requirements for F019

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which any visible particulate emissions were observed from the stack serving this emissions unit and a description of any corrective actions taken to eliminate the visible particulate emissions.
 - b. An identification of each day during which the dust collection system was not in service when the emissions unit was in operation.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A

FF. Testing Requirements for F019

1. Emission Limitation:

Less than or equal to 20 percent opacity, as a 6-minute average, from the stack, except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emissions limitation from stack shall be based upon the Monitoring and Recordkeeping requirements for F019. If required, compliance shall also be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1)
2. Emission Limitation:

0.94 tons per year of particulate matter and 0.84 tons per year PM₁₀.

Applicable Compliance Method:

Compliance with the hourly particulate emissions limitation shall be based upon the record keeping requirements for F019. If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10) and Method 5 of 40 CFR Part 60, Appendix A.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

GG. Operational Restriction for P001

The permittee shall burn only natural gas or burn number two fuel oil with a sulfur content of no greater than 0.39 percent sulfur in this emissions unit.

HH. Monitoring and Record Keeping Requirements for P001

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content in accordance with the following ASTM methods: ASTM method D4294, ASTM D240, or ASTM method 6010 for sulfur content. Alternative, equivalent methods may be used upon written approval by the Toledo Division of Environmental Services.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil suppliers analyses for sulfur content.

II. Reporting Requirement for P001

The permittee shall submit deviation (excursion) reports which include the following information:

- a. an identification of each day when a fuel other than number two fuel oil was burned in this emissions unit; and,
- b. an identification of each day during which the sulfur content of fuel oil burned contained greater than 0.39% sulfur on an as received basis.

Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

JJ. Testing Requirements for P001

1. Emission Limitation:

Less than or equal to 20 percent opacity, as a 6-minute average, from the stack.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Applicable Compliance Method:

Compliance with the visible emissions limitation from stack shall be based upon the record keeping requirements for F019. If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation:

1.01 lb/hr and 4.4 TPY CO

Applicable Compliance Method:

the exclusive combustion of #2 fuel oil or natural gas as determined through the record keeping requirements shall be considered adequate demonstration of compliance with these emissions limits. These limits were based on multiplying the AP-42 emission factor of 84 lb CO/MMCF of natural gas burned times the gas burned per hour times the gas heating value correction factor for compliance with the lb/hr limit. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/SCF. Compliance with the lb/hr limit constitutes compliance with the ton/yr limit.

If required, use the methods and procedures provided in Method 10 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

1.74 lbs/hr and 7.63 TPY NO_x

Applicable Compliance Method

the exclusive combustion of natural gas or #2 fuel oil as determined through the record keeping requirements shall be considered adequate demonstration of compliance with these emissions limits. These limits were based on multiplying the AP-42 emission factor of 20 lbs/1000 gallons dated 9/98 by the maximum fuel usage of 87 gallons per hour.

If required, use the methods and procedures provided in Method 7 of 40 CFR Part 60, Appendix A.

4. Emission Limitation

0.002 lb/hr and 0.008 TPY PM
0.001 lb/hr and 0.004 TPY PM-10

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Applicable Compliance Method

the exclusive combustion of natural gas or #2 fuel oil as determined through the record keeping requirements shall be considered adequate demonstration of compliance with these emissions limits. These limits were based on multiplying the AP-42 emission factor of 2 lbs/1000 gallons (55% PM-10) dated 9/98 by the maximum fuel usage of 87 gallons per hour and an estimated of control efficiency of 99% since these emissions are vented through the fabric filter controlling emissions unit F010.

If required, use the methods and procedures provided in OAC rule 3745-17-03(B)(9).

5. Emission Limitation

4.83 lbs/hr and 21.15 TPY SO₂

Applicable Compliance Method

Compliance shall be demonstrated through the recordkeeping requirements by demonstrating that only fuel oil with a sulfur content no greater than 0.39% or natural gas was burned. These limits were based on multiplying the AP-42 emission factor of 142S lbs/1000 gallons, where S is %sulfur, dated 9/98 by the maximum fuel usage of 87 gallons per hour.

If required, use the methods and procedures provided in OAC 3745-18-04(E).

6. Emission Limitation

0.06 lb/hr and 0.26 TPY VOC

Applicable Compliance Method

the exclusive combustion of natural gas or #2 fuel oil as determined through the record keeping requirements shall be considered adequate demonstration of compliance with these emissions limits. These limits were based on multiplying the AP-42 emission factor of 5.5 lb SO₂/MMCF of natural gas burned times the gas burned per hour times the gas heating value correction factor for compliance with the lb/hr limit. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/SCF. Compliance with the lb/hr limit constitutes compliance with the ton/yr limit.

If required, use the methods and procedures provided in Method 25 of 40 CFR Part 60, Appendix A.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

KK. Additional Terms and Conditions for F006

1. The permittee shall employ reasonably available control measures on the coke truck dump 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: ensure that the coke contains sufficient moisture to ensure compliance with the visible emissions limitation. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
2. The coke truck dump shall be treated with water and/or suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of the coke truck dump until further observation confirms that use of the control measures is unnecessary.
3. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

LL. Monitoring and Recordkeeping Requirements for F006

1. Except as otherwise provided in this section and for coke unloading stations that are not adequately enclosed, the permittee shall perform inspections of such coke unloading stations with the following frequencies:

coke unloading station identification:

Coke truck dump

minimum inspection frequency:

Daily
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Toledo Division of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

with the above-mentioned applicable requirements. Such modified inspection frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

4. 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 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.

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

MM. Reporting Requirements for F006

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; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted semi-annually by January 31 and July 31 of each year and shall cover the previous six calendar months.

NN. Testing Requirements for F006

1. Compliance with the emission limitations for coke unloading identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.*

*The procedures related to Test Method 9 reflect the settlement agreement reached between Ohio EPA and the Ohio Electric Utilities concerning the Utilities' appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

these procedures was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the Ohio Electric Utilities have agreed to consider the procedures as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the procedures as a revision to the Ohio SIP for particulate matter.

OO. Additional Terms and Conditions for F014

1. The permittee shall employ reasonably available control measures on the coke truck loadout 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: ensure that the coke contains sufficient moisture to ensure compliance with the visible emissions limitation. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
2. The coke truck loadout shall be treated with water and/or suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of the coke truck loadout until further observation confirms that use of the control measures is unnecessary.
3. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

PP. Monitoring and Recordkeeping Requirements for F014

1. Except as otherwise provided in this section and for coke loadout stations that are not adequately enclosed, the permittee shall perform inspections of such coke loadout stations with the following frequencies:

coke loadout station identification:

Coke Truck Load-Out Station at Transfer House #1

minimum inspection frequency:

Daily
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

3. The permittee may, upon receipt of written approval from the Toledo Division of Environmental Services, 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. Such modified inspection frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.
4. 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 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.

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

QQ. Reporting Requirements for F014

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; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted semi-annually by January 31 and July 31 of each year and shall cover the previous six calendar months..

RR. Testing Requirements for F014

1. Compliance with the emission limitations for coke loadout identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.*

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

*The procedures related to Test Method 9 reflect the settlement agreement reached between Ohio EPA and the Ohio Electric Utilities concerning the Utilities' appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing these procedures was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the Ohio Electric Utilities have agreed to consider the procedures as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the procedures as a revision to the Ohio SIP for particulate matter.

SS. Additional Terms and Conditions for F015

1. The permittee shall employ reasonably available control measures on the coke truck loadout 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: ensure that the coke contains sufficient moisture to ensure compliance with the visible emissions limitation. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
2. The coke truck loadout shall be treated with water and/or suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of the coke truck loadout until further observation confirms that use of the control measures is unnecessary.
3. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

TT. Monitoring and Recordkeeping Requirements for F015

1. Except as otherwise provided in this section and for coke loadout stations that are not adequately enclosed, the permittee shall perform inspections of such coke loadout stations with the following frequencies:

coke loadout station identification:

Coke Truck Load-Out Station from the Coke Storage Pile

minimum inspection frequency:

Daily

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Toledo Division of Environmental Services, 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. Such modified inspection frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.
4. 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 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.

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

UU. Reporting Requirements for F015

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; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted semi-annually by January 31 and July 31 of each year and shall cover the previous six calendar months..

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

VV. Testing Requirements for F015

1. Compliance with the emission limitations for coke loadout identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.*

*The procedures related to Test Method 9 reflect the settlement agreement reached between Ohio EPA and the Ohio Electric Utilities concerning the Utilities' appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing these procedures was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the Ohio Electric Utilities have agreed to consider the procedures as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the procedures as a revision to the Ohio SIP for particulate matter.

WW. Additional Terms and Conditions for Unit F010.

1. Additional Terms and Conditions
 - a. Total emissions from all of the operations comprising this emissions unit shall not exceed:

fugitive	0.0 tons per year as PE or PM10
stack	14.23 tons of PE per year
	12.80 tons as PM10 per year
 - b. The permittee shall not exceed 5840 hours of operation for this emissions unit per rolling, 12-month period.
 - c. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO .
 - d. The permittee shall comply with either i. or ii. below:
 - i. Stack particulate emissions shall not exceed 0.05 gram per dry standard cubic meter (g/dscm) or exhibit greater than 7 percent opacity. Fugitive particulate emissions shall not exhibit greater than 10 % opacity.

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- ii. The permittee shall not cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any crushing and screening operation any visible fugitive particulate emissions, except emissions from a vent as defined by 40 CFR 60.671.

The permittee shall not cause to be discharged into the atmosphere from any building enclosing a transfer point on a conveyor belt or any crushing and screening operation which exceed the stack emissions limits in paragraph i. above.

- e. The permittee shall not cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.
- f. The emission limitations and control requirements established by OAC rule 3745-17-07(B) and 3745-17-08(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- g. The application and enforcement of the provisions of NSPS, as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR Part 60 are also federally enforceable.

2. Operating restrictions

- a. The maximum annual hours of operation for this emissions unit shall not exceed 5840 hours, based upon a rolling, 12-month summation.
- b. To ensure the baghouses are operated according to the manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, the pressure drop across each baghouse shall be maintained within the range of 3.0 to 5.0 inches of water while the emissions unit is in operation.

3. Monitoring and/or Recordkeeping Requirements

- a. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from all enclosures serving this emissions unit. The presence or absence of any visible

emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- i. the color of the emissions;
 - ii. whether the emissions are representative of normal operations;
 - iii. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - iv. the total duration of any abnormal visible emission incident; and
 - v. any corrective actions taken to eliminate the abnormal visible emissions.
- b. The permittee shall maintain monthly records of the following information:
- i. The hours of operation for each month.
 - ii. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the hours of operation.

Also, during the first 12 calendar months of operation following the issuance, the permittee shall record the cumulative production rate for each calendar month.

- c. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each 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 each baghouse on weekly basis.

4. Reporting Requirements

- a. The permittee shall submit quarterly deviation (excursion) reports which:
- i. identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit;
 - ii. describe any corrective actions taken to eliminate the abnormal visible particulate emissions;
 - iii. identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above; and

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

- iv. identify any exceedances of the hours of operation limitation.
- b. Pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for this emissions unit:
 - i. Construction date (no later than 30 days after such date);
 - ii. Actual start-up date (within 15 days after such date); and
 - iii. Date of performance testing (if required, at least 30 days prior to testing).

The notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

and

City of Toledo, Division of Environmental Services
Quilter Environmental Center
348 South Erie Street
Toledo, OH 43602-1633

- c. The permittee shall submit the reports in accordance with paragraph A.2.b of the General Terms and Conditions.

5. Testing Requirements

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

14.23 TPY PE

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

Applicable Compliance Method:

For Limestone Crushing Operation:

The emission limitation was developed using the annual throughput of 276,000 tons at 5840 hours of operation per year, 99.9% control efficiency and the vendor design emission factors: 3.607 lb/hr for the main dust collector; 0.771 lb/hr for the auxiliary dust collector; 2.4522 lb/ton for the receiving hopper filter; 3.4261 lb/ton for the vent filter for limestone silo; and 4.5739 lb/ton for the vent filter for silo discharge feeder:
 $(3.607+0.771)5840\text{hrs}/2000\text{lb}+(2.4522+3.4261+4.5739)(276,000)(0.001)/2000\text{lb}$

The permittee shall demonstrate compliance by monitoring and recordkeeping of the annual hours of operation in section 3.b. of Special Additional Terms and Conditions for Unit F010.

ii. Emission Limitation:

7% opacity from a stack or a vent

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated using Method 9 of 40 CFR part 60, appendix A with the modification(s) of 40 CFR 60.675(c), as follows:

- (a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (b) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (40 CFR 60 Appendix A, Method 9, Section 2.1) must be followed.
- (c) When determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin, using Method 9, the duration of the Method 9 observations shall be one hour (ten six-minute averages).

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

iii. Emission Limitation:

0.05 gram of PE/dscm or 0.022 grains of PE/dscf

Applicable Compliance Method:

Method 5 or Method 17 shall be used to determine the particulate emission concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121°C (250°F), to prevent water condensation on the filter.

iv. Emission Limitation:

No visible fugitive emissions from the building except from the stacks and vents.

Applicable Compliance Method:

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

b. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all transfer points, screens, and crushers of emissions unit F010 in accordance with the following requirements.

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.
- ii. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations and the allowable mass emission rates for particulate emissions.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable visible emission limitations:
 - (a) stack opacity: Method 9 of 40 CFR part 60, appendix A with the modifications of

FirstEnergy Corporation
PTI Application: 04-01056
Modification Issued: 10/24/2002

Facility ID: **0448020006**

40 CFR 60.675(c), as described in section ~~4.a.ii.~~ **5.a.ii** above.

- (b) stack particulate concentrations: see section 5.a.iii.
- (c) fugitive building emissions: see section 5.a.iv.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

6. Miscellaneous Requirements

The terms and conditions of this PTI shall supersede the terms and conditions for this emissions unit established by PTI application number 04-1056 as modified June 3, 1999.