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Facility Name: **Ohio State University**

Application Number: **01-7409**

Date: **September 23, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

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

CONSTRUCTION OF NEW SOURCE(S)

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

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio 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 Ohio Administrative Code

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(OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

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

APPLICABILITY

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

BEST AVAILABLE TECHNOLOGY

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

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PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for period of up to one year from the date the source commenced operation. This 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.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Ohio State University** located in **Franklin** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio
EPA
Source B132
Number Cont'd

Source
Identification
Description

B132

313.1 mmBtu/hr,
natural gas and
number
two oil-
fired Babcock
and Wilcox
boiler
(300.1 mmBtu/hr
when burning
number two fuel
oil)

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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BAT
Determination

Applicable
Federal &
OAC Rules

Use of low NOx burners and flue gas recirculation. The number two fuel oil shall have a sulfur content of 0.5%, by weight. Compliance with permitted limits and applicable rules and regulations.

3745-31-05

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	Subpart Db			0.0196 lb/mmBtu of actual heat input when burning number two fuel oil and 0.007 lb/mmBtu when burning natural gas.
	3745-17-07 (A)	3745-23-06 (C)	Permit Allowable Mass Emissions and/or Control/Usage Requirements	Nitrogen oxides emissions shall not exceed 0.12 lb/mmBtu of actual heat input when burning number two fuel oil and 0.036 lb/mmBtu when burning natural gas.
40 CFR Part 60.43b (f)	3745-17-10 (B) (1)		Carbon monoxide emissions shall not exceed 77.8 tons/year.	Nitrogen oxides emissions shall not exceed 39.95 tons/year.
			Particulate emissions shall not exceed 7.7 tons/year.	Sulfur dioxide emissions shall not exceed 0.507 lb/mmBtu of actual heat input when burning number two fuel oil and 0.0006 lb/mmBtu when burning natural gas.
			Sulfur dioxide emissions shall not exceed 15.8 tons/year.	Carbon monoxide emissions shall not exceed 0.17 lb/mmBtu of actual heat input when
40 CFR Part 60,	3745-18-06 (D)		Volatile organic compound emissions shall not exceed 8.3 tons/year.	Particulate emissions shall not exceed

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
burning gas. number two fuel oil and 0.072 lb/mmBtu when burning natural gas. Volatil e organic compound d emissio ns shall not exceed 0.009 lb/mmBtu of actual heat input when burning number two fuel oil and 0.008 lb/mmBtu when burning natural	Visible particulate emissions shall not exceed 20% opacity as a 6- minute average, except for one 6-minute period per hour of not more than 27% opacity. The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule. The emission limitations specified in this rule are less stringent than the emission	limitations specified in 40 CFR Part 60.43b(f). The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitation established by this rule. The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitation established by this rule. The emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitation established by this rule.		

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SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Carbon monoxide	77.8
Nitrogen oxides	39.95
Sulfur dioxide	15.8
Volatile organic compounds	8.3
Particulates	7.7

CONSTRUCTION STATUS

The **Ohio EPA, Central District Office** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following source(s): **B132**.

NSPS REQUIREMENTS

The following source(s) is (are) subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
B132	313.1 mmBtu/hr natural gas/number two fuel oil-fired boiler	40 CFR Part 60, Subpart Db

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

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Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, OH 43216-3669

and

Ohio EPA, Central District Office
Air Pollution Group
3232 Alum Creek Drive
Columbus, OH 43207-3417

WASTE DISPOSAL

The owner/operator shall comply with any applicable State and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC rule 3745-15-06, any malfunction of the

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source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA, Central District Office, Air Pollution Group, 3232 Alum Creek Drive, Columbus, OH 43207-3417.**

Except as provided by OAC rule 3745-15-06(A) (3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC rule 3745-15-07.

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ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. OPERATIONAL RESTRICTIONS

1. The maximum annual natural gas consumption rate for B132 shall not exceed 1,951 million cubic feet (MMFt³) based upon a rolling 365-day summation of the natural gas consumption figures. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the natural gas consumption levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Natural Gas Usage (MMFt³)</u>
1	162
1-2	325
1-3	487
1-4	650
1-5	812
1-6	975
1-7	1138
1-8	1300
1-9	1463
1-10	1625
1-11	1788
1-12	1951

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual natural gas consumption limitation shall be based upon a rolling, 365-day summation of the natural gas consumption figures.

2. The maximum annual number two fuel oil consumption for B132 shall not exceed 428,800 gallons based upon a rolling, 365-day summation of the number two fuel oil consumption figures. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the number two fuel oil consumption levels specified in the following table:

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<u>Month(s)</u>	<u>Maximum Allowable Cumulative Number Two Fuel Oil Usage (gallons)</u>
1	35,733
1-2	71,466
1-3	107,199
1-4	142,933
1-5	178,666
1-6	214,399
1-7	250,133
1-8	285,866
1-9	321,599
1-10	357,333
1-11	393,066
1-12	428,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual number two fuel oil consumption limitation shall be based upon a rolling, 365-day summation of the number two fuel oil consumption figures.

3. The quality of oil burned in B132 shall meet, on an as-received basis, a sulfur content which is equal to or less than 0.5 weight percent sulfur.

B. MONITORING AND RECORDKEEPING REQUIREMENTS

1. Opacity Monitoring System

The permittee shall install, operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part

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60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which B132 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 1. Personnel from the Ohio EPA, Central District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to the Ohio EPA, Central District Office pursuant to OAC rule 3745-15-04 within 30 days after the test is completed. Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I), and 40 CFR Part 60, Appendix B, Performance Specification 1, including section 5.1.9 (mandatory).

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. Nitrogen Oxides Monitoring System

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

Prior to the installation of the continuous nitrogen oxides monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60 for approval by the Ohio EPA, Central Office.

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Within 60 days after achieving the maximum production rate at which B132 will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests of such equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60. Personnel from the Ohio EPA, Central District Office 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 Ohio EPA, Central District Office within 30 days after the test is completed. Copies of the test results shall be sent to the Ohio EPA, Central District Office and the Ohio EPA, Central Office. Certification of the continuous nitrogen oxides monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis, emissions of nitrogen oxides in lb/mmBtu on a rolling, 30-day average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each

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shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA, Central District Office.

4. The permittee shall maintain daily records of the following information:
 - a. The natural gas consumption for each day.
 - b. The number two fuel oil consumption for each day.
 - c. The total actual heat input values as determined through F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.
 - d. Beginning after the initial compliance demonstration, the rolling, 30-day average nitrogen oxides emission rate, in lb/mmBtu.
 - e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 365-day summation of the natural gas consumption figures.
 - f. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 365-day summation of the number two fuel oil consumption figures.
5. The permittee shall maintain monthly records of the following information:
 - a. During the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative natural gas consumption for each calendar month.
 - b. During the first 12 calendar months of operation

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following the issuance of this permit, the permittee shall record the cumulative number two fuel oil consumption for each calendar month.

6. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of 5 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 the permit. Such records may be maintained in computerized form.

C. REPORTING REQUIREMENTS

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting all instances of opacity values in excess of the limitations specified in 40 CFR Part 60.43b(f) and OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and

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corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar year.

2. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all rolling, 30-day average nitrogen oxides values in excess of the applicable nitrogen oxides emission rate (lb/mmBtu).

The reports shall also document any continuous nitrogen oxide 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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.

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These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar year.

3. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon a volume-weighted average of the calculated sulfur dioxide emission rates. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 45 days after the deviation occurs.
4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day natural gas consumption limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative natural gas consumption levels. These reports shall be submitted according to paragraph C.6 of this permit.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day number two fuel oil consumption limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative number two fuel oil consumption levels. These reports shall be submitted according to paragraph C.6 of this permit.
6. The permittee shall submit required reports in the following manner:
 - a. Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA, Central District Office.
 - b. Quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record

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keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted 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.)

D. TESTING REQUIREMENTS

1. Compliance with the emission limitation(s) of the terms and conditions shall be determined in accordance with the following methods.

2. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

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

3. Emission Limitations:

Particulate emissions shall not exceed 0.0196 lb/mmBtu of actual heat input while burning number two fuel oil, and 0.007 lb/mmBtu while burning natural gas.

Applicable Compliance Method:

Initial compliance with the particulate emission limitation for number two fuel oil shall be determined through emission testing. The particulate emission

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tests shall be conducted in accordance with the procedures specified in 40 CFR Parts 60.8 and 60.46b(d). The test shall be conducted while the emissions unit is operating at or near its maximum capacity, while burning number two fuel oil.

Following the initial performance test, the permittee shall demonstrate compliance with the particulate emission limitations on a continuous basis through the use of an emission factor which will be developed during the initial compliance demonstration and the data obtained from the continuous opacity monitoring system.

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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central 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, Central District Office.

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4. Emission Limitations:

Nitrogen oxides emissions shall not exceed 0.12 lb/mmBtu of actual heat input while burning number two fuel oil and 0.036 lb/mmBtu of actual heat input while burning natural gas.

Applicable Compliance Method:

Initial compliance with the nitrogen oxides emission limitation for number two fuel oil shall be determined through a performance test using the continuous nitrogen oxides monitoring system. The nitrogen oxides performance test shall be conducted in accordance with the procedures specified in 40 CFR Parts 60.8 and 60.46b(e). The test shall be conducted while the emissions unit is operating at or near its maximum capacity, while burning number two fuel oil.

Following the initial performance test, the permittee shall demonstrate compliance with the nitrogen oxides emission limitations on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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

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unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central 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, Central District Office.

5. Emission Limitations:

Sulfur dioxide emissions shall not exceed 0.507 lb/mmBtu of actual heat input when burning number two fuel oil and 0.0006 lb/mmBtu when burning natural gas.

Applicable Compliance Method:

When burning number two fuel oil, compliance with this emission limitation shall be based upon the records required pursuant to Section B.3 of this permit.

When burning natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

6. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.17 lb/mmBtu of actual heat input while burning number two fuel oil, and 0.072 lb/mmBtu of actual heat input while burning natural gas.

Applicable Compliance Method:

When burning fuel oil, compliance with the carbon monoxide emission limitation shall be determined by multiplying an emission factor of 5.0 lbs of carbon monoxide/1,000 gallons of fuel oil burned by the emissions unit's maximum hourly fuel oil consumption capacity (2,144 gallons/hr) and dividing by the emissions unit's maximum hourly heat input capacity

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(300.1 mmBtu/hr). This emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-2.

When burning natural gas, compliance with the carbon monoxide emission limitation shall be determined by multiplying an emission factor of 74.5 lbs of carbon monoxide/mm³cu.ft. of natural gas burned by the emissions unit's maximum hourly natural gas consumption capacity (302,512 cu.ft./hr) and dividing by the emissions unit's maximum hourly heat input capacity (313.1 mmBtu/hr). This emission factor was developed by the manufacturer of this emissions unit.

If required, the permittee shall demonstrate compliance with these emission limitations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 10.

7. Emission Limitations:

Volatile organic compound emissions shall not exceed 0.009 lb/mmBtu of actual heat input while burning number two fuel oil, and 0.008 lb/mmBtu of actual heat input while burning natural gas.

Applicable Compliance Method:

When burning fuel oil, compliance with the volatile organic compound emission limitation shall be determined by multiplying an emission factor of 0.34 lb of volatile organic compounds/1,000 gallons of fuel oil burned by the emissions unit's maximum hourly fuel oil consumption capacity (2,144 gallons/hr) and dividing by the emissions unit's maximum hourly heat input capacity (300.1 mmBtu/hr). This emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-4.

When burning natural gas, compliance with the volatile organic compound emission limitation shall be determined by multiplying an emission factor of 8.28 lbs of volatile organic compounds/mm³cu.ft. of natural

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gas burned by the emissions unit's maximum hourly natural gas consumption capacity (302,512 cu.ft./hr) and dividing by the emissions unit's maximum hourly heat input capacity (313.1 mmBtu/hr). This emission factor was developed by the manufacturer of this emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25.

8. Emission limitation:

Carbon monoxide emissions shall not exceed 77.8 tons/year.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined by adding the carbon monoxide emissions from the consumption of natural gas and number two fuel oil.

When burning fuel oil, carbon monoxide emissions shall be determined by multiplying an emission factor of 5.0 lbs of carbon monoxide/1,000 gallons of fuel oil burned by the emissions unit's annual fuel oil consumption and dividing by 2,000. This emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-2.

When burning natural gas, carbon monoxide emissions shall be determined by multiplying an emission factor of 74.5 lbs of carbon monoxide/mmcf of natural gas burned by the emissions unit's annual natural gas consumption and dividing by 2,000. This emission factor was developed by the manufacturer of this emissions unit.

9. Emission limitation:

Volatile organic compound emissions shall not exceed 8.3 tons/year.

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Applicable Compliance Method:

Compliance with this emission limitation shall be determined by adding the volatile organic compound emissions from the consumption of natural gas and number two fuel oil.

When burning fuel oil, volatile organic compound emissions shall be determined by multiplying an emission factor of 1.26 lbs of volatile organic compounds/1,000 gallons of fuel oil burned by the emissions unit's annual fuel oil consumption and dividing by 2,000. This emission factor was developed by the manufacturer of this emissions unit.

When burning natural gas, volatile organic compound emissions shall be determined by multiplying an emission factor of 8.28 lbs of volatile organic compounds/mmcu.ft of natural gas burned by the emissions unit's annual natural gas consumption and dividing by 2,000. This emission factor was developed by the manufacturer of this emissions unit.