



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
TRUMBULL COUNTY**

CERTIFIED MAIL

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

Application No: 02-2731

DATE: October 6, 1999

GE Lighting Niles/Mahoning Glass Plant
Dave Calderwood
403 North Main Street
Niles, OH 44446

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

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

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

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

Very truly yours,

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

cc: USEPA
DAPC, NEDO
Mahoning Trumbull APC



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: October 6, 1999

FINAL PERMIT TO INSTALL 02-2731

Application Number: 02-2731
APS Premise Number: 0278060490
Permit Fee: **\$1000**
Name of Facility: GE Lighting Niles/Mahoning Glass Plant
Person to Contact: Dave Calderwood
Address: 403 North Main Street
Niles, OH 44446

Location of proposed air contaminant source(s) [emissions unit(s)]:
403 North Main Street
Niles, Ohio

Description of proposed emissions unit(s):
**20 HP CULLET CRUSHER MANUFACTURED BY JOBS ON MACHINE WORKS USED TO CRUSH
REJECTED GLASS.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS**A. 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

GE Lighting Niles/Mahoning Glass Plant

PTI Application: **02-2731**

October 6, 1999

Facility ID: **0278060490**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.21
Lead	0.21
Radionulides	1.24 E-5

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Niles Cullet Crusher, Rated at 30 tons per hour.	OAC rule 3745-31-05(A)(3)	Maximum allowable emission rate 0.48 pound per hour and 0.21 tons per year of particulate; 0.48 pound per hour and 0.21 tons per year of lead; and 2.82 E-6 pound per hour and 1.24 E-5 ton per year of radionuclides. See section A.2.a of these terms and conditions.
	OAC rule 3745-17-07	There shall be no visible particulate emissions from any opening of the building in which this emissions unit is located.
	OAC rule 3745-17-08	The emission limit based on this applicable is less stringent than the limit established pursuant to OAC rule 3745-31-05.
		The emission limit based on this applicable is less stringent than the limit established pursuant to OAC rule 3745-31-05.

2. Additional Terms and Conditions

- 2.a** Permittee shall not process more than 25,823 tons of glass per year in this emissions unit. This is the maximum capacity based on the maximum capacity of the facility.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

E. Testing Requirements

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

- a. Emission Limitation: 0.48 lb/hr of PM

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor, 0.016 lb/ton, by the maximum process weight rate, 30 tons per hour, of the emissions unit.

* Emission factor determined based upon AP - 42, chapter 11.13, 1995. Assume emission factor for crushing is the same as for mixing and weighing. The emission factor for mixing and weighing in AP - 42, chapter 11.13, 1995 is 0.62 pound PM per ton of production. There are 4 transfer units per mixing and weighing operation. Per transfer unit, emission factor for mixing and weighing is equal to 0.155 lb/ton. Because cullet is not expected to have more than 5% fines (≤ 100 microns), a modifier equal to 0.10 was used for this emissions unit. Therefore, the emission factor for this emissions unit is equal to 0.016 lb/ton.

- b. Emission Limitation: 0.48 lb/hr of lead

Applicable Compliance Method:

The emission limitation was developed by assuming all particulate emissions were lead. Therefore, provided compliance is shown with the particulate hourly limitation,

compliance will also be shown with the lead hourly limitation.

- c. Emission Limitation: 2.82 E-6 lb/hr of radionuclides

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum production rate (30 tons per hour) by the emission factor, 0.016 pound particulate per ton of production, by 0.235 percent (0.235%), and by 0.25 percent (0.25%).

- * 0.235 percent of particulate emissions is cerium, and 0.25 percent of the cerium is Thorium from which the radionuclides are emitted (emission factor determination see section E.1.a of these terms and conditions).

- d. Emission Limitation: 0.21 tons/year of particulate
0.21 tons/year of lead

Applicable Compliance Method:

The tons per year limitations were developed by multiplying the AP-42 emission factor, 0.016 pound particulate per ton of production, by maximum annual production rate, 25,823 tons of glass crushed per year, and divided by 2000 pounds per ton.

- * Maximum annual production rate is determined based upon facility's bottleneck.

- e. Emission Limitation: 1.24 E-5 ton/year of radionuclides

Applicable Compliance Method:

The tons per year limitation was developed by multiplying the pound per hour limitations by the maximum operating schedule of 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also shown with the annual limitations.

- f. Emission Limitation: No visible particulate emissions

Applicable Compliance Method:

Compliance shall be determined based upon USEPA Method 22, 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None