



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
CRAWFORD COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 03-05922

DATE: 6/26/2003

GE Bucyrus Lamp Plant
Chris Bruni
1250 South Walnut Street
Bucyrus, OH 44820

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

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

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

CC: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/26/2003
Effective Date: 6/26/2003**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-05922

Application Number: 03-05922
APS Premise Number: 0317010010
Permit Fee: **\$200**
Name of Facility: GE Bucyrus Lamp Plant
Person to Contact: Chris Bruni
Address: 1250 South Walnut Street
Bucyrus, OH 44820

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1250 South Walnut Street
Bucyrus, Ohio**

Description of proposed emissions unit(s):
Administrative modification - to break apart emissions unit P013 into P013 and P022 - and to correct allowable NOx limitation and add CO limitation.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install General Terms and Conditions****1. Monitoring and Related Recordkeeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.9 below if no deviations occurred during the quarter.

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

declared invalid.

6. General Requirements

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

7. Fees

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

8. Federal and State Enforceability

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

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

9. Compliance Requirements

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

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

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

B. State Only Enforceable Permit To Install General Terms and Conditions**1. Compliance Requirements**

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Termination of Permit To Install

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

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

5. Construction of New Sources(s)

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

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	3.32
NOx	12.52
CO	10.50
OC	7.98
HCl	3.24

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GE Bucyrus Lamp Plant

PTI Application: **03-05922**

Modification Issued: 6/26/2003

Facility ID: **0317010010**

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Modification Issued: 6/26/2003

Emissions Unit ID: P013

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P013 - east spray lehr (with tin chloride application) direct-fired natural gas, 13.6 mmBtu/hr, with settling chamber and 'venturi and packed tower' wet scrubber system (administrative modification to PTI 03-5922 previously issued on April 15, 1992 to change/correct NOx and CO emission limitations, and to separate into two emissions units)	OAC rule 3745-31-05	0.38 lb particulate emissions (PE)/hr, 1.66 tons/yr PE 1.20 lb carbon monoxide (CO)/hr, 5.25 tons/yr CO 1.43 lbs nitrogen oxides (NOx)/hr, 6.26 tons/yr NOx 0.91 lb volatile organic compounds (VOC) /hr, 3.99 tons/yr VOC 0.37 lb hydrogen chloride (HCl)/hr, 1.62 tons/yr HCl The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-17-11(B)	none (See A.I.2.a.)
	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-18-06(E)	Exempt, See A.I.2.c.
	OAC rule 3745-23-06(B)	See A.I.2.d.
	OAC rule 3745-21-08(B)	See A.I.2.d.

2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the facility is located in Crawford County, which is identified as a P-2 county.
- 2.b** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.c** The maximum process weight rate for this emissions unit is less than 1000 lbs/hr. Therefore, pursuant to OAC rule 3745-18-06(C), this emissions unit is exempt from OAC rule 3745-18-06(E).
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-5922.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** Sections A.I.2.a, b. and c above are intended for clarification of current regulatory applicability under this permit at time of issuance, and are not intended to address or prohibit any change that could otherwise be processed under OAC rule 3745-77-07(I).

II. Operational Restrictions

1. The pressure drop across the high energy venturi section of the scrubber system shall be maintained at a value of not less than 35 inches of water at all times while the emissions unit is in operation.

Modification Issued: 6/26/2003

2. The water flow rate through the packed tower section of the scrubber system shall be maintained at a value of not less than 150 gallons per minute at all times while the emissions unit is in operation.
3. The pH of the scrubber water from the treatment tank shall be maintained within the range of 5.5 to 8.5 at all times while the emissions unit is in operation.
4. The permittee shall burn only natural gas, or other such 'inherently clean' fuel that would result in emissions that comply with the limitations and restrictions of this permit, in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the venturi section and water flow rate to the packed tower section while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, or good engineering practice.

The permittee shall collect and record the following information each day:

- a. The pressure drop across the venturi section, in inches of water, on a daily basis.
 - b. The water flow rate to the packed tower section, in gallons per minute, on a daily basis.
2. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber system treatment tank water while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, or good engineering practice.

The permittee shall collect and record the following information each day: the pH of the treatment tank water.

3. For each day during which the permittee burns a fuel other than natural gas or other inherently clean fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the required levels:

- a. The static pressure drop across the venturi section.
- b. The water flow rate for the packed tower section.
- c. The pH of the scrubber system treatment tank water.

The deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify each day when any fuel was burned in this emissions unit other than natural gas or other inherently clean fuel. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:
0.38 lb PE/hr

Applicable Compliance Method:

To determine the actual maximum PE rate (E), the permittee may use the following equation:

$$E = E1 + E2$$

$E1 = 0.15 \text{ lb PE/hr}$ (determined by multiplying the maximum hourly natural gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor for natural gas (1.9 lbs PE/mm cu. ft))

$E2 = 0.10 \text{ lb PE/hr}$ (determined based on the results of emission testing conducted for emissions unit P009 in November, 1991)

If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 5.

- b. Emission Limitation:
1.43 lbs NOx/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NOx limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor for natural gas (100 lbs NOx/mm cu. ft).

If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

- c. Emission Limitation:
1.20 lb CO/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable CO limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor for natural gas (84 lbs CO/mm cu. ft).

If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

- d. Emission Limitation:
0.91 lb VOC/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable VOC limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor for natural gas (5.5 lbs VOC/mm cu. ft).

If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4, and 25.

- e. Emission Limitation:
0.37 lb HCl/hr

Applicable Compliance Method:

The permittee may determine compliance based on the results of emission testing conducted in accordance with Methods 1 - 4 and 26 of 40 CFR, Part 60, Appendix A.

- f. Emission Limitations:
1.66 ton PE /yr
6.26 ton NO_x /yr
5.25 ton CO /yr

3.99 ton OC /yr
1.62 ton HCl /yr

Applicable Compliance Method:

Compliance with the annual emission limitation for each pollutant above shall be assumed as long as compliance with the hourly emission limitation for the specific pollutant is maintained (the annual emission limitation for each pollutant was determined by multiplying the hourly emission limitation for the specific pollutant by 8760, and then dividing by 2000).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 12 months following the issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for hydrogen chloride.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 26, 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

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Modification Issued: 6/26/2003

Emissions Unit ID: P013

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>
P013 - east spray lehr (with tin chloride application) direct-fired natural gas, 13.6 mmBtu/hr, with settling chamber and 'venturi and packed tower' wet scrubber system	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

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GE Bucyrus Lamp Plant
PTI Application: 02 05022
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Facility ID: 0317010010

Emissions Unit ID: P013

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P022 - west spray lehr (with tin chloride application) direct-fired natural gas, 13.6 mmBtu/hr, with settling chamber and 'venturi and packed tower' wet scrubber system (administrative modification to PTI 03-5922 previously issued on April 15, 1992 to change/correct NOx and CO emission limitations, and to separate into two emissions units)	OAC rule 3745-31-05	OAC rule 3745-23-06(B)
	OAC rule 3745-17-11(B)	OAC rule 3745-21-08(B)
	OAC rule 3745-17-07(A)	
	OAC rule 3745-18-06(E)	

Applicable Emissions
Limitations/Control
Measures

0.38 lb particulate emissions
 (PE)/hr, 1.66 tons/yr PE

1.20 lb carbon monoxide
 (CO)/hr, 5.25 tons/yr CO

1.43 lbs nitrogen oxides
 (NO_x)/hr, 6.26 tons/yr NO_x

0.91 lb volatile organic
 compounds (VOC) /hr, 3.99
 tons/yr VOC

0.37 lb hydrogen chloride
 (HCl)/hr, 1.62 tons/yr HCl

The requirements of this rule
 also include compliance with
 the requirements of OAC
 rules 3745-18-06(E), 3745-
 21-08(B) and 3745-23-
 06(B).

none (See A.I.2.a.)

none (See A.I.2.b.)

Exempt, See A.I.2.c.

See A.I.2.d.

See A.I.2.d.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10

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lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the facility is located in Crawford County, which is identified as a P-2 county.

- 2.b** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.c** The maximum process weight rate for this emissions unit is less than 1000 lbs/hr. Therefore, pursuant to OAC rule 3745-18-06(C), this emissions unit is exempt from OAC rule 3745-18-06(E).
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-5922.

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

- 2.e** Sections A.I.2.a, b. and c above are intended for clarification of current regulatory applicability under this permit at time of issuance, and are not intended to address or prohibit any change that could otherwise be processed under OAC rule 3745-77-07(I).

II. Operational Restrictions

1. The pressure drop across the high energy venturi section of the scrubber system shall be maintained at a value of not less than 35 inches of water at all times while the emissions unit is in operation.
2. The water flow rate through the packed tower section of the scrubber system shall be maintained at a value of not less than 150 gallons per minute at all times while the emissions unit is in operation.

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3. The pH of the scrubber water from the treatment tank shall be maintained within the range of 5.5 to 8.5 at all times while the emissions unit is in operation.
4. The permittee shall burn only natural gas, or other such 'inherently clean' fuel that would result in emissions that comply with the limitations and restrictions of this permit, in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the venturi section and water flow rate to the packed tower section while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, or good engineering practice.

The permittee shall collect and record the following information each day:

- a. The pressure drop across the venturi section, in inches of water, on a daily basis.
 - b. The water flow rate to the packed tower section, in gallons per minute, on a daily basis.
2. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber system treatment tank water while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, or good engineering practice.

The permittee shall collect and record the following information each day: the pH of the treatment tank water.

3. For each day during which the permittee burns a fuel other than natural gas or other inherently clean fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the required levels:
 - a. The static pressure drop across the venturi section.
 - b. The water flow rate for the packed tower section.
 - c. The pH of the scrubber system treatment tank water.

The deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

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2. The permittee shall submit deviation (excursion) reports that identify each day when any fuel was burned in this emissions unit other than natural gas or other inherently clean fuel. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:
0.38 lb PE/hr

Applicable Compliance Method:

To determine the actual maximum PE rate (E), the permittee may use the following equation:

$$E = E1 + E2$$

$E1 = 0.15 \text{ lb PE/hr}$ (determined by multiplying the maximum hourly natural gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor for natural gas (1.9 lbs PE/mm cu. ft))

$E2 = 0.10 \text{ lb PE/hr}$ (determined based on the results of emission testing conducted for emissions unit P009 in November, 1991)

If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 5.

- b. Emission Limitation:
1.43 lbs NO_x/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable NO_x limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor for natural gas (100 lbs NO_x/mm cu. ft).

If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

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- c. Emission Limitation:
1.20 lb CO/hr
- Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly allowable CO limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor for natural gas (84 lbs CO/mm cu. ft).
- If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.
- d. Emission Limitation:
0.91 lb VOC/hr
- Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly allowable VOC limitation by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor for natural gas (5.5 lbs VOC/mm cu. ft).
- If required, the permittee shall demonstrate compliance with the limitation above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4, and 25.
- e. Emission Limitation:
0.37 lb HCl/hr
- Applicable Compliance Method:
The permittee may determine compliance based on the results of emission testing conducted in accordance with Methods 1 - 4 and 26 of 40 CFR, Part 60, Appendix A.
- f. Emission Limitations:
1.66 ton PE /yr
6.26 ton NO_x /yr
5.25 ton CO /yr
3.99 ton OC /yr
1.62 ton HCl /yr
- Applicable Compliance Method:
Compliance with the annual emission limitation for each pollutant above shall be assumed as long as compliance with the hourly emission limitation for the specific pollutant is maintained (the annual emission limitation for each pollutant was determined by multiplying the hourly emission limitation for the specific pollutant by 8760, and then dividing by 2000).
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in

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accordance with the following requirements:

- a. The emission testing shall be conducted within 12 months following the issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for hydrogen chloride.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 26, 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

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>
P022 - west spray lehr (with tin chloride application) direct-fired natural gas, 13.6 mmBtu/hr, with settling chamber and 'venturi and packed tower' wet scrubber system	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