State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

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

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Permit to Install Registration
Terms and Conditions

RE: PERMIT TO INSTALL REGISTRATION **CERTIFIED MAIL**
TRUMBULL COUNTY
Application No: 02-13768

DATE: 3/29/00

General Electric Ohio Lamp Plant
Kevin Weeks
1210 North Park Ave
Warren, OH 44483

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

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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

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

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control
cc: NEDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY
PERMIT TO INSTALL REGISTRATION

Application Number: 02-13768

APS Premise Number: 0278080068
Permit Fee: **$75**
Name of Facility: General Electric Ohio Lamp Plant
Person to Contact: Kevin Weeks
Address: 1210 North Park Ave
Warren, OH 44483

Location of proposed air contaminant source(s) [emissions unit(s)]:
1210 North Park Ave
Warren, **Ohio**

Description of proposed emissions unit(s):
Powder paint booth for the coating of soft glass light bulbs using a powder paint coating system with infrared curing.

Date of Issuance: 3/29/00
Effective Date: 3/29/00

The above named entity is hereby granted a Permit to Install Registration for the above described source(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 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 and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

A. 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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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 are inadequate 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 prove to be inadequate or cannot meet applicable standards.

10. 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.

11. 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).

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

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

14. 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.

15. 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.

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
Particulate Emissions	**2.4**
Organic Compounds	**2.6**

Emissions Unit: R007

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R007 - Powder paint booth for the coating of soft glass light bulbs using a powder paint coating system with infrared curing	OAC rule 3745-31-05	8 lbs OC/hr 40 lbs OC/day 2.6 TPY of OC
	OAC rule 3745-21-07(G)	See B.1 below.
	OAC rule 3745-17-11	0.55 lbs PE/hr 2.4 TPY of PE
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from this emissions unit shall not exceed twenty percent opacity, as a six-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None.

B. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of

the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for the coating operation:

   a. The company identification for each cleanup material employed.

   b. The number of gallons of each cleanup material employed.

   c. The organic compound (OC) content of each cleanup material, in lbs/gallon.

   d. The total OC emission rate for all cleanup materials, in lbs/day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly OC emission rate for all cleanup materials, i.e., (d)/(e), in lbs/hr.

D. Reporting Requirements

1. In accordance with paragraph 3 of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which include the following information:

   a. An identification of each day during which the average OC emissions from the cleanup materials exceeded *8* lbs/hr, and the actual average OC emissions for each such day.

   b. An identification of each day during which the OC emissions from the cleanup materials exceeded *40* lbs/day, and the actual OC emissions for each such day.

2. The permittee shall also submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.The permittee shall also submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

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

   a. Emission Limitation-
   8 lbs OC/hr

   Applicable Compliance Method-
   Compliance shall be based on the record keeping requirements as specified in term C.1.

   b. Emission Limitation-
   40 lbs OC/day

   Applicable Compliance Method-
   Compliance shall be based on the record keeping requirements as specified in term C.1.

   c. Emission Limitation-
   2.6 TPY of OC

   Applicable Compliance Method-
   Compliance shall be based on the record keeping requirements as specified in term C.1 and shall be the sum of the 365 daily emission rates for the calendar year.

   d. Emission Limitation:
   20% opacity as a six-minute average, except as provided by rule.

   Applicable Compliance Method-
   U.S.EPA reference method 9, if required by the Ohio EPA.

   e. Emission Limitation:
   0.551 lb particulate emissions/hr and 2.4 tons particulate emissions/year

   Applicable Compliance Method:
   Compliance shall be based on a one time calculation using the maximum powder paint usage and control efficiency of the cartridge collector.
   To determine the actual worst case emission rate for particulates, the following equation shall be used:

   PE = maximum powder coating usage rate (3 pounds per hour) X (1-TE) X (1-CE)
   = 3 x 0.5 x 0.05 =0.08 lb/hr

Where,
PE = particulate emission rate (lb/hr)
TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (50%)
CE = control efficiency of the control equipment (95%)

PE yearly = 0.08 lb/hr x 8760 hr/year x 1 ton / 2000 lb = 0.35 ton/year

2. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

F. Miscellaneous Requirements

None.

Emissions Unit: R007

NEW SOURCE REVIEW FORM B

PTI Number: 02-13768 Facility ID: 0278080068

FACILITY NAME General Electric Ohio Lamp Plant

FACILITY DESCRIPTION Powder paint booth for the coating of soft glass light bulbs using a powder paint coating system with infrared curing

CITY/TWP Warren

SIC CODE 3641 SCC CODE 40299999 EMISSIONS UNIT ID R007

EMISSIONS UNIT DESCRIPTION Reflector Powder Paint Process powder paint coating system with infrared curing

DATE INSTALLED as soon a permit issued

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.08 lb/hr	0.35	0.55 lb/hr	2.4
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment		1.3	40 lb/day	2.6
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Use of powder coating with cartridge collector

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

Emissions Unit: R007

NEW SOURCE REVIEW FORM B

PTI Number: 02-13768 Facility ID: 0278080068

FACILITY NAME General Electric Ohio Lamp Plant

FACILITY DESCRIPTION	Powder paint booth for the coating of soft glass light bulbs using a powder paint coating system with infrared curing	CITY/TWP	Warren

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

calcs.

Please provide any additional permit specific notes as you deem necessary:

used template 87 +PE requirements

Permit To Install Synthetic Minor Write-Up

NONE

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
Particulate Emissions	2.4
Organic Compounds	2.6