



State of Ohio Environmental Protection Agency

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RE: FINAL PERMIT TO INSTALL MODIFICATION

CERTIFIED MAIL

PICKAWAY COUNTY

Application No: 01-08180

Fac ID: 0165010026

DATE: 9/18/2007

General Electric Circleville Lamp Plant
Don Hatfield
559 E Ohio St
Circleville, OH 43113

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

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

CDO



FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 01-08180

Application Number: 01-08180

Facility ID: 0165010026

Permit Fee: **\$250**

Name of Facility: General Electric Circleville Lamp Plant

Person to Contact: Don Hatfield

Address: 559 E Ohio St
Circleville, OH 43113

Location of proposed air contaminant source(s) [emissions unit(s)]:

**559 E Ohio St
Circleville, Ohio**

Description of proposed emissions unit(s):

Lamp assembly group 15.

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

Chris Korleski
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 (i.e., postmarked) quarterly, 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification
- 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, 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 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 (i.e., postmarked) quarterly, 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. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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., postmarked), 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>
NOx	7.0
CO	5.5
SO2	5.5
PM	0.9
VOC	14.2
Hg	0.026

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>
P020 - Lamp assembly line - Group 15 with baghouse	OAC rule 3745-31-05 (A)(3)	Particulate matter emissions shall not exceed 0.20 pound per hour and 0.9 ton per year.
		Sulfur dioxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.
		Nitrogen oxide emissions shall not exceed 1.60 pounds per hour and 7.0 tons per year.
		Carbon monoxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.
		Volatile organic compound emissions shall not exceed 3.25 pounds per hour and 14.2 tons per year.
		Mercury emissions shall not exceed 0.006 pound per hour and 0.026 ton per year.
	OAC rule 3745-17-11 (B)(1)	See A.I.2.a,c below.
		The emission limitation specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

OAC rule 3745-17-07 (A)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
OAC rule 3745-18-06 (E)	The emission limitation specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).
OAC rule 3745-21-07 (G)(2)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a** Permittee shall use water based coatings at all times this emissions unit is in operation.
- 2.b** Pursuant to OAC rule 3745-21-07 (G)(9), this emissions unit is exempt from the emission limitations specified in OAC rule 3745-21-07 (G)(2) because there are no photochemically reactive materials employed in this emissions unit.
- 2.c** Permittee shall vent all emissions from this emissions unit through a baghouse.

II. Operational Restrictions

- 1. 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. For each day during which the permittee burns a fuel other than natural gas or other such "inherently clean" fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 2. The permittee shall monitor at least once every fifteen minutes the pressure drop across the baghouse during operation of this emissions unit, and record the average of those values over the period during which this emissions unit operates each day. For purposes of this requirement, the permittee shall record on average total pressure drop value for each day for a period beginning at midnight or such time after midnight when the emissions unit begins to operate and ending at the time the emissions unit ceases that day or at midnight should the emissions unit operated beyond midnight. If the emissions unit starts and stops more than once during this 24-hour period, the permittee shall record the average value for the time during this 24-hour period when the emissions unit is in operation. Hereinafter this value shall be called a "Daily Pressure Drop Value".

Whenever the Daily Pressure Drop Value is outside of the range specified below (hereinafter the "Pressure Drop Range"), the permittee shall promptly conduct an investigation to determine if there is a malfunction of the baghouse, and if so, comply with the requirements of OAC rule 3745-15-06. For each such occasion (i.e. when a Daily Pressure Drop Value is outside of the Pressure Drop Range), the permittee shall record the number of days during which the Daily Pressure Drop Value remained outside of the Pressure Drop Range and a description of the maintenance and repairs, if any, made to the baghouse. If upon the investigation the permittee determines that there is no malfunction that is subject to OAC rule 3745-15-06, the permittee shall also maintain records documenting the basis for such determination.

Pressure Drop Range is 1 - 4 inches of water

The Pressure Drop Range is effective for the duration of this permit, unless a revision is requested by the permittee and approved in writing by the Ohio EPA, Central District Office. The permittee may request revisions to the range based upon information that demonstrates compliance with the allowable particulate emission rate for this emission unit. If the permittee submits a written request to establish a new Pressure Drop Range, Ohio EPA shall promptly evaluate and act on that request, and, if approved, incorporate the new range into this permit as a minor permit modification.

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with good engineering practices or as determined by the permittee.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, or other such "inherently clean" fuel, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each period of time when a photochemically reactive material was employed in this emissions unit; and
 - b. each day when a coating other than a water-based coating was used in the phosphorous coating operations.

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

3. The permittee shall submit semiannual reports that identify the following information concerning the operation of the baghouse during the operation of this emissions unit:
 - a. the total duration (in days) that the Daily Pressure Drop Value was outside of its applicable Pressure Drop Range; and
 - b. any and all omissions of the monitoring, recordkeeping, investigation and malfunction reporting requirements specified in Section A. III of this permit; and
 - c. each day when a fuel other than natural gas or other such "inherently clean" fuel was burned in this emissions unit.

The semiannual monitoring reports shall be submitted by January 31 for the six-month period ending December 31 and by July 31 for the six-month period ending June 30 in accordance with Part I - General Terms and Conditions A.1.c.iii of this permit.

4. The permittee shall also submit annual reports that specify the total particulate, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, and mercury emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emission unit in the annual Fee Emission Report.

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 -
Particulate matter emissions shall not exceed 0.20 pound per hour and 0.9 ton per year.

Applicable Compliance Method -
Compliance with the short and long term emission limitations shall be demonstrated by summing the combustion and assembly operation emissions.

The short term combustion emissions shall be calculated by multiplying the emission factor for natural gas combustion of 7.6 lbs PM/mm³.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The short term assembly operation emissions shall be calculated by the baghouse emission rate of 0.10 lb/hr.

The long term combustion emissions shall be calculated by multiplying the maximum short term emissions by 8760 hours per year and dividing by 2000 pounds per ton. The long term assembly operation emissions shall be

calculated by multiplying the baghouse emission rate by 8760 hours per year and dividing by 2000 pounds per ton.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR, Part 60, Appendix A, Method 1 thru 5 and the procedures specified in OAC rule 3745-17-03 (B)(9).

b. Emission Limitation -

Sulfur dioxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.

Applicable Compliance Method -

Compliance with the short and long term emission limitations shall be demonstrated by summing the combustion and assembly operation emissions.

The short term combustion emissions shall be calculated by multiplying the emission factor for natural gas combustion of 0.6 lbs SO₂/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The short term assembly operation emissions shall be calculated by multiplying the emission rate of 0.825 lb/hr (SEC, Inc., Chemical Usage Evaluation, 1997) by the percent increase in throughput of 25% (1.25).

The long term combustion emissions shall be calculated by multiplying the maximum short term emissions by 8760 hours per year and dividing by 2000 pounds per ton. The long term assembly operation emissions shall be calculated by multiplying the maximum short term emissions by 8760 hours per year and dividing by 2000 pounds per ton.

c. Emission Limitation -

Nitrogen oxide emissions shall not exceed 1.60 pounds per hour and 7.0 tons per year.

Applicable Compliance Method -

Compliance with the short term emission limitation shall be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO_x/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr.

Compliance with the long term emission limitation shall be demonstrated by multiplying the maximum hourly emission rate by 8760 hours per year and dividing by 2000 pounds per ton.

d. Emission Limitation -

Carbon monoxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.

Applicable Compliance Method -

Compliance with the short term emission limitation shall be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mm³.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr.

Compliance with the long term emission limitation shall be demonstrated by multiplying the maximum hourly emission rate by 8760 hours per year and dividing by 2000 pounds per ton.

e. Emission Limitation -

Volatile organic compound emissions shall not exceed 3.25 pounds per hour and 14.2 tons per year.

Applicable Compliance Method -

Compliance with the short and long term emission limitations shall be demonstrated by summing the combustion operation and the two assembly operation emissions.

The short term combustion emissions shall be calculated by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mm³.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The short term assembly "headmarking" operation emissions shall be calculated by multiplying the emission rate of 0.38 lb/hr (SEC, Inc., Chemical Usage Evaluation, 1997) by the percent increase in throughput of 25% (1.25). The short term assembly "base cement" operation emissions shall be calculated by multiplying the emission rate of 1.93 lb/hr (SEC, Inc., Chemical Usage Evaluation, 1997) by the percent increase in throughput of 25% (1.25).

Compliance with the long term emission limitation shall be calculated by multiplying the maximum hourly emission rate by 8760 hours per year and dividing by 2000 pounds per ton. The long term assembly operation emissions shall be calculated by multiplying the maximum short term emissions by 8760 hours per year and dividing by 2000 pounds per ton.

f. Emission Limitation -

Mercury emissions shall not exceed 0.006 pound per hour and 0.026 tons per year.

Applicable Compliance Method -

Compliance with the short term emission limitation shall be demonstrated by the maximum emissions of 0.002 lb/hr (SEC, Inc., Chemical Usage Evaluation, 1997) by the percent increase in throughput of 25% (1.25).

The long term assembly operation emissions shall be demonstrated by multiplying the maximum short term emissions by 8760 hours per year and dividing by 2000 pounds per ton.

General Electric Circleville Lamp Plant

PTI Application: 01-08180

Modification Issued: 9/18/2007

Facility ID: 016501002

Emissions Unit ID: P020

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>
P020 - Lamp Assembly Line - Group 15		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit P020 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: n-propyl alcohol

TLV (mg/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 3.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 548.2

MAGLC (ug/m3): 11,714

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

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None