

Synthetic Minor Determination and/or  Netting Determination

Permit To Install 06-07031

**A. Source Description:**

The Chillicothe Correctional Institution plans to install two new 44.09 MMBtu Natural Gas Boilers with the capability of using #2 fuel oil as a back-up fuel. They will also install a new 9.89 MMBtu natural gas boiler that is exempt from permitting requirements. These new emission units will replace four existing 33MMBtu Coal Boilers. An existing 50 MMBtu Natural Gas boiler will remain in place. The permittee has requested operating restrictions on the use of No. 2 fuel oil to avoid PSD applicability and to eventually opt out of Title V once the coal boilers are decommissioned.

**B. Facility Emissions and Attainment Status:**

Ross county is an attainment area for all criteria pollutants. The new boilers have the potential to emit 88.3 TPY of SOx burning No. 2 fuel oil. The facility is currently characterized as a major for SO2, therefore, the major modification levels will be triggered for any emissions increase above the significance levels in the attainment area.

**C. Source Emissions:**

Chillicothe Correctional Institution has requested federally enforceable limits on the hours of operation while using No. 2 fuel oil for both B013 and B014. Restricting each boiler to 300 hours of operation per rolling 12-month period, using No. 2 fuel oil with a maximum sulfur content of 0.25 percent will limit total annual SO2 emissions to 3.06 tons.

**D. Conclusion:**

By restricting the hours of operation and the type of fuel oil used in the boilers, the terms and conditions of this permit to install will limit the boilers maximum SO2 emissions to less than the applicable PSD threshold. Excursion reports will be required for each emissions unit to ensure compliance.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL  
ROSS COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center

**Application No: 06-07031**

**DATE: 1/9/2003**

Chillicothe Correctional Institution  
Mike McElvain  
15802 State Route 104N  
Chillicothe, OH 45601-0990

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

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

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

Very truly yours,

*Michael W. Ahern*

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

CC: USEPA

SEDO

KY



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install  
Terms and Conditions**

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

**DRAFT PERMIT TO INSTALL 06-07031**

Application Number: 06-07031  
APS Premise Number: 0671010104  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Chillicothe Correctional Institution  
Person to Contact: Mike McElvain  
Address: 15802 State Route 104N  
Chillicothe, OH 45601-0990

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**15802 State Route 104N**  
**Chillicothe, Ohio**

Description of proposed emissions unit(s):  
**New steam heating boilers.**

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

Chillicothe Correctional Institution

Facility ID: 0671010104

PTI Application: 06-07031

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

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

**1. Monitoring and Related Recordkeeping and Reporting Requirements**

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

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

## 2. Scheduled Maintenance/Malfunction Reporting

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

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

## 3. Risk Management Plans

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

## 4. Title IV Provisions

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

## 5. Severability Clause

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

**6. General Requirements**

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

**7. Fees**

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

**8. Federal and State Enforceability**

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

**9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally

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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

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**Facility ID: 0671010104**

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3745-77-08(C)(3)(d).

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

**11. Best Available Technology**

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

**12. Air Pollution Nuisance**

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

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**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. 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.

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**5. Construction of New Sources(s)**

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

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**6. Public Disclosure**

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

**7. Applicability**

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

**8. Construction Compliance Certification**

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

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facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

**C. Permit To Install Summary of Allowable Emissions**

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

SUMMARY (for informational purposes only)

**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year NG / #2 Fuel Oil</u></b>
NOx	15.6 / 2.42
CO	15.6 / 1.88
PE	0.7 / 0.2
SOx	0.26 / 3.06

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**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

Chillico  
PTI A

Emissions Unit ID: B013

Issued: To be entered upon final issuance

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
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B013 - 44.09 MMBtu Natural Gas Boiler with No. 2 Fuel Oil Back-up	OAC rule 3745-31-05(A)(3)
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OAC rule 3745-35-07(B)

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

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

OAC rule 3745-18-06(D)

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	<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>	
<p>40CFR 60, Subpart Dc</p>	<p>Nitrogen oxide (NOx) emissions shall not exceed: 0.04 lb/MMBtu actual heat input, 1.77 lbs/hr, and 7.8 TPY from natural gas; 0.20 lb/MMBtu actual heat input, and 8.06 lbs/hr, from low sulfur fuel oil.</p> <p>Carbon monoxide (CO) emissions shall not exceed: 0.04 lb/MMBtu actual heat input, 1.77 lbs/hr, and 7.8 TPY from natural gas; 0.155 lb/MMBtu actual heat input, and 6.25 lbs/hr, from low sulfur fuel oil.</p> <p>Particulate emissions (PE) shall not exceed: 0.08 lb/hr, and 0.35 TPY from natural gas; 0.6 lb/hr, from low sulfur fuel oil.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed: 0.03 lb/hr, and 0.13 TPY from natural gas; 0.25 lb/MMBtu actual heat input, and 10.18 lbs/hr from low sulfur fuel oil.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), and OAC rule 3745-31-05(D).</p> <p>Visible particulate emissions from the boiler stack shall not exceed 20%</p>	<p>opacity as a six-minute average, while burning natural gas.</p> <p>See term II.2. and II.3. below. NOx emissions shall not exceed 1.21 TPY; CO emissions shall not exceed 0.94 TPY; PE shall not exceed 0.1 TPY; and SO<sub>2</sub> emissions shall not exceed 1.53 TPY from low sulfur fuel oil.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60, Subpart Dc.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>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, while burning number 2 fuel oil; and the SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

**2. Additional Terms and Conditions**

**2.a** The hourly and annual emission limitations from firing natural gas were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

**II. Operational Restrictions**

1. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I. above.
3. The maximum annual hours of operation while burning No. 2 fuel oil in this emissions unit shall not exceed 300 hours, based upon a rolling, 12-month summation.

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

<u>Months</u>	<u>Maximum Allowable Cumulative Hours of Operation with No. 2 Fuel Oil</u>
1	300
1-2	300
1-3	300
1-4	300
1-5	300
1-6	300
1-7	300
1-8	300
1-9	300
1-10	300
1-11	300
1-12	300

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil usage limitation shall be based upon a rolling, 12-month summation of the hours of operation while burning No. 2 fuel oil.

**III. Monitoring and/or Recordkeeping Requirements**

1. Pursuant to 40 CFR Part 60 Subpart Dc, the permittee shall record and maintain records of the amount of natural gas and No. 2 fuel oil combusted during each day. These records shall be maintained by the permittee for a period of two years following the date of such record.

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2. For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
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).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and 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).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the

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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).)

4. The permittee shall maintain a monthly record of hours of operation while using No. 2 fuel oil in this emission unit.

**IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or no. 2 fuel oil was burned in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or No. 2 fuel oil combusted in the emission unit. These reports shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month hours of operation limitation, while burning No. 2 fuel oil. (For the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation while burning No.2 fuel oil limitation as required in Section A.II.3. These reports shall be submitted within 30 days after the exceedance of the hourly restriction occurs.
4. The permittee shall notify the Ohio EPA, Southeast District Office, in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III.3. above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southeast District Office within 30 days after the deviation occurs.
5. The following source is 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>
B013	44.09 MMBtu/hr natural gas fired boiler, with No. 2 fuel oil back up, equipped with low NO <sub>x</sub> burners	Subpart Dc

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

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);

**Chillicothe Correctional Institution**

**PTI Application: 06 07031**

**Issued**

**Facility ID: 0671010104**

Emissions Unit ID: B013

- 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 - Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Ohio EPA  
Southeast District Office  
Division of Air Pollution Control  
2195 Front Street  
Logan, OH 43138

**V. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit or a representative emissions unit in accordance with the following requirements:

## Emission Limitations:

NO<sub>x</sub> emissions shall not exceed 0.04 lb/MMBtu actual heat input, and 1.77 lbs/hour and CO emissions shall not exceed 0.04 lb/MMBtu actual heat input, and 1.77 lbs/hour when firing natural gas.

## Compliance Methods:

- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the lb/MMBtu limitations for NO<sub>x</sub> and CO from the combustion of natural gas.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content  
Method 7E from 40 CFR Part 60, Appendix A for NO<sub>x</sub>;  
Method 10 from 40 CFR Part 60, Appendix A for CO; and  
Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



**Compliance Method:**

Compliance with the lbs/hr emission limitation shall be determined by multiplying the manufacturer' emission factor of 0.20 lb/MMBtu by 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) to arrive at the lbs/hr. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

6. **Emission Limitation:**

CO emissions shall not exceed 0.155 lb/MMBtu actual heat input, 6.25 lbs/hr, and 0.94 TPY from low sulfur fuel oil.

**Compliance Method:**

Compliance with the lbs/hr emission limitation shall be determined by multiplying the manufacturer' emission factor of 0.155 lb/MMBtu by 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) to arrive at the lbs/hr. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

7. **Emission Limitation:**

PE shall not exceed 0.6 lb/hr and 0.1 TPY from low sulfur fuel oil.

**Compliance Method:**

Compliance shall be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (288 gal/hr) by 2 lbs/1000 gal. of fuel oil burned = 0.576 lb/hr (emission factor from AP-42, 5th Ed., September 1998, Chapter 1.3, "Fuel Oil Combustion," Table 1.3-1).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 5. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

8. **Emission Limitation:**

SO<sub>2</sub> emissions shall not exceed 0.25 lb/MMBtu actual heat input, 10.22 lbs/hr, and 1.53 TPY from low sulfur fuel oil.

**Compliance Method:**

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (288 gal/hr) by 142 lbs(S)/1000 gal. of fuel oil burned = 10.22 lbs/hr (S = 0.25, the sulfur content of the fuel. Emission factor from AP-42, 5th Ed., September 1998, Chapter 1.3, "Fuel Oil Combustion," Table 1.3-1). Sulfur expressed in lb/MMBtu is determined by dividing 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) by 10.22 lbs/hr = 0.25 lb/MMBtu. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

9. **Emission Limitation:**

Visible particulate emissions from the boiler stack shall not exceed 20% opacity as a six-minute average, while burning natural gas.

**Compliance Method:**

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If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## 10. 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, while burning number 2 fuel oil.

## Compliance Method:

If at any time fuel oil #2 is to be used in B013 and B014 the permittee also shall conduct, or have conducted, at the time of use or within 2 months of the use of this fuel, emission testing for one boiler, to represent emissions of both boilers burning fuel oil in this permit. The testing shall be performed to satisfy the performance testing requirements of NSPS subpart Dc for fuel oil. Opacity shall be tested in accordance with 40 CFR Part 60, Appendix A, Method 9.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B013 - 44.09 MMBtu Natural Gas Boiler with No. 2 Fuel Oil Back-up	None	None

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None



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	<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>	
<p>40CFR 60, Subpart Dc</p>	<p>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed: 0.04 lb/MMBtu actual heat input, 1.77 lbs/hr, and 7.8 TPY from natural gas; 0.20 lb/MMBtu actual heat input, and 8.06 lbs/hr, from low sulfur fuel oil.</p> <p>Carbon monoxide (CO) emissions shall not exceed: 0.04 lb/MMBtu actual heat input, 1.77 lbs/hr, and 7.8 TPY from natural gas; 0.155 lb/MMBtu actual heat input, and 6.25 lbs/hr, from low sulfur fuel oil.</p> <p>Particulate emissions (PE) shall not exceed: 0.08 lb/hr, and 0.35 TPY from natural gas; 0.6 lb/hr, from low sulfur fuel oil.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed: 0.03 lb/hr, and 0.13 TPY from natural gas; 0.25 lb/MMBtu actual heat input, and 10.18 lbs/hr from low sulfur fuel oil.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), and OAC rule 3745-31-05(D).</p> <p>Visible particulate emissions from the boiler stack shall not exceed 20%</p>	<p>opacity as a six-minute average, while burning natural gas.</p> <p>See term II.2. and II.3. below. NO<sub>x</sub> emissions shall not exceed 1.21 TPY; CO emissions shall not exceed 0.94 TPY; PE shall not exceed 0.1 TPY; and SO<sub>2</sub> emissions shall not exceed 1.53 TPY from low sulfur fuel oil.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60, Subpart Dc.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>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, while burning number 2 fuel oil; and the SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

**Issued: To be entered upon final issuance****2. Additional Terms and Conditions**

- 2.a** The hourly and annual emission limitations from firing natural gas were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

**II. Operational Restrictions**

1. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I. above.
3. The maximum annual hours of operation while burning No. 2 fuel oil in this emissions unit shall not exceed 300 hours, based upon a rolling, 12-month summation.

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

<u>Months</u>	<u>Maximum Allowable Cumulative Hours of Operation with No. 2 Fuel Oil</u>
1	300
1-2	300
1-3	300
1-4	300
1-5	300
1-6	300
1-7	300
1-8	300
1-9	300
1-10	300
1-11	300
1-12	300

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil usage limitation shall be based upon a rolling, 12-month summation of the hours of operation while burning No. 2 fuel oil.

**III. Monitoring and/or Recordkeeping Requirements**

1. Pursuant to 40 CFR Part 60 Subpart Dc, the permittee shall record and maintain records of the amount of natural gas and No. 2 fuel oil combusted during each day. These records shall be maintained by the permittee for a period of two years following the date of such record.
2. For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
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).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and 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).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the

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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).)

4. The permittee shall maintain a monthly record of hours of operation while using No. 2 fuel oil in this emission unit.

**IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or no. 2 fuel oil was burned in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or No. 2 fuel oil combusted in the emission unit. These reports shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify any exceedances of the rolling, 12-month hours of operation limitation, while burning No. 2 fuel oil. For the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation while burning No.2 fuel oil limitation. These reports shall be submitted within 30 days after the exceedance of the hourly restriction occurs.
4. The permittee shall notify the Ohio EPA, Southeast District Office, in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III.3. above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southeast District Office within 30 days after the deviation occurs.
5. The following source is 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>
B014	44.09 MMBtu/hr natural gas fired boiler, with No. 2 fuel oil back up, equipped with low NO <sub>x</sub> burners	Subpart Dc

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

**Chillicothe Correctional Institution**

**PTI Application: 06 07031**

**Issued**

**Facility ID: 0671010104**

Emissions Unit ID: B014

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 - Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Ohio EPA  
Southeast District Office  
Division of Air Pollution Control  
2195 Front Street  
Logan, OH 43138

Chillico

PTI A

Emissions Unit ID: B014

**Issued: To be entered upon final issuance****V. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit or a representative emissions unit in accordance with the following requirements:

## Emission Limitations:

NO<sub>x</sub> emissions shall not exceed 0.04 lb/MMBtu actual heat input, and 1.77 lbs/hour and CO emissions shall not exceed 0.04 lb/MMBtu actual heat input, and 1.77 lbs/hour when firing natural gas.

## Compliance Methods:

- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the lb/MMBtu limitations for NO<sub>x</sub> and CO from the combustion of natural gas.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content  
Method 7E from 40 CFR Part 60, Appendix A for NO<sub>x</sub>;  
Method 10 from 40 CFR Part 60, Appendix A for CO; and  
Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office refusal to accept the results of the emission test(s).

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- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - g. 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, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.
2. Emission Limitation:  
NO<sub>x</sub> emissions shall not exceed 7.8 tons per year and CO emissions shall not exceed 7.8 tons per year when firing natural gas.  
  
Compliance Method:  
Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).
  3. Emission Limitation:  
PE shall not exceed 0.08 lb/hr, and 0.35 TPY from natural gas.  
  
Compliance Method:  
Compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (44.09 MMBtu/hour) by 0.0018 lb PE per mmBtu natural gas burned (emissions factor from AP-42, 5th Ed., July 1998, Chapter 1.4.1, "Natural Gas Combustion," Table 1.4-2). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 5.
  4. Emission Limitation:  
SO<sub>2</sub> emissions shall not exceed 0.03 lb/hour and 0.13 TPY from natural gas.  
  
Compliance Method:  
Compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (44.09 MMBtu/hour) by 0.0006 lb SO<sub>2</sub> per mmBtu natural gas burned (emissions factor from AP-42, 5th Ed., July 1998, Chapter 1.4.1, "Natural Gas Combustion," Table 1.4-2). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6C. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).
  5. Emission Limitation:  
NO<sub>x</sub> emissions shall not exceed 0.20 lb/MMBtu actual heat input, 8.06 lbs/hr, and 1.21 TPY from low sulfur fuel oil.

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## Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the manufacturer' emission factor of 0.20 lb/MMBtu by 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) to arrive at the lbs/hr. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

## 6. Emission Limitation:

CO emissions shall not exceed 0.155 lb/MMBtu actual heat input, 6.25 lbs/hr, and 0.94 TPY from low sulfur fuel oil.

## Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the manufacturer' emission factor of 0.155 lb/MMBtu by 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) to arrive at the lbs/hr. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

## 7. Emission Limitation:

PE shall not exceed 0.6 lb/hr and 0.1 TPY from low sulfur fuel oil.

## Compliance Method:

Compliance shall be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (288 gal/hr) by 2 lbs/1000 gal. of fuel oil burned = 0.576 lb/hr (emission factor from AP-42, 5th Ed., September 1998, Chapter 1.3, "Fuel Oil Combustion," Table 1.3-1).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 5. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

## 8. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 0.25 lb/MMBtu actual heat input, 10.22 lbs/hr, and 1.53 TPY from low sulfur fuel oil.

## Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (288 gal/hr) by 142 lbs(S)/1000 gal. of fuel oil burned = 10.22 lbs/hr (S = 0.25, the sulfur content of the fuel. Emission factor from AP-42, 5th Ed., September 1998, Chapter 1.3, "Fuel Oil Combustion," Table 1.3-1). Sulfur expressed in lb/MMBtu is determined by dividing 40.32 MMBtu (the maximum Btu output of the boiler using No. 2 fuel oil) by 10.22 lbs/hr = 0.25 lb/MMBtu. Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation (300 hours) is maintained.

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9. Emission Limitation:  
Visible particulate emissions from the boiler stack shall not exceed 20% opacity as a six-minute average, while burning natural gas.

Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

10. 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, while burning number 2 fuel oil.

Compliance Method:

If at any time fuel oil #2 is to be used in B013 and B014 the permittee also shall conduct, or have conducted, at the time of use or within 2 months of the use of this fuel, emission testing for one boiler, to represent emissions of both boilers burning fuel oil in this permit. The testing shall be performed to satisfy the performance testing requirements of NSPS subpart Dc for fuel oil. Opacity shall be tested in accordance with 40 CFR Part 60, Appendix A, Method 9 .

## **VI. Miscellaneous Requirements**

None

Chillico  
PTI A

Emissions Unit ID: B014

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**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B014 - 44.09 MMBtu Natural Gas Boiler with No. 2 Fuel Oil Back-up	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None