State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
BUTLER COUNTY

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Application No: 14-05143

DATE: 11/15/2001

Miller Brewing Company
Mark Koch
2525 Wayne Madison Road
Trenton, OH 450679760

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

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

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

Very truly yours,

Thomas G. Rigo

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

CC: USEPA **HCDES**

FINAL PERMIT TO INSTALL 14-05143

Application Number:	14-05143
APS Premise Number:	1409000353
Permit Fee:	**$1600**
Name of Facility:	Miller Brewing Company
Person to Contact:	Mark Koch
Address:	2525 Wayne Madison Road Trenton, OH 450679760

Location of proposed air contaminant source(s) [emissions unit(s)]:
2525 Wayne Madison Road
Trenton Ohio, Ohio

Description of proposed emissions unit(s):
Installation of an 8.5 MW simple-cycle steam turbine generator.

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

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

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

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

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

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

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

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

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

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

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

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

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.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

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

3. Permit Transfers

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

4. Air Pollution Nuisance

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

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete

within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

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

7. Public Disclosure

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

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other

emissions unit(s).

9. 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.

10. 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

Pollutant	Tons Per Year
PM	122.9
PM10	122.9
NOx	1375.9
VOC	23.0
CO	175.2
SO2	2758.0
HCl	141.5
HF	17.7

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements
B001 - 238 MMBtu/hr pulverized coal/fuel oil natural gas- fired boiler with a baghouse. This boiler is used to generate steam for production and to drive an existing 13.8 MW steam turbine and a new 8.5 MW steam turbine for electricity generation - modification	OAC rule 3745-31-05(A)(3)

		Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-10(B)(1)	See A.I.2.b. (BAT also includes the requirements of these rules)
	OAC rule 3745-17-10(C)	Limits when Burning Coal 0.031 lb PM-PM10/MMBtu, 0.01 gr PM/acf
OAC rules 3745-31-10 through 28	OAC rule 3745-21-08(B)	0.7 lb NOx/MMBtu 0.62 lb VOC/hr 5.2 lbs CO/hr 1.40 lbs SO2/MMBtu 12.4 lbs HCl/hr 1.6 lbs HF/hr
	OAC rule 3745-23-06(B)	Limits when Burning No. 6 Oil 0.125 lb PM-PM10/MMBtu (based on total heat input of 476 MMBtu/hr for B001 & B002), 0.01 gr PM/acf 0.7 lb NOx/MMBtu 1.2 lbs VOC/hr 8.15 lbs CO/hr 1.40 lbs SO2/MMBtu
40 CFR Part 52.1881(b)(12)(i)		Limits when Burning No. 2 Oil 0.020 lb PM-PM10/MMBtu 0.01 gr PM/acf 0.7 lb NOx/MMBtu 0.38 lb VOC/hr 8.5 lbs CO/hr 1.40 lbs SO2/MMBtu
OAC rule 3745-18-06(D)		
OAC rule 3745-17-07(A)		While Burning Natural Gas 0.020 lb PM-PM10/MMBtu 0.01 gr PM/acf 0.7 lb NOx/MMBtu

2.6 lbs VOC/hr 20.0 lbs CO/hr 1.40 lbs SO2/MMBtu	Combined limits for emissions units B001 and B002 when burning any combination of fuels:	See term A.II.1.
Maximum allowable emissions for emissions unit B001: 11.5 TPY VOC (based on natural gas) 87.6 TPY CO (based on natural gas)	2758.0 TPY SO2 (to meet modeling requirements) 1375.9 TPY NOx 1.40 lbs SO2/MMBtu actual heat input when burning any fossil fuel	
The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 28, 40 CFR Part 52.1881(b)(12)(i), OAC rule 3745-17-07(A), OAC rule 3745-17-10(B)(1), OAC rule 3745-17-10(C) and 3745-23-06(B).	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 52.1881(b)(12)(i). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.	
Combined limits for emissions units B001 and B002 when burning any combination of fuels: 122.9 TPY PM-PM10 141.5 TPY HCL 17.7 TPY HF	0.020 lb of PM/MMBtu of actual heat input when burning No. 2 fuel oil or natural gas 0.125 lb PM/MMBtu when burning No. 6 fuel oil (based on a total heat input of 476 mmBtu/hr)	
1.6 lbs SO2/MMBtu actual heat input established in PTI 18-080 issued August 14, 1979. 0.01 gr PM/acf of exhaust gases when burning coal	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.031 lb/MMBtu of actual heat input when burning coal and 0.01 grains/actual cubic feet of exhaust gases.

2.b Nitrogen oxide emissions shall not exceed 0.7 lb. NOx/MMBtu actual heat input. This limit is based on a review by U.S. EPA of the performance test for emissions unit B001, which indicated that the 0.6 lb NOx per MMBtu emission limit in PSD permit 5-79-A-28 cannot be attained and maintained.

2.c The tons per year sulfur dioxide emission limitation was set to comply with the PSD modeling requirements.

2.d The maximum coal usage for this emissions unit shall not exceed 10.35 tons per hour.

2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, usage limitations, fuel quality restrictions, use of a fabric filter, recordkeeping, compliance with NAAQS and PSD pollutant impact modeling.

2.f The hourly emission limitation(s) for CO, VOC, HCl, and HF, outlined in term A.I.1. are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

II. Operational Restrictions

1. The emissions unit shall utilize the manufacturer's best design for minimizing NOx emissions. The design shall utilize overfire, and side fire air to reduce flame temperature and limit combustion air (ref. PSD 5-79-A-23 FR Vol 44 No. 215 issued Nov. 5, 1979).

2. The quality of coal burned in this emissions unit shall meet the following specification on an as-burned basis:

   a. A combination of ash content and heat content sufficient to comply with the particulate emission limitations specified in terms A.I.1. and A.I.2.

b. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.40 lbs/MMBTU of actual heat input.

Compliance with the above mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or coal supplier for all shipments of coal during each calender month.

All emissions modeling for this application were performed with coal quality corresponding to 1.6 lbs of SO2 per mmBTU; this emissions level will replace the current level of 1.4lb of SO2 per mmBTU upon the State Implementation Plan (SIP) approval by USEPA .

3. The quality of the fuel oil(s) burned in this emissions unit shall have a combination of sulfur content and heat content that is sufficient to comply with the allowable SO2 emission limitation specified in section A.I.1. above.

   Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

   The quality of the oil burned in this emissions unit shall meet the following specifications on an as-received basis:

   a. A combination of ash content and heat content sufficient to comply with the particulate emission limitation of 0.020 lb PM/MMBtu when burning No. 2 fuel oil and 0.125 lb PM/MMBtu when burning No. 6 fuel oil.

   b. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.40 lbs/MMBtu of actual heat input.

   Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month and/or stack gas sampling using methods specified in 40 CFR 60, Section 60.46.

4. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

5. The combined maximum annual coal usage rate for emissions units B001 and B002 shall not exceed 125081.8 tons per year, based upon a rolling, 12-month summation of the coal usage rate. The permittee has existing records to demonstrate compliance with this permit limit.

6. Emissions from the combination of natural gas, No. 2 fuel oil, No. 6 fuel oil, and coal usage for emissions units B001 and B002, combined, shall not exceed 2758.0 TPY SO2, based upon a rolling, 12-month summation of the monthly emissions.

   The permittee has existing records to demonstrate compliance with this permit limit.

7. The daily average operating rate for this emissions unit shall not exceed 238 MMBtu/hour and 180,000 pounds of steam per hour.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect representative grab samples of the coal burned in this emissions unit from each shipment of coal received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. Representative samples may be obtained via composite sampling from the coal handling system. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

   Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

   The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average SO2 emission rate for the month, in lbs/MMBtu of actual heat input.

2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content 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 District Office or local air agency.

   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, heat content and the calculated SO2 emission rate [the SO2 emission rate shall be calculated as specified in OAC 3745-18-04(F)].

3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on an hourly basis.

4. The permittee shall properly operate and maintain existing equipment to continuously monitor and record the steam load, in pounds/hour, from this emissions unit.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous steam load monitoring system designed to ensure continuous valid and representative readings of steam load, in pounds of steam/hour. The plan shall include a description of preventive maintenance activities. A logbook dedicated to the continuous steam monitoring system must be kept on site and be available for inspection during regular office hours.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PM 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 visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

6. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. The usage rates for each fuel (natural gas, No.2 fuel oil, No.6 fuel oil, and coal) burned in this emissions unit.

   b. The rolling, 12-month summation of the natural gas, No.2 fuel oil, No.6 fuel oil, and coal usage rates.

   c. The rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.

7. The permittee shall maintain daily records of the coal burned in this emissions unit, in tons per day.

8. The permittee shall maintain daily records of hours of operation while burning coal in this emissions unit, in hours per day.

9. The permittee shall calculate and record daily the average amount of coal burned per hour in this emissions unit, tons coal per hour.

10. The permittee shall maintain monthly records of the updated rolling, 12-month summation of the SO2 emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports concerning the quality and quantity of coal as-burned in this emissions unit. These reports shall include the following information for the emissions unit

for each calendar month during the calendar quarter:

a. the total quantity of coal as- burned (tons);

b. the average ash content (percent) of the coal as- burned;

c. the average sulfur content (percent) of the coal as- burned;

d. the average heat content (Btu/pound) of the coal as- burned; and

e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBtu actual heat input) from the coal as- burned.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

a. the total quantity of oil received in each shipment (gallons);

b. the weighted* average sulfur content (percent) for the oil received during each calendar month;

c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month; and

d. the weighted* average SO2 emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month.

*In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the

allowable range specified in term A.II.4.

4. The permittee shall submit semi-annual reports which identify any exceedances of the hourly coal usage limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by February 15 and August 15 of each year.

5. The permittee shall submit quarterly reports that identify all exceedances of the rolling, 12-month coal usage limitation and the SO2 emissions limitation.

6. The permittee shall also submit annual reports which specify the total PM/PM10, SO2 and NOx, HCl, and HF emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

7. The permittee shall submit quarterly steam load deviation (excursion) reports that identify all periods of time during which the steam load exceeded 180,000 lbs of steam per hour.

8. The permittee shall submit semiannual written reports which (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 Director (the appropriate Ohio EPA District Office or local air agency) by February 15 and August 15 of each year and shall cover the previous 6-month period.

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

V. Testing Requirements

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

   a. Emissions limitation: Visible PM shall not exceed 20 percent opacity, as a 6-minute average as outlined in OAC rule 3745-17-07(A) .

      Compliance Method: Compliance shall be demonstrated by the methods specified in 40 CFR 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitations:
      0.031 lb of PM/MMBtu of actual heat input and 0.01 grain per actual cubic foot when burning coal:

      Applicable Compliance Method:
      The permittee shall demonstrate compliance with the above PM emission limitations based upon the results of the emission testing required in Section V.2 of this permit.

   c. Emission Limitation:

.020 lb of PM/MMBtu of actual heat input when burning either No. 2 fuel oil or natural gas

Applicable Compliance Method:
For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PM/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PM/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:
0.7 lb of NOx/MMBtu of actual heat input when burning coal

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above NOx emission limitation based upon the results of the emission testing required in Section V.2 of this permit.

e. Emission Limitation:
1.40 lbs of SO2/MMBtu of actual heat input
2758.0TPY SO2

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above SO2 emission limitation based on the monitoring and record keeping requirements in Section A.III.1, A.III.2 and A.III.10 and the reporting keeping requirements in Section A.IV.1,A.IV.2 and A.IV.5 of this permit. The SO2 emission rate shall be calculated pursuant to the equation specified in OAC rule 3745-18-04(F). When multiple fuels are burned, the SO2 emission rate is the sum of SO2 from all fuels burned divided by the sum of the Btu value of all fuels burned.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part

60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following instructions:

   a. The emission testing shall be conducted within six months after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit when burning coal for particulate of 0.031 lb PM/MMBtu, 0.01 gr/acf of exhaust gases, and for NOx of 0.7 lb/MMBtu.

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

      Method 5 of 40 CFR Part 60, Appendix A for particulate, and;
      Method 7 of 40 CFR Part 60, Appendix A for NOx.

   d. During the test, the temperature, the pressure drop across the baghouse, and the steam load shall be recorded at least every 15 minutes.

   e. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   f. The permittee shall conduct, or have conducted, a heat input measurement evaluation and ultimate analysis of the coal fed to this emissions unit, and shall collect and record the following data from the evaluation and ultimate analysis:

      i. the coal feed to the boiler, by weight, during each stack test run and the total amount of coal used during the entire stack test (from the beginning of the first test run to the end of the third test run, (i.e., about eight hours);

      ii. the coal feed counter readings during each test run and for the duration of the entire stack test (i.e., about eight hours);

      iii. the ultimate analysis of the coal; and

      iv. the F-factor for each stack test run (as a QA/QC check) per Ohio EPA Engineering Guide #27.

   The permittee shall calibrate the steam flow meter in advance of the heat input measurement evaluation and shall maintain records of the steam flow meter calibration.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions

unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Offices or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the limit of 0.020 lb PM/MMBtu from OAC rule 3745-17-10(B)(1) for No.2 fuel oil and natural gas shall be demonstrated by emission factors in AP 42 Fifth Edition, oil analyses, and recordkeeping and reporting required in terms A.III. and A.IV. of this permit.

4. Compliance with the limit of 0.125 lb PM/MMBtu from OAC rule 3745-17-10(C) for No.6 fuel oil shall be demonstrated by emission factors in AP 42 Fifth Edition, oil analyses, and recordkeeping and reporting required in terms A.III. and A.IV. of this permit.

5. Compliance with term A.I.2.d shall be demonstrated by the record keeping in term A.III.7 - A.III.9.

6. Compliance with term A.II.4 shall be demonstrated by the record keeping in term A.III.3.

7. Compliance with term A.II.5 shall be demonstrated by the record keeping in term A.III.6.

8. Compliance with term A.II.6 shall be demonstrated by the record keeping in term A.III.10.

VI. Miscellaneous Requirements

1. The heat input rating for emissions units B001 is questionable since several stack tests indicate the capacity of the boiler is over 250 MMBTU/hr. Resolution of the heat input rating issue for emissions unit B001 may result in the applicability of NSPS rule 40 CFR 60 Subpart D. If Subpart D is found to be applicable to B001, the permittee shall immediately comply with the requirements of this subpart.

2. The terms and conditions listed in this permit to install for this emissions unit shall supercede the air pollution control requirements for this emission unit contained in permit to install 18-080 as issued on August 14, 1979. This new permit to install was to address the addition of an 8.5 MW steam powered turbine to use the existing boiler steam generation capacity to produce electricity for the plant.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B001 - 238 MMbtu/hr pulverized coal/fuel oil natural gas- fired boiler with a baghouse. This boiler is used to generate steam for production and to drive a 8.5 MW steam turbine for electricity generation - modification	OAC rule 3745-18-15(O)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 52.1881(b)(12)(i).

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit B001 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to

the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl (Hydrogen Chloride)

TLV (ug/m3): 7458.0

Maximum Hourly Emission Rate (lbs/hr): 24.84 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 17.9

MAGLC (ug/m3): 177.6

Pollutant: HF (Hydrogen Fluoride)

TLV (ug/m3): 2455.0

Maximum Hourly Emission Rate (lbs/hr): 3.1 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2.2

MAGLC (ug/m3): 58.5

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

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

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

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

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

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements
B002 - 238 MMBtu/hr pulverized coal/fuel oil natural gas- fired boiler with a baghouse. This boiler is used to generate steam for production and to drive a 8.5 MW steam turbine for electricity generation - modification	OAC rule 3745-31-05(A)(3)

		Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-10(B)(1)	See A.I.2.b. (BAT also includes the requirements of these rules)
OAC rules 3745-31-10 through 28	OAC rule 3745-17-10(C)	Limits when Burning Coal 0.031 lb PM-PM10/MMBtu, 0.01 gr PM/acf 0.7 lb NOx/MMBtu 0.62 lb VOC/hr 5.2 lbs CO/hr 1.40 lbs SO2/MMBtu 12.4 lbs HCl/hr 1.6 lbs HF/hr
	OAC rule 3745-21-08(B)	
	OAC rule 3745-23-06(B)	Limits when Burning No. 6 Oil 0.125 lb PM-PM10/MMBtu (based on total heat input of 476 MMBtu/hr for B001 & B002), 0.01 gr PM/acf 0.7 lb NOx/MMBtu 1.2 lbs VOC/hr 8.15 lbs CO/hr 1.40 lbs SO2/MMBtu
40 CFR Part 52.1881(b)(12)(i)		Limits when Burning No. 2 Oil 0.020 lb PM-PM10/MMBtu 0.01 gr PM/acf 0.7 lb NOx/MMBtu 0.38 lb VOC/hr 8.5 lbs CO/hr 1.40 lbs SO2/MMBtu
OAC rule 3745-18-06(D)		
OAC rule 3745-17-07(A)		While Burning Natural Gas 0.020 lb PM-PM10/MMBtu 0.01 gr PM/acf 0.7 lb NOx/MMBtu 2.6 lbs VOC/hr 20.0 lbs CO/hr

1.40 lbs SO2/MMBtu	1375.9 TPY NOx
Maximum allowable emissions for emissions unit B001: 11.5 TPY VOC (based on natural gas) 87.6 TPY CO (based on natural gas)	1.40 lbs SO2/MMBtu actual heat input when burning any fossil fuel The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 52.1881(b)(12)(i).
The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 28, 40 CFR Part 52.1881(b)(12)(i), OAC rule 3745-17-07(A), OAC rule 3745-17-10(B)(1), OAC rule 3745-17-10(C) and 3745-23-06(B).	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule. 0.020 lb of PM/MMBtu of actual heat input when burning No. 2 fuel oil or natural gas
Combined limits for emissions units B001 and B002 when burning any combination of fuels: 122.9 TPY PM-PM10 141.5 TPY HCL 17.7 TPY HF 1.6 lbs SO2/MMBtu actual heat input established in PTI 18-080 issued August 14, 1979. 0.01 gr PM/acf of exhaust gases when burning coal Combined limits for emissions units B001 and B002 when burning any combination of fuels: **2758.0** TPY SO2 (to meet modeling requirements)	0.125 lb PM/MMBtu when burning No. 6 fuel oil (based on a total heat input of 476 mmBtu/hr) The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See term A.II..1.

2. Additional Terms and Conditions

2.a Particulate emissions shall not exceed 0.031 lb/MMBtu of actual heat input when burning coal and 0.01 grains/actual cubic feet of exhaust gases.

2.b Nitrogen oxide emissions shall not exceed 0.7 lb. NOx/MMBtu actual heat input. This limit is based on a review by U.S. EPA of the performance test for emissions unit B001, which indicated that the 0.6 lb NOx per MMBtu emission limit in PSD permit 5-79-A-28 cannot be attained and maintained.

2.c The tons per year sulfur dioxide emission limitation was set to comply with the PSD modeling requirements.

2.d The maximum coal usage for this emissions unit shall not exceed 10.35 tons per hour.

2.e Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, usage limitations, fuel quality restrictions, use of a fabric filter, recordkeeping, compliance with NAAQS and PSD pollutant impact modeling.

2.f The hourly emission limitation(s) for CO, VOC, HCl, and HF, outlined in term A.I.1. are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

II. Operational Restrictions

1. The emissions unit shall utilize the manufacturer's best design for minimizing NOx emissions. The design shall utilize overfire, and side fire air to reduce flame temperature and limit combustion air (ref. PSD 5-79-A-23 FR Vol 44 No. 215 issued Nov. 5, 1979).

2. The quality of coal burned in this emissions unit shall meet the following specification on an as-burned basis:

a. A combination of ash content and heat content sufficient to comply with the particulate emission limitations specified in term A.I.1. and A.I.2.

b. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.40 lbs/MMBTU of actual heat input.

Compliance with the above mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or coal supplier for all

shipments of coal during each calender month.

All emissions modeling for this application were performed with coal quality corresponding to 1.6 lbs of SO2 per mmBTU; this emissions level will replace the current level of 1.4lb of SO2 per mmBTU upon the State Implementation Plan (SIP) approval by USEPA .

3. The quality of the fuel oil(s) burned in this emissions unit shall have a combination of sulfur content and heat content that is sufficient to comply with the allowable SO2 emission limitation specified in section A.I.1. above.

   Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

   The quality of the oil burned in this emissions unit shall meet the following specifications on an as-received basis:

   a. A combination of ash content and heat content sufficient to comply with the particulate emission limitation of 0.020 lb PM/mmBTU when burning No. 2 fuel oil and 0.125 lb PM/MMBTU when burning No. 6 fuel oil.

   b. A combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.40 lbs/MMBTU of actual heat input.

   Compliance with the above-mentioned specifications shall be determined by using a weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month and/or stack gas sampling using methods specified in 40 CFR 60, Section 60.46.

4. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

5. The combined maximum annual coal usage rate for emissions units B001 and B002 shall not exceed 125081.8 tons per year, based upon a rolling, 12-month summation of the coal usage rate. The permittee has existing records to demonstrate compliance with this permit limit.

6. Emissions from the combination of natural gas, No. 2 fuel oil, No. 6 fuel oil, and coal usage for emissions units B001 and B002, combined, shall not exceed 2758.0 TPY SO2, based upon a rolling, 12-month summation of the monthly emissions.

The permittee has existing records to demonstrate compliance with this permit limit.

7. The daily average operating rate for this emissions unit shall not exceed 238 MMBTU/hour and 180,000 pounds of steam per hour.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect representative grab samples of the coal burned in this emissions unit from each shipment of coal received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. Representative samples may be obtained via composite sampling from coal handling system. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

   Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

   The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average SO2 emission rate for the month, in lbs/MMBTU of actual heat input.

2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content 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 District Office or local air agency.

   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, heat content and the calculated SO2 emission rate [the SO2 emission rate shall be calculated as specified in OAC 3745-18-04(F)].

3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's

recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on an hourly basis.

4. The permittee shall properly operate and maintain existing equipment to continuously monitor and record the steam load, in pounds/hour, from this emissions unit.

   Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous steam load monitoring system designed to ensure continuous valid and representative readings of steam load, in pounds of steam/hour. The plan shall include a description of preventive maintenance activities. A logbook dedicated to the continuous steam monitoring system must be kept on site and be available for inspection during regular office hours.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PM 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 visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

6. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. The usage rates for each fuel (natural gas, No.2 fuel oil, No.6 fuel oil, and coal) burned in this emissions unit.

   b. The rolling, 12-month summation of the natural gas, No.2 fuel oil, No.6 fuel oil, and coal usage rates.

   c. The rolling, 12-month summation of the coal usage rate for emissions unit B001 and B002 combined.

7. The permittee shall maintain daily records of the coal burned in this emissions unit, in tons per day.

8. The permittee shall maintain daily records of hours of operation while burning coal in this emissions unit, in hours per day.

9. The permittee shall calculate and record daily the average amount of coal burned per hour in this emissions unit, tons coal per hour.

10. The permittee shall maintain monthly records of the updated rolling, 12-month summation of the

SO2 emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports concerning the quality and quantity of coal as- burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:

   a. the total quantity of coal as- burned (tons);

   b. the average ash content (percent) of the coal as- burned;

   c. the average sulfur content (percent) of the coal as burned;

   d. the average heat content (Btu/pound) of the coal *as*- burned; and

   e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBTU actual heat input) from the coal as- burned.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

   a. the total quantity of oil received in each shipment (gallons);

   b. the weighted* average sulfur content (percent) for the oil received during each calendar month;

   c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month; and

   d. the weighted* average SO2 emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month.

   *In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term A.II.4.

4. The permittee shall submit semi-annual reports which identify any exceedances of the hourly coal usage limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by February 15 and August 15 of each year.

5. The permittee shall submit quarterly reports that identify all exceedances of the rolling, 12-month coal usage limitation and the SO2 emissions limitation.

6. The permittee shall also submit annual reports which specify the total PM/PM10, SO2 and NOx, HCl, and HF emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

7. The permittee shall submit quarterly steam load deviation (excursion) reports that identify all periods of time during which the steam load exceeded 180,000 lbs of steam per hour.

8. The permittee shall submit semiannual written reports which (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 Director (the appropriate Ohio EPA District Office or local air agency) by February 15 and August 15 of each year and shall cover the previous 6-month period.

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

V. Testing Requirements

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

   a. Emissions limitation: Visible PM shall not exceed 20 percent opacity, as a 6-minute average as outlined in OAC rule 3745-17-07(A) .

      Compliance Method: Compliance shall be demonstrated by the methods specified in 40 CFR 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitations:
      0.031 lb of PM/MMBTU of actual heat input and 0.01 grain per actual cubic foot when

burning coal:

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above PM emission limitations based upon the results of the emission testing required in Section V.2 of this permit.

c. Emission Limitation:
.020 lb of PM/MMBTU of actual heat input when burning either No. 2 fuel oil or natural gas

Applicable Compliance Method:
For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PM/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBTU/hr).

For the use of no. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PM/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBTU/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBTU emission limitations through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:
0.7 lb of NOx/MMBTU of actual heat input when burning coal

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above NOx emission limitation based upon the results of the emission testing required in Section V.2 of this permit.

e. Emission Limitation:
1.40 lbs of SO2/MMBTU of actual heat input
2758.0 TPY SO2

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above SO2 emission limitation based on the monitoring and record keeping requirements in Section A.III.1, A.III.2 and

A.III.10 and the reporting keeping requirements in Section A.IV.1,A.IV.2 and A.IV.5 of this permit. The SO2 emission rate shall be calculated pursuant to the equation specified in OAC rule 3745-18-04(F). When multiple fuels are burned, the SO2 emission rate is the sum of SO2 from all fuels burned divided by the sum of the Btu value of all fuels burned.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following instructions:

   a. The emission testing shall be conducted within six months after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit when burning coal for particulate of 0.031 lb PM/MMBTU, 0.01 gr/acf of exhaust gases, and for NOx of 0.7 lb/MMBTU.

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

      Method 5 of 40 CFR Part 60, Appendix A for particulate, and;
      Method 7 of 40 CFR Part 60, Appendix A for NOx.

   d. During the test, the temperature, the pressure drop across the baghouse, and the steam load shall be recorded at least every 15 minutes.

   e. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   f. The permittee shall conduct, or have conducted, a heat input measurement evaluation and ultimate analysis of the coal fed to this emissions unit, and shall collect and record the following data from the evaluation and ultimate analysis:

      i. the coal feed to the boiler, by weight, during each stack test run and the total amount of coal used during the entire stack test (from the beginning of the first test run to the end of the third test run, (i.e., about eight hours);

      ii. the coal feed counter readings during each test run and for the duration of the entire stack test (i.e., about eight hours);

      iii. the ultimate analysis of the coal; and

      iv. the F-factor for each stack test run (as a QA/QC check) per Ohio EPA Engineering Guide #27.

The permittee shall calibrate the steam flow meter in advance of the heat input measurement evaluation and shall maintain records of the steam flow meter calibration.

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

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

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

3. Compliance with the limit of 0.020 lb PM/MMBTU from OAC rule 3745-17-10(B)(1) for No.2 fuel oil and natural gas shall be demonstrated by emission factors in AP 42 Fifth Edition, oil analyses, and recordkeeping and reporting required in terms A.III. and A.IV. of this permit.

4. Compliance with the limit of 0.125 lb PM/MMBTU from OAC rule 3745-17-10(C) for No.6 fuel oil shall be demonstrated by emission factors in AP 42 Fifth Edition, oil analyses, and recordkeeping and reporting required in terms A.III. and A.IV. of this permit.

5. Compliance with term A.I.2.d shall be demonstrated by the record keeping in term A.III.7 - A.III.9.

6. Compliance with term A.II.4 shall be demonstrated by the record keeping in term A.III.3.

7. Compliance with term A.II.5 shall be demonstrated by the record keeping in term A.III.6.

8. Compliance with term A.II.6 shall be demonstrated by the record keeping in term A.III.10.

VI. Miscellaneous Requirements

1. The heat input rating for emissions units B002 is questionable since several stack tests indicate the capacity of the boiler is over 250 MMBTU/hr. Resolution of the heat input rating issue for emissions unit B001 may result in the applicability of NSPS rule 40 CFR 60 Subpart D. If Subpart D is found to be applicable to B002, the permittee shall immediately comply with the requirements of this subpart.

2. The terms and conditions listed in this permit to install for this emissions unit shall supercede the air pollution control requirements for this emission unit contained in permit to install 18-080 as issued on August 14, 1979. This new permit to install was to address the addition of an 8.5 MW steam powered turbine to use the existing boiler steam generation capacity to produce electricity for the plant.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B002 - 238 MMBTU/hr pulverized coal/fuel oil natural gas- fired boiler with a baghouse. This boiler is used to generate steam for production and to drive a 8.5 MW steam turbine for electricity generation - modification	OAC rule 3745-18-15(O)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 52.1881(b)(12)(i).

2. Additional Terms and Conditions

2.a

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit B002 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to

the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl (Hydrogen Chloride)

TLV (ug/m3): 7458.0

Maximum Hourly Emission Rate (lbs/hr): 24.84 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 17.9

MAGLC (ug/m3): 177.6

Pollutant: HF (Hydrogen Fluoride)

TLV (ug/m3): 2455.0

Maximum Hourly Emission Rate (lbs/hr): 3.1 (B001 and B002)

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2.2

MAGLC (ug/m3): 58.5

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

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

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

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

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

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None