

☒ Synthetic Minor Determination and/or ☒ Netting Determination

Permit To Install #06-06309

A. Source Description

Mingo Junction Energy Center operates four 180 MMBTU/hr blast furnace gas and natural gas-fired boilers. These boilers were originally constructed under PTI #17-1382 owned by National Power Exchange Group. The plant was sold to Air Liquide America Corporation on March 14, 1996. Subsequently, PTI #17-1382 was modified due to mistakes in the May 1, 1996 PTI. Ownership was again transferred on January 12, 2000, this time to Mingo Junction Energy Center (MJEC). After initial start-up and testing, it was determined that the four boilers required greater quantities of natural gas to operate than originally expected. Additionally, the sulfur content of the blast furnace gas utilized as a fuel contains greater quantities of sulfur than originally estimated. Because of these new circumstances, Ohio EPA determined that MJEC must submit a new PTI application to account for these increases. This PTI application is being processed as a Chapter 31 Modification. This new PTI was written to account for these differences. Netting for PTI # 06-06309 was based on 1994 and 1995 emissions, which were prior to the installation of this facility. These netting years were chosen based on the original installation date of the facility, as well as the fact that this PTI is a modification, not a new PTI.

Because MJEC has been determined to be a "captive facility", all emissions from this operation must be considered along with operations for Wheeling-Pittsburgh Steel. It should be noted that Wheeling-Pittsburgh Steel has obtained a PTI for a new Electric Arc Furnace, which takes into account emissions from MJEC's four boilers.

B. Facility Emissions and Attainment Status

MJEC is a major stationary source for carbon monoxide, nitrogen oxides, PM10, and sulfur dioxide. Jefferson County is attainment for the above pollutants.

C. Source Emissions

Listed below are the sources that the company has removed or will remove, based on actuals as well as the new sources.

1. PM Emissions:

	NETTING ANALYSIS FOR PM			
	Emissions (TPY)			
	<u>1994</u>	<u>1995</u>	<u>Mean</u>	<u>Allowable</u>
South Boilers	48.18	41.47	44.83	<u>0.00</u> ¹
CAS OB				<u>1.90</u> ²
East Boilers 5,6&7	46.77	47.35	47.06	<u>8.46</u> ³
Excess COG Bleed	8.77	5.84	7.30	<u>0.00</u> ⁴
COG Flare	0.00	2.81	1.40	<u>8.80</u> ⁵
MJEC PTI #06-06309	--	--	--	<u>45.00</u> ⁶
		Total	100.59	64.16
		Increase		-36.43

1 WPSC shutting down of boilerhouse is federally enforceable by Ohio EPA PTI 17-1382 issued 11/15/95. Allowable per OAC Rule 3745-17-13= 59.75 tpy (1994), 60.38 tpy (1995).

- 2 CASOB, federally enforceable Ohio EPA PTI 17-1325 issued 1/19/95 set allowable to 1.90 tons/year.
- 3 Removing coal as a fuel for East Boilers 5,6 & 7 and substituting COG as a fuel for Boilers 6 & 7, and shutting down boiler 5 is federally enforceable by WV DEP Permit R13-1939A.
The two boilers have a heat rating of 161.0 MM Btu/hr. The emission factor for coke oven gas is 0.012 lb/MM Btu from AP-42. The PM emission rate would be 1.93 lb/hr or 8.46 tons/year. Allowable per 45CSR2 = 53.7 tpy (1994), 53.8 tpy (1995).
- 4 Discontinuation of Excess COG bleeds in September 1995 is federally enforceable by WV DEP Permit R13-1939A when the Excess COG Flare came on-line. Allowable per 45CSR7 = 9.1 tpy (1994), and 6.1 tpy (1995).
- 5 Federally enforceable WV DEP Permit No. R13-1939A for the excess COG Flare at Follansbee limits annual PM emissions to 8.8 tons/year.
- 6 Air Liquide requested a PM10 allowable of 45 tons/year. DFF&O specifies allowable of 11.2 tons/year per boiler for PM10. Four boilers yield allowable of 44.8 tons/year for PM10 as per attached analysis. AP-42 lists Natural Gas as having a PM10/PM ratio of 1.00. Blast Furnace Gas is assumed to have PM10/PM ratio of 1.00. Diesel Generator Emission is 0.04 t/y from federally enforceable Ohio EPA PTI 17-1382 issued 11/15/05. Total PM emissions is $4 * 11.2 + 0.04 = 44.84$ tpy. PM allowable would be 45.0 tons/year because PM10/PM ratio is 1.00 for both fuels.

The net change in emissions resulting from the operation of the new sources in this PTI, over the contemporaneous time period, will be a decrease of 36.43 TPY of PM.

2. PM10 Emissions:

	NETTING ANALYSIS FOR PM10				Emissions (TPY)
	<u>1994</u>	<u>1995</u>	<u>Mean</u>	<u>Allowable</u>	
South Boilers	39.83	36.19	38.01	<u>0.00</u>	1
CASOB				<u>1.90</u>	2
East Boilers 5,6&7	47.20	47.93	47.56	<u>8.11</u>	3
Excess COG Bleed	8.41	5.60	7.00	<u>0.00</u>	4
COG Flare	0.00	2.81	1.40	<u>8.80</u>	5
MJEC PTI #06-06309	--	--	--	<u>45.00</u>	6
		Total	93.98	63.81	
		Increase		-30.17	

- 1 WPSC shutting down of boilerhouse is federally enforceable by Ohio EPA PTI 17-1382 issued 11/15/95. Allowable per OAC Rule 3745-17-13= 59.75 tpy (1994), 60.38 tpy (1995).
- 2 CASOB, federally enforceable Ohio EPA PTI 17-1325 issued 1/19/95 set allowable to 1.90 tons/year.
- 3 Removing coal as a fuel for East Boilers 5,6 & 7 and substituting COG as a fuel for Boilers 6 & 7, and shutting down boiler 5 is federally enforceable by WV DEP Permit R13-1939A. The two boilers have a heat rating of 161.0 MM Btu/hr. The emission factor for coke oven gas is 0.012 lb/MM Btu from AP-42. The PM emission rate would be 1.93 lb/hr or 8.46 tons/year. A PM10 factor of 0.959 reduces this allowable to 8.11 tons/year. Allowable per 45CSR2 = 53.7 tpy (1994), 53.8 tpy (1995).
- 4 Discontinuation of Excess COG bleeds in September 1995 is federally enforceable by WV DEP Permit R13-1939A when the Excess COG Flare came on-line. Allowable per 45CSR7 = 9.1 tpy (1994), and 6.1 tpy (1995).
- 5 Federally enforceable WV DEP Permit No. R13-1939A for the excess COG flare at Follansbee limits annual PM10 emissions to 8.8 tons/year.

- 6 Air Liquide requested a PM10 allowable of 45 tons/year. DFF&O specifies allowable of 11.2 tons/year per boiler for PM10. Four boilers yield allowable of 44.8 tons/year for PM10. Diesel generator emission per federally enforceable OEPA PTI 17-1382 issued 11/15/95 is 0.04 tpy. Total emission is 44.8+0.04=44.84 tpy. PM10 allowable of 45 tons/year was developed as per attached analysis.

The net change in emissions resulting from the operation of the new sources in this PTI, over the contemporaneous time period, will be a decrease of 30.17 TPY of PM10.

3. CO Emissions:

	NETTING ANALYSIS FOR CO				Emissions (TPY)
	<u>1994</u>	<u>1995</u>	<u>Mean</u>	<u>Allowable</u>	
South Boilers	393.80	292.29	343.04	<u>0.00</u>	1
Excess COG Bleed	5,558.37	3,700.50	4,629.44	<u>0.00</u>	2
COG Flare	0.00	7.96	3.98	<u>273.30</u>	3
MJEC PTI #06-06309	--	--	--	<u>144.39</u>	4
		Total	4,976.46	417.69	
		Increase		-4,558.77	

- 1 WSPC shutting down boilerhouse is federally enforceable by OEPA PTI 17-1382 dated 11/15/95). No applicable limitation.
- 2 Discontinuation of Excess COG bleeds in September 1995 is federally enforceable by WV DEP Permit R13-1939A when the Excess COG Flare came on-line. No applicable limitation.
- 3 Federally enforceable WV DEP Permit No. R13-1939A for the excess COG Flare at Follansbee limits annual CO emissions to 273.3 tons/year.
- 4 WSPC will provide excess BFG to the Cogeneration Plant that will vary over the range of 80,000 CFM at 80 Btu/CF to a maximum of 120,000 CFM at 90 Btu/CF at a 93% availability. The upper or lower end of this range will be used that maximizes the allowable emission rate for each pollutant.
The Air Liquide Cogeneration Plant is rated at 730.24 MM Btu/hr. CO emissions are 0.045 lb/MM Btu as per boiler mfg guarantee. Emissions are 143.93 tons/year (730.24 MM Btu/hr * 0.045 lb/MM Btu * (8760 hr/yr / 2000lb/ton)). An emergency generator contributes an additional 0.46 ton/year (per federally enforceable OEPA PTI 17-1382 issued 11/15/95) for a total of 144.39 ton/year.

The net change in emissions resulting from the installation of the new sources in this PTI, over the contemporaneous time period, will be a decrease of 4558.77 TPY of CO.

4. NOx Emissions:

	NETTING ANALYSIS FOR NOx				Emissions (TPY)
	<u>1994</u>	<u>1995</u>	<u>Mean</u>	<u>Allowable</u>	
South Boilers	745.82	576.60	661.21	<u>0.00</u>	1
COG Flare	0.00	34.60	17.30	<u>50.10</u>	2
MJEC PTI #06-06309	--	--	--	<u>412.22</u>	3
		Total	678.51	462.32	
		Increase		-216.19	

- 1 WSPC shutting down boilerhouse is federally enforceable by OEPA PTI 17-1382 dated 11/15/95). No applicable limitation.
- 2 Federally enforceable WV DEP Permit No. R13-1939A for the excess COG Flare at Follansbee limits annual NOx emissions to 50.1 tons/year.

3 WPSC will provide excess BFG to the Cogeneration Plant that will vary over the range of 80,000 CFM at 80 Btu/CF to a maximum of 120,000 CFM at 90 Btu/CF at a 93% availability. The upper or lower end of this range will be used that maximizes the allowable emission rate for each pollutant. Natural Gas emission factor is 0.2 lb/MM Btu from boiler mfg guarantee. BF Gas emission factor is 0.06 lb/MM Btu from boiler mfg guarantee. The Air Liquide Cogeneration Plant is rated at 730.24 MM Btu/hr. Blast Furnace Gas feed to the plant is expected to average 80,000 CFM at a heating value of 80 Btu/CF, available 93% of the year, resulting in BFG providing 49.6% of the full capacity fuel input. Annual fuel mix is expected to be 50.4% Natural Gas and 49.6% Blast Furnace Gas. NOx emissions would be $0.504 * 730.24 \text{ MM Btu/hr} * 0.20 \text{ lb/MM Btu} = 73.61 \text{ lb/hr}$ for Natural Gas and $0.496 * 730.24 \text{ MM Btu/hr} * 0.06 \text{ lb/MM Btu} = 21.73 \text{ lb/hr}$ for Blast Furnace Gas. Total hourly emissions would be the combination of the two fuels or 95.34 lb/hr for an annual emission rate of 417.59 tons/year. An emergency generator contributes an additional 0.4 ton/year for a total of 417.99 tons/year. DFF&O specifies 102.9 tons/year per boiler. Four boilers yield allowable of 411.60 tons/year. However, the DFF&O limited Natural Gas annual usage to 3,062 MM cubic feet or $3.12E+12 \text{ Btu/year}$. This limits Natural Gas to 48.8 percent of the total energy needs of the four boilers. Recalculation of the allowable NOx becomes $((3.12E+6 \text{ MM Btu/year} * 0.20 \text{ lb/MM Btu}) + (3.28E+6 \text{ MM Btu/year} * 0.06 \text{ lb/MM Btu}))/2000 = 410.40 \text{ tons/year}$. Diesel Generator Emission is 1.82 t/y from federally enforceable OEPA PTI 17-1382 issued 11/15/95. Total NOx emissions is $410.4+1.82=412.22 \text{ tpy}$.

The net change in emissions resulting from the operation of the new sources in this PTI, over the contemporaneous time period, will be a decrease of 216.19 TPY of NOx.

5. SO2 emissions:

	NETTING ANALYSIS FOR SO2			
	Emissions (TPY)			
	<u>1994</u>	<u>1995</u>	<u>Mean</u>	<u>Allowable</u>
South Boilers	424.04	387.44	405.74	<u>0.00</u> ¹
East Boilers 5,6&7	1,161.04	1,077.39	1,119.22	<u>301.40</u> ²
COG Flare	0.00	80.30	40.15	<u>294.00</u> ³
MJEC PTI #06-06309	--	--	--	<u>801.17</u> ⁴
		Total	1,565.11	1,396.57
		Increase		-168.54

- 1 WPSC shutting down the boilerhouse is federally enforceable by Ohio EPA PTI 17-1382 dated 11/15/95. Allowable per OAC Rule 3745-18-47= 1415 tpy (1994, 1995)
- 2 Removing coal as a fuel for East Boilers 5,6 & 7 and substituting COG as a fuel for Boilers 6 & 7, and shutting down boiler 5 is federally enforceable by WV DEP Permit R13-1939A. Federally enforceable WV DEP Permit No. R13-1939A for the excess COG Flare at Follansbee limits annual SO2 emissions to 301.4 tons/year from Boilers 6 & 7. Allowable per 45 CSR10 =1849.8 (1994), 1852.9 (1995).
- 3 Federally enforceable WV DEP Permit No. R13-1939A for the excess COG Flare at Follansbee limits annual SO2 emissions to 294 tons/year.
- 4 WPSC will provide excess BFG to the Cogeneration Plant that will vary over the range of 80,000 CFM at 80 Btu/CF to a maximum of 120,000 CFM at 90 Btu/CF at a 93% availability. The upper or lower end of this range will be used that maximizes the allowable emission rate for each pollutant. The attached analysis shows that a SO2 emission factor at 2 standard deviations above the mean would yield emissions at 200.2 tons/year per boiler from BF Gas, which would provide 88.7 percent of the energy need for each boiler. Natural Gas would provide the remainder of energy at 20.56 MM Btu/hr per boiler. The AP-42 emission factor of 0.0006 lb/MM Btu adds an additional 0.05 ton/year per boiler. Total Cogen boiler emissions would be $4 * (200.2 + 0.05)$ or 801 tons/year. DFF&O specifies 200.2 tons/year per boiler (four boilers yield allowable of 800.80 tons/year). An emergency generator contributes an additional 0.17 tons/year (per federally enforceable OEPA PTI 17-1382 issued 11/15/95) for a total of 801.17 tons/year.

The net change in emissions resulting from the operation of the new sources in this PTI, over the contemporaneous time period, will be a decrease of 168.54 TPY of SO2.

D. Conclusion

With the increase in emissions from the proposed sources and the removal of or reduction in emissions from the listed sources, a net decrease in facility emissions of 35.40 tons/yr PM10, 4559.22 tons/yr CO, 218.01 tons/yr NOx, and 168.91 tons/yr SO2 will result. The installation and operation of the sources at this facility results in an increase in emissions of less than the significance levels. Since the net increase in allowable emissions will be less than the PSD significance levels, the source will net out of the PSD review requirement.



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: DRAFT PERMIT TO INSTALL
JEFFERSON COUNTY
Application No: 06-06309**

CERTIFIED MAIL

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

DATE: 1/2/2004

Mingo Junction Energy Center LLC
Michael Hatem
PO Box 160
Mingo Junction, OH 43938

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

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$4200** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

JEFFERSON COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 06-06309 FOR AN AIR CONTAMINANT SOURCE FOR
MINGO JUNCTION ENERGY CENTER LLC**

On 1/2/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Mingo Junction Energy Center LLC**, located at **Wheeling Pittsburgh Steel Commercial Ave, Mingo Junction, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 06-06309:

Four boilers to burn clean blast furnace gas as a primary fuel.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Kay Gilmer, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138 [(740)385-8501]



**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 06-06309

Application Number: 06-06309

APS Premise Number: 0641090234

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

Name of Facility: Mingo Junction Energy Center LLC

Person to Contact: Michael Hatem

Address: PO Box 160
Mingo Junction, OH 43938

Location of proposed air contaminant source(s) [emissions unit(s)]:
**Wheeling Pittsburgh Steel Commercial Ave
Mingo Junction, Ohio**

Description of proposed emissions unit(s):
Four boilers to burn clean blast furnace gas as a primary fuel.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official

that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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

11. Best Available Technology

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

12. Air Pollution Nuisance

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Termination of Permit To Install

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

5. Construction of New Sources(s)

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

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM/PM10	45.6
NOx	413.4
CO	142.4
VOC	8.8
SO2	801.0

Mingo Junction Energy Center LLC

Facility ID: 0641090234

PTI Application: 06-06309

Issued: To be entered upon final issuance

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. Wheeling-Pittsburgh Steel Corporation and Mingo Junction Energy Center, LLC (MJEC) have been determined to be one facility for permitting purposes under 40 CFR 52.21, OAC Chapter 3745-31, and OAC Chapter 3545-77.

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

none

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B001 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	OAC rule 3745-31-05 (A)(3)	Particulate matter (PM) and Particulate emissions with a diameter less than 10 microns (PM10) shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas. PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when only burning natural gas. PM/PM10 emissions shall not exceed 2.6 lbs/hr. Nitrogen oxide (NOx) emissions shall not exceed 0.20 lb/MMBTU, as a 3-hour block of time, when burning natural gas or natural gas/blast furnace gas blend. NOx emissions shall not exceed 36.0 lbs/hr, as a 3-hour block of time. Carbon monoxide (CO) emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or natural gas/blast furnace gas blend. CO emissions shall not exceed 8.1 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 1.0 lb/hr.

	<p>Sulfur dioxide (SO₂) emissions shall not exceed 45.7 lbs/hr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-21-08(B), 3745-23-06(B), and 3745-31-05(D).</p>
OAC rule 3745-31-05 (D)	<p>PM/PM₁₀ emissions shall not exceed 11.4 tons/rolling, 12-month period.</p> <p>NO_x emissions shall not exceed 102.9 tons/rolling, 12-month period.</p> <p>CO emissions shall not exceed 35.5 tons/rolling, 12-month period.</p> <p>VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.</p>
OAC rule 3745-17-07 (A)	<p>Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
OAC rule 3745-17-10(B)(1)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-21-08(B)	<p>See section A.I.2.b.</p>
OAC rule 3745-23-06(B)	<p>See section A.I.2.c.</p>
40 CFR 60 subpart Db	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

2.a For purposes of this permit, "clean blast furnace gas" is defined as blast furnace gas which has had particulate matter removed by Wheeling-Pittsburgh Steel's properly operating scrubber system on blast furnace #5.

2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

II. Operational Restrictions

1. Natural gas usage shall not exceed 3,062 MMCF per rolling, 12-month period for Mingo Junction Energy Center emissions units B001, B002, B003, and B004, combined. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly natural-gas usage.
2. This emissions unit shall be operated only in conjunction with the permanent shutdown of the Wheeling-Pittsburgh Steel Corporation Mingo Junction Boiler House, emissions units B005, B006, B007, B008, B009, B010, B011, and B012 under Ohio EPA premise number 0641090010.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or a combination of natural gas and clean blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records of the quantity of natural gas combusted during each operating day and each rolling, 12-month period, in cubic feet.
3. The permittee shall maintain records of the quantity of clean blast furnace gas combusted during each operating day, in cubic feet.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall perform certification tests for the monitoring system in accordance with 40 CFR 60 , Appendix B, Performance Specification Test 6, within three months after December 12, 2003.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (i.e., hourly, 3-hour block, daily, monthly, and rolling 12-month summation), results of daily zero/span calibration checks, and magnitudes of manual calibration adjustments.

6. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification Test 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. 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 NOx monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or clean blast furnace gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month total natural gas usage exceeds 3,062 MMCF, and the actual total monthly usage rate for each such month. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions (in tons) for each rolling, 12-month period during the calendar quarter.

The permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

V. Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when burning natural gas.

Compliance Method:

This limit has been established through manufacturer's data for natural gas combustion of 0.004 lb/MMBTU.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

c. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $0.0151 \times 0.95 + 0.004 \times 0.05 = 0.0143$ lb/MMBTU

If required, compliance shall be determined through stack testing methods and procedures specified in A.V.2 utilizing the worst case blend of clean blast furnace gas and natural gas. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

d. Emission Limitation:

PM/PM10 emissions shall not exceed 11.4 tons/rolling 12-month period.

Compliance Method:

This limit was established based upon the worst-case maximum operating rate of 8760 hours/yr and 95% blast furnace gas and 5% natural gas. $2.6 \text{ lb/hr} \times 8760 = 11.4 \text{ tons/yr}$

Compliance shall be based upon the record keeping in section A.III.4.

e. Emission Limitation:

PM/PM10 emissions shall not exceed 2.6 lbs/hr.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $180 \times (0.0151 \times 0.95 + 0.004 \times 0.05) = 2.6 \text{ lb/hr}$.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for PM10 emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

f. Emission Limitation:

VOC emissions shall not exceed 1.0 lb/hr.

Compliance Method:

This limit has been established by multiplying the maximum gas burning capacity of the of the emission unit by the AP-42 factor of 5.5 lb VOC/MMSCF (Table 1.4-2, July, 1998). At a maximum 0.175 MMSCF/hr, hourly emissions are 1.0 lb VOC/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for VOC emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

g. Emission Limitations:

NOx emissions shall not exceed 0.20 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.

NOx emissions shall not exceed 36.0 lbs/hr.

Compliance Methods:

The above lb/MMBTU NO_x limits were initially established through manufacturer's data. The lb/hr limit is based on the worst case scenario of 100% natural gas. $0.20 \times 180 = 36.0$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.2 and A.III.3 and upon the continuous NO_x and oxygen monitoring systems data and the records required pursuant to this permit. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A.

h. Emission Limitations:

CO emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.
CO emissions shall not exceed 8.1 lbs/hr.

Compliance Methods:

The emission limitation of 0.045 lb/MMBTU was established through a performance guarantee by the boiler manufacturer for both natural gas and blast furnace gas. At the maximum firing rate of 180 MMBTU/hr, hourly emissions are 8.1 lb/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for CO emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

i. Emission Limitation:

SO₂ emissions shall not exceed 45.7 lbs/hr.

Compliance Method:

The lb/hr limit is based on unit stack testing conducted by Blue Mountain in July, 1999.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for SO₂. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

j. Emission Limitation:

SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon the maximum lb/hr emission rate. At 24x31 hours/month (maximum), maximum monthly emissions are 17 tons/month. Total maximum 12-month emissions based on 8760 hours of operation/rolling 12-month period are 200.2 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4, taking into account monthly natural and blast furnace gas usage, as required.

k. Emission Limitation:

NOx emissions shall not exceed 102.9 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon an average lb/hr emission rate over the course of 12 months. At 24x31 hours/month (maximum), average monthly emissions are $24 \times 31 \times 23.5 \text{ lb/hr} = 8.74 \text{ tons/month}$. Total maximum 12-month emissions based on 8760 hours of operation/yr are $8760 \times 23.5 = 102.9 \text{ tons/rolling 12-month period}$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.4 and upon the continuous NOx and oxygen monitoring systems data and the records required pursuant to this permit.

l. Emission Limitation:

CO emissions shall not exceed 35.5 tons/rolling, 12-month period.

Compliance Method:

Emissions were originally estimated using manufacturer's performance guarantee of 8.1 lb/hr. Based on 8760 hours/rolling 12-month period, emissions are 35.5 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4.

m. Emission Limitation:

VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.

Compliance Method:

Compliance was estimated by using the lb/hr emission limit multiplied by 8760 hours/rolling 12-month period. At 1 lb/hr maximum emissions, the rolling 12-month emission rate is $8760 \times 1.0 = 4.38 \text{ tons}$.

Compliance shall be based upon the record keeping in section A.III.4.

2. If required, the permittee shall conduct, or have conducted, emission testing of the boiler stack emissions in accordance with the following requirements:
 - a. Performance testing must be conducted within 180 days of the effective date of this permit and every 5 years thereafter.
 - b. The emission testing shall be conducted to demonstrate compliance with the PM10, opacity, VOC, NOx, SO2, and CO emission limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PM10, Methods 1 through 4 of 40 CFR Part 60, Appendix A, and Method 201 or 201A of 40 CFR Part 51, Appendix M;

for visible particulate emissions, Method 9 of 40 CFR 60 Appendix A;

for VOC, Methods 1 through 4 and Method 25 of 40 CFR 60 Appendix A;

for NOx, Methods 1 through 4 and Method 7 of 40 CFR 60, Appendix A;

for SO2, Methods 1 through 4 and Method 6 of 40 CFR 60, Appendix A; and

for CO, Methods 1 through 4 and Method 10 of 40 CFR 60 Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, and under worst-case fuel conditions for the particular pollutant being tested, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.

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

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

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

Mingo Junction Energy Center LLC

PTI Application: 06-06309

Issued: To be entered upon final issuance

Facility ID: 0641090234

Emissions Unit ID: B001

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B001 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B002 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	OAC rule 3745-31-05 (A)(3)	Particulate matter (PM) and Particulate emissions with a diameter less than 10 microns (PM10) shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas. PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when only burning natural gas. PM/PM10 emissions shall not exceed 2.6 lbs/hr. Nitrogen oxide (NOx) emissions shall not exceed 0.20 lb/MMBTU, as a 3-hour block of time, when burning natural gas or natural gas/blast furnace gas blend. NOx emissions shall not exceed 36.0 lbs/hr, as a 3-hour block of time. Carbon monoxide (CO) emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or natural gas/blast furnace gas blend. CO emissions shall not exceed 8.1 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 1.0 lb/hr.

	<p>Sulfur dioxide (SO₂) emissions shall not exceed 45.7 lbs/hr.</p>
OAC rule 3745-31-05 (D)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-21-08(B), 3745-23-06(B), and 3745-31-05(D).</p>
	<p>PM/PM10 emissions shall not exceed 11.4 tons/rolling, 12-month period.</p>
	<p>NO_x emissions shall not exceed 102.9 tons/rolling, 12-month period.</p>
	<p>CO emissions shall not exceed 35.5 tons/rolling, 12-month period.</p>
	<p>VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.</p>
	<p>SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.</p>
OAC rule 3745-17-07 (A)	<p>Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(B)(1)	<p>See section A.I.2.b.</p>
	<p>See section A.I.2.c.</p>
OAC rule 3745-21-08(B)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-23-06(B)	
40 CFR 60 subpart Db	

2. Additional Terms and Conditions

2.a For purposes of this permit, "clean blast furnace gas" is defined as blast furnace gas which has had particulate matter removed by Wheeling-Pittsburgh Steel's properly operating scrubber system on blast furnace #5.

2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

II. Operational Restrictions

1. Natural gas usage shall not exceed 3,062 MMCF per rolling, 12-month period for Mingo Junction Energy Center emissions units B001, B002, B003, and B004, combined. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly natural-gas usage.
2. This emissions unit shall be operated only in conjunction with the permanent shutdown of the Wheeling-Pittsburgh Steel Corporation Mingo Junction Boiler House, emissions units B005, B006, B007, B008, B009, B010, B011, and B012 under Ohio EPA premise number 0641090010.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or a combination of natural gas and clean blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records of the quantity of natural gas combusted during each operating day and each rolling, 12-month period, in cubic feet.
3. The permittee shall maintain records of the quantity of clean blast furnace gas combusted during each operating day, in cubic feet.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall perform certification tests for the monitoring system in accordance with 40 CFR 60 , Appendix B, Performance Specification Test 6, within three months after December 12, 2003.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (i.e., hourly, 3-hour block, daily, monthly, and rolling 12-month summation), results of daily zero/span calibration checks, and magnitudes of manual calibration adjustments.

6. A statement of certification of the existing continuous NO_x monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification Test 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or clean blast furnace gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month total natural gas usage exceeds 3,062 MMCF, and the actual total monthly usage rate for each such month. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions(in tons) for each rolling, 12-month period during the calendar quarter.

The permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

V. Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when burning natural gas.

Compliance Method:

This limit has been established through manufacturer's data for natural gas combustion of 0.004 lb/MMBTU.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

c. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $0.0151 \times 0.95 + 0.004 \times 0.05 = 0.0143$ lb/MMBTU

If required, compliance shall be determined through stack testing methods and procedures specified in A.V.2 utilizing the worst case blend of clean blast furnace gas and natural gas. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

d. Emission Limitation:

PM/PM10 emissions shall not exceed 11.4 tons/rolling 12-month period.

Compliance Method:

This limit was established based upon the worst-case maximum operating rate of 8760 hours/yr and 95% blast furnace gas and 5% natural gas. $2.6 \text{ lb/hr} \times 8760 = 11.4 \text{ tons/yr}$

Compliance shall be based upon the record keeping in section A.III.4.

e. Emission Limitation:

PM/PM10 emissions shall not exceed 2.6 lbs/hr.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $180 \times (0.0151 \times 0.95 + 0.004 \times 0.05) = 2.6 \text{ lb/hr}$.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for PM10 emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

f. Emission Limitation:

VOC emissions shall not exceed 1.0 lb/hr.

Compliance Method:

This limit has been established by multiplying the maximum gas burning capacity of the of the emission unit by the AP-42 factor of 5.5 lb VOC/MMSCF (Table 1.4-2, July, 1998). At a maximum 0.175 MMSCF/hr, hourly emissions are 1.0 lb VOC/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for VOC emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

g. Emission Limitations:

NOx emissions shall not exceed 0.20 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.

NOx emissions shall not exceed 36.0 lbs/hr.

Compliance Methods:

The above lb/MMBTU NO_x limits were initially established through manufacturer's data. The lb/hr limit is based on the worst case scenario of 100% natural gas. $0.20 \times 180 = 36.0$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.2 and A.III.3 and upon the continuous NO_x and oxygen monitoring systems data and the records required pursuant to this permit. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A.

h. Emission Limitations:

CO emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.
CO emissions shall not exceed 8.1 lbs/hr.

Compliance Methods:

The emission limitation of 0.045 lb/MMBTU was established through a performance guarantee by the boiler manufacturer for both natural gas and blast furnace gas. At the maximum firing rate of 180 MMBTU/hr, hourly emissions are 8.1 lb/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for CO emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

i. Emission Limitation:

SO₂ emissions shall not exceed 45.7 lbs/hr.

Compliance Method:

The lb/hr limit is based on unit stack testing conducted by Blue Mountain in July, 1999.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for SO₂. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

j. Emission Limitation:

SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon the maximum lb/hr emission rate. At 24x31 hours/month (maximum), maximum monthly emissions are 17 tons/month. Total maximum 12-month emissions based on 8760 hours of operation/rolling 12-month period are 200.2 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4, taking into account monthly natural and blast furnace gas usage, as required.

k. Emission Limitation:

NOx emissions shall not exceed 102.9 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon an average lb/hr emission rate over the course of 12 months. At 24x31 hours/month (maximum), average monthly emissions are $24 \times 31 \times 23.5 \text{ lb/hr} = 8.74 \text{ tons/month}$. Total maximum 12-month emissions based on 8760 hours of operation/yr are $8760 \times 23.5 = 102.9 \text{ tons/rolling 12-month period}$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.4 and upon the continuous NOx and oxygen monitoring systems data and the records required pursuant to this permit.

l. Emission Limitation:

CO emissions shall not exceed 35.5 tons/rolling, 12-month period.

Compliance Method:

Emissions were originally estimated using manufacturer's performance guarantee of 8.1 lb/hr. Based on 8760 hours/rolling 12-month period, emissions are 35.5 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4.

m. Emission Limitation:

VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.

Compliance Method:

Compliance was estimated by using the lb/hr emission limit multiplied by 8760 hours/rolling 12-month period. At 1 lb/hr maximum emissions, the rolling 12-month emission rate is $8760 \times 1.0 = 4.38 \text{ tons}$.

Compliance shall be based upon the record keeping in section A.III.4.

2. If required, the permittee shall conduct, or have conducted, emission testing of the boiler stack emissions in accordance with the following requirements:
 - a. Performance testing must be conducted within 180 days of the effective date of this permit and every 5 years thereafter.
 - b. The emission testing shall be conducted to demonstrate compliance with the PM10, opacity, VOC, NOx, SO2, and CO emission limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PM10, Methods 1 through 4 of 40 CFR Part 60, Appendix A, and Method 201 or 201A of 40 CFR Part 51, Appendix M;

for visible particulate emissions, Method 9 of 40 CFR 60 Appendix A;

for VOC, Methods 1 through 4 and Method 25 of 40 CFR 60 Appendix A;

for NOx, Methods 1 through 4 and Method 7 of 40 CFR 60, Appendix A;

for SO2, Methods 1 through 4 and Method 6 of 40 CFR 60, Appendix A; and

for CO, Methods 1 through 4 and Method 10 of 40 CFR 60 Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, and under worst-case fuel conditions for the particular pollutant being tested, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.

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

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

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

Mingo Junction Energy Center LLC

PTI Application: 06-06309

Issued: To be entered upon final issuance

Facility ID: 0641090234

Emissions Unit ID: B002

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B002 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B003 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	OAC rule 3745-31-05 (A)(3)	Particulate matter (PM) and Particulate emissions with a diameter less than 10 microns (PM10) shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas. PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when only burning natural gas. PM/PM10 emissions shall not exceed 2.6 lbs/hr. Nitrogen oxide (NOx) emissions shall not exceed 0.20 lb/MMBTU, as a 3-hour block of time, when burning natural gas or natural gas/blast furnace gas blend. NOx emissions shall not exceed 36.0 lbs/hr, as a 3-hour block of time. Carbon monoxide (CO) emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or natural gas/blast furnace gas blend. CO emissions shall not exceed 8.1 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 1.0 lb/hr.

	<p>Sulfur dioxide (SO₂) emissions shall not exceed 45.7 lbs/hr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-21-08(B), 3745-23-06(B), and 3745-31-05(D).</p> <p>PM/PM10 emissions shall not exceed 11.4 tons/rolling, 12-month period.</p> <p>NO_x emissions shall not exceed 102.9 tons/rolling, 12-month period.</p> <p>CO emissions shall not exceed 35.5 tons/rolling, 12-month period.</p> <p>VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.</p>
OAC rule 3745-31-05 (D)	<p>Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
OAC rule 3745-17-07 (A)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(B)(1)	<p>See section A.I.2.b.</p>
OAC rule 3745-21-08(B)	<p>See section A.I.2.c.</p>
OAC rule 3745-23-06(B)	
40 CFR 60 subpart Db	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

2.a For purposes of this permit, "clean blast furnace gas" is defined as blast furnace gas which has had particulate matter removed by Wheeling-Pittsburgh Steel's properly operating scrubber system on blast furnace #5.

2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

II. Operational Restrictions

1. Natural gas usage shall not exceed 3,062 MMCF per rolling, 12-month period for Mingo Junction Energy Center emissions units B001, B002, B003, and B004, combined. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly natural-gas usage.
2. This emissions unit shall be operated only in conjunction with the permanent shutdown of the Wheeling-Pittsburgh Steel Corporation Mingo Junction Boiler House, emissions units B005, B006, B007, B008, B009, B010, B011, and B012 under Ohio EPA premise number 0641090010.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or a combination of natural gas and clean blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records of the quantity of natural gas combusted during each operating day and each rolling, 12-month period, in cubic feet.
3. The permittee shall maintain records of the quantity of clean blast furnace gas combusted during each operating day, in cubic feet.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall perform certification tests for the monitoring system in accordance with 40 CFR 60 , Appendix B, Performance Specification Test 6, within three months after December 12, 2003.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (i.e., hourly, 3-hour block, daily, monthly, and rolling 12-month summation), results of daily zero/span calibration checks, and magnitudes of manual calibration adjustments.

6. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification Test 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. 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 NOx monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or clean blast furnace gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month total natural gas usage exceeds 3,062 MMCF, and the actual total monthly usage rate for each such month. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions (in tons) for each rolling, 12-month period during the calendar quarter.

The permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

V. Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when burning natural gas.

Compliance Method:

This limit has been established through manufacturer's data for natural gas combustion of 0.004 lb/MMBTU.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

c. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $0.0151 \times 0.95 + 0.004 \times 0.05 = 0.0143$ lb/MMBTU

If required, compliance shall be determined through stack testing methods and procedures specified in A.V.2 utilizing the worst case blend of clean blast furnace gas and natural gas. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

d. Emission Limitation:

PM/PM10 emissions shall not exceed 11.4 tons/rolling 12-month period.

Compliance Method:

This limit was established based upon the worst-case maximum operating rate of 8760 hours/yr and 95% blast furnace gas and 5% natural gas. $2.6 \text{ lb/hr} \times 8760 = 11.4 \text{ tons/yr}$

Compliance shall be based upon the record keeping in section A.III.4.

e. Emission Limitation:

PM/PM10 emissions shall not exceed 2.6 lbs/hr.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $180 \times (0.0151 \times 0.95 + 0.004 \times 0.05) = 2.6 \text{ lb/hr}$.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for PM10 emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

f. Emission Limitation:

VOC emissions shall not exceed 1.0 lb/hr.

Compliance Method:

This limit has been established by multiplying the maximum gas burning capacity of the of the emission unit by the AP-42 factor of 5.5 lb VOC/MMSCF (Table 1.4-2, July, 1998). At a maximum 0.175 MMSCF/hr, hourly emissions are 1.0 lb VOC/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for VOC emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

g. Emission Limitations:

NOx emissions shall not exceed 0.20 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.

NOx emissions shall not exceed 36.0 lbs/hr.

Compliance Methods:

The above lb/MMBTU NO_x limits were initially established through manufacturer's data. The lb/hr limit is based on the worst case scenario of 100% natural gas. $0.20 \times 180 = 36.0$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.2 and A.III.3 and upon the continuous NO_x and oxygen monitoring systems data and the records required pursuant to this permit. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A.

h. Emission Limitations:

CO emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.
CO emissions shall not exceed 8.1 lbs/hr.

Compliance Methods:

The emission limitation of 0.045 lb/MMBTU was established through a performance guarantee by the boiler manufacturer for both natural gas and blast furnace gas. At the maximum firing rate of 180 MMBTU/hr, hourly emissions are 8.1 lb/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for CO emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

i. Emission Limitation:

SO₂ emissions shall not exceed 45.7 lbs/hr.

Compliance Method:

The lb/hr limit is based on unit stack testing conducted by Blue Mountain in July, 1999.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for SO₂. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

j. Emission Limitation:

SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon the maximum lb/hr emission rate. At 24x31 hours/month (maximum), maximum monthly emissions are 17 tons/month. Total maximum 12-month emissions based on 8760 hours of operation/rolling 12-month period are 200.2 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4, taking into account monthly natural and blast furnace gas usage, as required.

k. Emission Limitation:

NOx emissions shall not exceed 102.9 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon an average lb/hr emission rate over the course of 12 months. At 24x31 hours/month (maximum), average monthly emissions are $24 \times 31 \times 23.5 \text{ lb/hr} = 8.74 \text{ tons/month}$. Total maximum 12-month emissions based on 8760 hours of operation/yr are $8760 \times 23.5 = 102.9 \text{ tons/rolling 12-month period}$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.4 and upon the continuous NOx and oxygen monitoring systems data and the records required pursuant to this permit.

l. Emission Limitation:

CO emissions shall not exceed 35.5 tons/rolling, 12-month period.

Compliance Method:

Emissions were originally estimated using manufacturer's performance guarantee of 8.1 lb/hr. Based on 8760 hours/rolling 12-month period, emissions are 35.5 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4.

m. Emission Limitation:

VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.

Compliance Method:

Compliance was estimated by using the lb/hr emission limit multiplied by 8760 hours/rolling 12-month period. At 1 lb/hr maximum emissions, the rolling 12-month emission rate is $8760 \times 1.0 = 4.38 \text{ tons}$.

Compliance shall be based upon the record keeping in section A.III.4.

2. The permittee shall conduct, or have conducted, emission testing of the boiler stack emissions in accordance with the following requirements:
 - a. Performance testing must be conducted within 180 days of the effective date of this permit and every 5 years thereafter.
 - b. The emission testing shall be conducted to demonstrate compliance with the PM10, opacity, VOC, NOx, SO2, and CO emission limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PM10, Methods 1 through 4 of 40 CFR Part 60, Appendix A, and Method 201 or 201A of 40 CFR Part 51, Appendix M;

for visible particulate emissions, Method 9 of 40 CFR 60 Appendix A;

for VOC, Methods 1 through 4 and Method 25 of 40 CFR 60 Appendix A;

for NOx, Methods 1 through 4 and Method 7 of 40 CFR 60, Appendix A;

for SO2, Methods 1 through 4 and Method 6 of 40 CFR 60, Appendix A; and

for CO, Methods 1 through 4 and Method 10 of 40 CFR 60 Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, and under worst-case fuel conditions for the particular pollutant being tested, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.

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

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

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

Mingo Junction Energy Center LLC

PTI Application: 06-06309

Issued: To be entered upon final issuance

Facility ID: 0641090234

Emissions Unit ID: B003

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B003 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B004 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	OAC rule 3745-31-05 (A)(3)	Particulate matter (PM) and Particulate emissions with a diameter less than 10 microns (PM10) shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas. PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when only burning natural gas. PM/PM10 emissions shall not exceed 2.6 lbs/hr. Nitrogen oxide (NOx) emissions shall not exceed 0.20 lb/MMBTU, as a 3-hour block of time, when burning natural gas or natural gas/blast furnace gas blend. NOx emissions shall not exceed 36.0 lbs/hr, as a 3-hour block of time. Carbon monoxide (CO) emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or natural gas/blast furnace gas blend. CO emissions shall not exceed 8.1 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 1.0 lb/hr.

	<p>Sulfur dioxide (SO₂) emissions shall not exceed 45.7 lbs/hr.</p>
OAC rule 3745-31-05 (D)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 (A), 3745-21-08(B), 3745-23-06(B), and 3745-31-05(D).</p> <p>PM/PM10 emissions shall not exceed 11.4 tons/rolling, 12-month period.</p> <p>NO_x emissions shall not exceed 102.9 tons/rolling, 12-month period.</p> <p>CO emissions shall not exceed 35.5 tons/rolling, 12-month period.</p> <p>VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 200.2 tons/rolling, 12-month period.</p>
OAC rule 3745-17-07 (A)	<p>Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
OAC rule 3745-17-10(B)(1)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-21-08(B)	<p>See section A.I.2.b.</p>
OAC rule 3745-23-06(B)	<p>See section A.I.2.c.</p>
40 CFR 60 subpart Db	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

2.a For purposes of this permit, "clean blast furnace gas" is defined as blast furnace gas which has had particulate matter removed by Wheeling-Pittsburgh Steel's properly operating scrubber system on blast furnace #5.

2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06309.

II. Operational Restrictions

1. Natural gas usage shall not exceed 3,062 MMCF per rolling, 12-month period for Mingo Junction Energy Center emissions units B001, B002, B003, and B004, combined. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly natural-gas usage.
2. This emissions unit shall be operated only in conjunction with the permanent shutdown of the Wheeling-Pittsburgh Steel Corporation Mingo Junction Boiler House, emissions units B005, B006, B007, B008, B009, B010, B011, and B012 under Ohio EPA premise number 0641090010.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or a combination of natural gas and clean blast furnace gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records of the quantity of natural gas combusted during each operating day and each rolling, 12-month period, in cubic feet.
3. The permittee shall maintain records of the quantity of clean blast furnace gas combusted during each operating day, in cubic feet.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall perform certification tests for the monitoring system in accordance with 40 CFR 60 , Appendix B, Performance Specification Test 6, within three months after December 12, 2003.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (i.e., hourly, 3-hour block, daily, monthly, and rolling 12-month summation), results of daily zero/span calibration checks, and magnitudes of manual calibration adjustments.

6. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification Test 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. 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 NOx monitoring system must be kept on site and available for inspection during regular office hours.
8. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system designed to ensure continuous valid and representative readings of SO₂. The plan shall follow the requirements of 40

CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO₂ monitoring system must be kept on site and available for inspection during regular office hours.

9. The permittee shall operate and maintain existing equipment to continuously monitor and record SO₂ 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.

The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to, parts per million SO₂ on an instantaneous (one-minute) basis, emissions of SO₂ in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or clean blast furnace gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month total natural gas usage exceeds 3,062 MMCF, and the actual total monthly usage rate for each such month. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions (in tons) for each rolling, 12-month period during the calendar quarter.

The permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable limits specified in OAC Chapter 3745-18, the 30-day rolling, weighted average SO₂ emission rates, and average daily SO₂ emission rates in units of the applicable standard(s). These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 or 31 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous SO₂ monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

V. Testing Requirements

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

- a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.004 lb/MMBTU when burning natural gas.

Compliance Method:

This limit has been established through manufacturer's data for natural gas combustion of 0.004 lb/MMBTU.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

c. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0143 lb/MMBTU when burning a blend of natural gas and clean blast furnace gas.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $0.0151 \times 0.95 + 0.004 \times 0.05 = 0.0143$ lb/MMBTU

If required, compliance shall be determined through stack testing methods and procedures specified in A.V.2 utilizing the worst case blend of clean blast furnace gas and natural gas. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

d. Emission Limitation:

PM/PM10 emissions shall not exceed 11.4 tons/rolling 12-month period.

Compliance Method:

This limit was established based upon the worst-case maximum operating rate of 8760 hours/yr and 95% blast furnace gas and 5% natural gas. $2.6 \text{ lb/hr} \times 8760 = 11.4 \text{ tons/yr}$

Compliance shall be based upon the record keeping in section A.III.4.

e. Emission Limitation:

PM/PM10 emissions shall not exceed 2.6 lbs/hr.

Compliance Method:

This limit was initially established through a manufacturer's performance guarantee. Worst case operating scenario is the combustion of 95% blast furnace gas (0.0151 lb/MMBTU) and 5% natural gas (0.004 lb/MMBTU). $180 \times (0.0151 \times 0.95 + 0.004 \times 0.05) = 2.6 \text{ lb/hr}$.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for PM10 emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

f. Emission Limitation:

VOC emissions shall not exceed 1.0 lb/hr.

Compliance Method:

This limit has been established by multiplying the maximum gas burning capacity of the of the emission unit by the AP-42 factor of 5.5 lb VOC/MMSCF (Table 1.4-2, July, 1998). At a maximum 0.175 MMSCF/hr, hourly emissions are 1.0 lb VOC/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst-case conditions for VOC emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

g. Emission Limitations:

NOx emissions shall not exceed 0.20 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.

NOx emissions shall not exceed 36.0 lbs/hr.

Compliance Methods:

The above lb/MMBTU NOx limits were initially established through manufacturer's data. The lb/hr limit is based on the worst case scenario of 100% natural gas. $0.20 \times 180 = 36.0$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.2 and A.III.3 and upon the continuous NOx and oxygen monitoring systems data and the records required pursuant to this permit. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A.

h. Emission Limitations:

CO emissions shall not exceed 0.045 lb/MMBTU when burning natural gas or a blend of natural gas and clean blast furnace gas.

CO emissions shall not exceed 8.1 lbs/hr.

Compliance Methods:

The emission limitation of 0.045 lb/MMBTU was established through a performance guarantee by the boiler manufacturer for both natural gas and blast furnace gas. At the maximum firing rate of 180 MMBTU/hr, hourly emissions are 8.1 lb/hr.

If required, the permittee shall demonstrate compliance based upon the stack testing methods and procedures specified in section A.V.2 under worst case conditions for CO emissions. "Worst case" shall be determined through a method developed by the permittee and approved by Ohio EPA.

i. Emission Limitation:

SO2 emissions shall not exceed 45.7 lbs/hr.

Compliance Method:

The lb/hr limit is based on unit stack testing conducted in July, 1999.

Compliance shall be demonstrated based upon the records required pursuant to section A.III and upon the continuous SO2 monitoring system data and the records required pursuant to this permit. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A.

j. Emission Limitation:

SO2 emissions shall not exceed 200.2 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon the maximum lb/hr emission rate. At 24x31 hours/month (maximum), maximum monthly emissions are 17 tons/month. Total maximum 12-month emissions based on 8760 hours of operation/rolling 12-month period are 200.2 tons/rolling 12-month period.

Compliance shall be demonstrated based upon the records required pursuant to section A.III and upon the continuous SO2 monitoring system data and the records required pursuant to this permit.

k. Emission Limitation:

NOx emissions shall not exceed 102.9 tons/rolling, 12-month period.

Compliance Method:

This limit was established based upon an average lb/hr emission rate over the course of 12 months. At 24x31 hours/month (maximum), average monthly emissions are $24 \times 31 \times 23.5 \text{ lb/hr} = 8.74 \text{ tons/month}$. Total maximum 12-month emissions based on 8760 hours of operation/yr are $8760 \times 23.5 = 102.9 \text{ tons/rolling 12-month period}$.

Compliance shall be demonstrated based upon the records required pursuant to section A.III.4 and upon the continuous NOx and oxygen monitoring systems data and the records required pursuant to this permit.

l. Emission Limitation:

CO emissions shall not exceed 35.5 tons/rolling, 12-month period.

Compliance Method:

Emissions were originally estimated using manufacturer's performance guarantee of 8.1 lb/hr. Based on 8760 hours/rolling 12-month period, emissions are 35.5 tons/rolling 12-month period.

Compliance shall be based upon the record keeping in section A.III.4.

m. Emission Limitation:

VOC emissions shall not exceed 2.2 tons/rolling, 12-month period.

Compliance Method:

Compliance was estimated by using the lb/hr emission limit multiplied by 8760 hours/rolling 12-month period. At 1 lb/hr maximum emissions, the rolling 12-month emission rate is $8760 \times 1.0 = 4.38 \text{ tons}$.

Compliance shall be based upon the record keeping in section A.III.4.

2. If required, the permittee shall conduct, or have conducted, emission testing of the boiler stack emissions in accordance with the following requirements:

- a. Performance testing must be conducted within 180 days of the effective date of this permit and every 5 years thereafter.

- b. The emission testing shall be conducted to demonstrate compliance with the PM10, opacity, VOC, NOx, SO2, and CO emission limitations.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PM10, Methods 1 through 4 of 40 CFR Part 60, Appendix A, and Method 201 or 201A of 40 CFR Part 51, Appendix M;

for visible particulate emissions, Method 9 of 40 CFR 60 Appendix A;

for VOC, Methods 1 through 4 and Method 25 of 40 CFR 60 Appendix A;

for NOx, Methods 1 through 4 and Method 7 of 40 CFR 60, Appendix A;

for SO2, Methods 1 through 4 and Method 6 of 40 CFR 60, Appendix A; and

for CO, Methods 1 through 4 and Method 10 of 40 CFR 60 Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, and under worst-case fuel conditions for the particular pollutant being tested, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.

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

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

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

- 3. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous SO₂ monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District

Mingo Junction Energy Center LLC

PTI Application: 06-06309

Issued: To be entered upon final issuance

Facility ID: 0641090234

Emissions Unit ID: B004

Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous SO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B004 - 180 MMBTU/hr boiler fired with natural gas and/or clean blast furnace gas Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B006 - Caterpillar 3516 emergency 2000 kW diesel generator. Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	OAC rule 3745-31-05(A)(3)	Emissions of particulate matter (PM) and particulate matter with a diameter less than or equal to 10 microns (PM10) shall not exceed 0.14 lb MMBTU and 0.04 tons/yr; Emissions of sulfur dioxide (SO ₂) shall not exceed 0.50 lb/MMBTU and 0.17 ton/yr; Emissions of nitrogen oxides (NO _x) shall not exceed 5.9 lb/MMBTU and 1.82 tons/yr; Emissions of carbon monoxide (CO) shall not exceed 1.47 lb/MMBTU and 0.46 tons/yr. See section B.1, below; The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-02(A)(2), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B) and 3745-17-07(A).
	OAC rule 3745-31-05 (D)	See Section B.2. below.
	OAC rule 3745-17-11(B)(5)(a)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-17-07(A)(1)	Visible emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule
OAC rule 3745-18-06(B)	See Section A.2.a. below.
OAC rule 3745-21-07(B)	See Section A.2.b. below.
OAC rule 3745-21-08(B)	See Section A.2.b. below.
OAC rule 3745-23-06(B)	See Section A.2.b. below.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.b The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and OAC rule 3745-21-07(B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

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

B. Operational Restrictions

1. The permittee shall only burn low sulfur No. 2 or diesel fuel, containing less than 0.5% sulfur by weight, in this emissions unit.
2. The permittee has requested a federally enforceable limitation on rolling 365-day fuel usage. The rolling 365-day diesel fuel usage is limited to 4150 gallons. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly diesel fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain documentation on the sulfur content of all fuels received.
2. For each day that the permittee burns a fuel other than low sulfur No. 2 or diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

3. The permittee shall maintain daily records of the following information:
 - a. The hours of operation for B006.
 - b. The fuel usage, in gallons/day.
 - c. The rolling 365-day summation of the fuel usage, calculated by adding the current day's fuel usage to the fuel usage for the preceding 364 days.
4. The permittee shall perform monthly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than low sulfur No. 2 or diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 365-day total diesel fuel usage exceeds 4,150 gallons, and the actual total daily usage rate for each such day. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

E. Testing Requirements

1. Emissions Limitation:

Emissions of SO₂ shall not exceed 0.50 lb/MMBTU and 0.17 ton/yr.

Compliance Method:

Compliance is based on the manufacturer's performance guarantee of 0.50 lb SO₂/MMBTU.

Annual emissions are:

$$(4150 \text{ gal/yr}) \times (0.149 \text{ MMBTU/gal}) \times (0.5 \text{ lb SO}_2\text{/MMBTU}) \times (0.0005 \text{ ton/lb}) = 0.15 \text{ ton/yr.}$$

Emissions testing, if required, shall be conducted using the following test method: 40 CFR Part 60, Appendix A, Method 8. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2. Emission Limitation:

Emissions of NO_x shall not exceed shall not exceed 5.9 lb/MMBTU and 1.82 tons/yr

Compliance Method:

Compliance is based on the manufacturer's performance guarantee of 5.90 lb NO_x/MMBTU.

Annual emissions are:

$$(4150 \text{ gal/yr}) \times (0.149 \text{ MMBTU/gal}) \times (5.90 \text{ lb NO}_x\text{/MMBTU}) \times (0.0005 \text{ ton/lb}) = 1.82 \text{ ton/yr.}$$

Emissions testing, if required, shall be conducted using the following test method: 40 CFR Part 60, Appendix A, Method 7. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

3. Emission Limitation:

Emissions of PM/PM10 shall not exceed 0.14 lb MMBTU and 0.04 tons/yr.

Compliance Method:

Compliance is based on the manufacturer's performance guarantee of 0.14 lb (PM/PM10)/MMBTU.

Annual emissions are:

$$(4150 \text{ gal/yr}) \times (0.149 \text{ MMBTU/gal}) \times (0.14 \text{ lb (PM/PM10)/MMBTU}) \times (0.0005 \text{ ton/lb}) = 0.04 \text{ ton/yr.}$$

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1-5 of 40 CFR Part 60, Appendix A.

4. Emissions Limitation:
Emissions of CO shall not exceed 1.47 lb/MMBTU and 0.46 tons/yr.

Compliance Method:

Compliance is based on the manufacturer's performance guarantee of 1.47 lb CO/MMBTU.

Annual emissions are:

$$(4150 \text{ gal/yr}) \times (0.149 \text{ MMBTU/gal}) \times (1.47 \text{ lb CO/MMBTU}) \times (0.0005 \text{ ton/lb}) = 0.46 \text{ ton/yr.}$$

Emissions testing, if required, shall be conducted using the following test method: 40 CFR Part 60, Appendix A, Method 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.

6. Operational Limitation:
Sulfur content of fuel restricted to less than 0.5%, by weight

Compliance Method:

Compliance shall be based on recordkeeping as specified in Section C.1. of this permit.

7. Operational Limitation:
Maximum of 4150 gallons of fuel usage per 365-day rolling period.

Compliance Method:

Compliance shall be based on recordkeeping as specified in Section C.3. of this permit.

F. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B006 - Caterpillar 3516 emergency 2000 kW diesel generator. Chapter 31 Modification (Terms in this permit supersede those in PTI 17-1382 issued 11/15/95)	None	None

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.