



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
Columbus, OH 43216-1049

08/22/01

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

01-65-01-0026  
GE Circleville Lamp Plant  
Michelle Culpepper  
General Electric-Circleville Lamp Plant  
559 East Ohio Street  
Circleville, OH 43113

Dear Michelle Culpepper:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Central District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Central District Office.**

Very truly yours,

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

cc: USEPA (electronically submitted)  
File, DAPC PMU  
Central District Office  
Kentucky



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 08/22/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 01-65-01-0026 to:
GE Circleville Lamp Plant
General Electric-Circleville Lamp Plant
559 East Ohio Street
Circleville, OH 43113

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B004, P007, P014, P019, P020, P029, P031, P045, P046, P047, P901, R001, R002, R003, R005, R006, R007, R010, R011, R012, R013, R014, and R015.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Central District Office
3232 Alum Creek Drive
PO Box 1049
Columbus, OH 43216-1049
(614) 728-3778

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Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 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 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 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. 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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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.

## **8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

## **9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

## 10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

## 11. 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.

## 12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.
  - 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.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

#### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

#### **15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### **16. Off Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## **17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

## **18. Insignificant Activity**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

## **B. State Only Enforceable Section**

### **1. Permit to Install Requirement**

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

### **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. 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.

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforceable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.

### B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B001 - 3.35 mmBtu/hr, natural gas boiler;  
B002 - bulb prep area;  
B003 - 2.1 mmBtu/hr, natural gas boiler;  
B005 - 7.1 mmBtu/hr, natural gas heater;  
B006 - 2.1 mmBtu/hr, natural gas boiler;  
B007 - fire water diesel pump;  
B008 - DF heater no. 1, fan room #6;  
B009 - DF heater fan room #11;  
B010 - DF heater fan #1 room #8;  
B011 - DF heater no. 2, fan room #6;  
B012 - DF heater fan #2 room #8;  
F001 - paved parking lots and driveways;  
K001 - basefill machine 1;  
K002 - basefill machine 2;  
K003 - basefill machine 3;  
K004 - basefill machine 4;  
K005 - basefill machine 5;  
K006 - basefill machine 6;  
K007 - basefill machine 7;  
L001 - shop solvent degreasing;  
L003 - shop solvent degreasing;  
L005 - nitro clean tank;  
L006 - shop solvent degreasing;  
L007 - basefill solvent parts cleaner;  
P002 - group No. 5 (Hitachi Circline) assembly operations;  
P004 - group No. 18;  
P005 - coiling operations;  
P008 - specialty lehr 1;  
P011 - group No. 5 (Hitachi Circline) coater;  
P012 - wastewater pretreatment;  
P013 - water coating mix rooms;  
P016 - LWBXI coater;  
P017 - HLBX including grit blaster;  
P018 - reclamation furnace;  
P021 - bi-ax mix room;  
P022 - tank farm;  
P023 - flare machines;  
P024 - group No. 16;  
P025 - group No. 25;  
P026 - group No. 26;

**B. State Only Enforceable Section (continued)**

P027 - nitro based coating mixing room;  
P028 - base cement mixing;  
P030 - group No. 21;  
P033 - mercury cleaning;  
P034 - aqueous strip cleaning;  
P035 - LWBXII coater;  
P037 - HLXI coater;  
P038 - group No. 4;  
P039 - group No. 7;  
P040 - group No. 10;  
P041 - group No. 11;  
P042 - group No. 22;  
P043 - group No. 24;  
P044 - group No. 17;  
P048 - miscellaneous chemical usage;  
P050 - group 14 sandblast;  
P051 - group 15 sandblast;  
P052 - group 21 sandblast;  
P053 - wastewater treatment plant sandblast;  
P054 - coating department sand blast;  
R008 - case sealers (2);  
T001 - HCL acid tank;  
T008 - mixed acid tank;  
T010 - coating thinner tank; and  
T011 - synasol tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

2. Air dispersion modeling was conducted on 2/18/92, for emissions units which have the potential to emit mercury air emissions. Emissions units included in the modeling were P014-bulb crusher, P020-group 15, P030-group 21 and the central vacuum system which serves emissions units P038-group 4, P039-group 7, P040-group 10, P041-group 11, P042-group 22, P043-group 24, P044-group 17. These emissions units were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of their exhaust systems, as specified by the permittee in a permit to install application or in correspondence with the permittee. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for mercury emitted by these emissions units using data from permit to install applications, correspondence and/or the SCREEN 3.0 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: Mercury

TLV (mg/m<sup>3</sup>): 0.05

Maximum Hourly Emission Rate (lbs/hr): 0.0174

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 0.85

MAGLC (ug/m<sup>3</sup>): 1.2

Physical changes to or changes in the method of operation of an emissions unit referenced above shall undergo an evaluation to determine if the changes satisfy the "Air Toxics Policy".

**B. State Only Enforceable Section (continued)**

3. Air dispersion modeling was conducted on 9/17/91 for emissions units R001-downflush coater 6, R002-downflush coater 10, R003-downflush coater 12, R005-downflush coater 8, R006-downflush coater 11, R007-downflush coater 15, P007-upflush coater 5, P016-LWBXI coater, P017-HLBX coater and P019-coater 14. These emissions units were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of each emissions unit's exhaust system, as specified by the permittee in a permit to install application or correspondence to the permittee. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application, correspondence and/or the SCREEN 3.0 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: Ammonia

TLV (mg/m<sup>3</sup>): 17

Maximum Hourly Emission Rate (lbs/hr): 18.12

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 274

MAGLC (ug/m<sup>3</sup>): 405

Pollutant: Monoethanol Amine (MEA)

TLV (mg/m<sup>3</sup>): 7.5

Maximum Hourly Emission Rate (lbs/hr): 9.90

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 149

MAGLC (ug/m<sup>3</sup>): 179

Physical changes to or changes in the method of operation of an emissions unit referenced above shall undergo an evaluation to determine if the changes satisfy the "Air Toxics Policy".

4. Air dispersion modeling was conducted on 10/28/92 for emissions units R010 - upflush room coater #6, R011 - upflush room coater #10, R012 - upflush room coater #11, R013 - upflush room coater #12, and R014 - upflush room coater #13. These emissions units were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' 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 these emissions units 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: 2- Ethoxyethanol

TLV (mg/m<sup>3</sup>): 18

Maximum Hourly Emission Rate (lbs/hr): 1.84

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1.37

MAGLC (ug/m<sup>3</sup>): 240.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** DF htr. fan room #4 (B004)

**Activity Description:** 11.2 mmBtu/hr natural gas fired room air heater

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
11.2 mmBtu/hr natural gas (direct-fired) room air heater	OAC rule 3745-31-05 (A)(3) (PTI 01-4250)	Particulate emissions shall not exceed 0.005 pound per mmBtu heat input.  Nitrogen oxides emissions shall not exceed 0.14 pound per mmBtu heat input.  Sulfur dioxide emissions shall not exceed 0.0006 pound per mmBtu heat input.  Carbon monoxide emissions shall not exceed 0.035 pound per mmBtu heat input.  Organic compound emissions shall not exceed 0.006 pound per mmBtu heat input.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-17-07(A)	None, see A.1.2.b below.

##### 2. Additional Terms and Conditions

- The uncontrolled mass rate of particulate emissions (PE)\* from this emissions unit is less than 10 pounds/hour. 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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas is the only source of PE from this emissions unit.

- This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.

### **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, 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 deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### **V. Testing Requirements**

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 0.005 pound per mmBtu heat input.

Applicable Compliance Method -

Compliance may be demonstrated by dividing the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the conversion factor of 1020.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 5.

- 1.b Emission Limitation -  
Nitrogen oxides emissions shall not exceed 0.14 pound per mmBtu heat input.

Applicable Compliance Method -

Compliance may be demonstrated by dividing the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the conversion factor of 1020.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 7.

- 1.c Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.0006 pound per mmBtu heat input.

Applicable Compliance Method -

Compliance may be demonstrated by dividing the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the conversion factor of 1020.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6.

- 1.d Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.035 pound per mmBtu heat input.

Applicable Compliance Method -

Compliance may be demonstrated by dividing the emission factor for natural gas combustion of 84 lbs CO/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the conversion factor of 1020.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 10.

**V. Testing Requirements (continued)**

- 1.e** Emission Limitation -  
Organic compound emissions shall not exceed 0.006 pound per mmBtu heat input.

Applicable Compliance Method -

Compliance may be demonstrated by dividing the emission factor for natural gas combustion of 5.5 lbs OC/mmCu.ft. (AP-42, 1.4, 1998) by the conversion factor of 1020.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 18, 25 or 25A.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush coater #5 (P007)

**Activity Description:** Upflush coater # 5 with drying oven; 10 mmBtu/hr; non-insignificant for ammonia

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush coater #5 with 10 mmBtu/hr natural gas-fired drying oven	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	None, see A.I.2.b below.
	OAC rule 3745-17-07(A)	None, see A.I.2.c below.
	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions shall not exceed 33.9 pounds/hour. See A.V.1 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The uncontrolled mass rate of particulate emissions (PE)\* from this emissions unit is less than 10 pounds/hour. 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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas is the only source of PE from this emissions unit.

- 2.c This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

#### **V. Testing Requirements**

1. Emission Limitation:  
Sulfur dioxide emissions shall not exceed 33.9 pounds/hour.

Applicable Compliance Method:

Compliance with this emission limitation may be assumed since the emissions unit's potential to emit for sulfur dioxide emissions (sum of the emissions from the firing of natural gas and the coating(s)) is less than the allowable emission limitation established by the applicable rule.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Bulb crusher (P014)  
**Activity Description:** Crush reject bulbs and lamps and store in a silo

**A. State and Federally Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
bulb crusher with baghouse	OAC rule 3745-31-05(A)(3) (PTI 01-3618)	Particulate emissions shall not exceed 0.02 gr/dscf.  Particulate emissions shall not exceed 0.37 pound per hour.  Mercury emissions shall not exceed 0.017 pound per hour.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.I.2.a below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified in this rule is less stringent than the pound per hour emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Particulate emissions from this emissions unit shall be controlled by a baghouse.

## II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3-8 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the cause of the visible emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
2. 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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

## IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
  - 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

## V. Testing Requirements (continued)

- 1.b** Emission Limitation -  
Particulate emissions shall not exceed 0.02 gr/dscf.

Applicable Compliance Method -

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

- i. The emission testing shall be conducted every 2.5 years.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions.
- iii. The following test methods shall be employed to demonstrate compliance with the allowable particulate mass emission rate(s): 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.
- iv. 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 Ohio EPA, Central District Office.

- 1.c** Emission Limitation -  
Particulate emissions shall not exceed 0.37 pound per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by the emission testing specified in Section A.V.1.b.

- 1.d** Emission Limitation -  
Mercury emissions shall not exceed 0.017 pound per hour.

Applicable Compliance Method -

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

- i. The emission testing shall be conducted once every 2.5 years.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mercury mass emission rate(s): 40 CFR Part 60, Appendix A, Methods 1 through 4 and 101. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- iv. 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 Ohio EPA, Central District Office.

- 2.** 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central 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, Central District Office.

Facility Name: **G. E. Lighting, Inc. - Circleville Lamp Plant**  
Facility ID: **01-65-01-0026**  
Emissions Unit: **Bulb crusher (P014)**

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
bulb crusher with baghouse		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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 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 ; 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.).
2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Group No. 14 (P019)

**Activity Description:** Medium speed horizontal assembly line #14 with coater and lehr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 14 with carbon adsorption unit	OAC rule 3745-31-05(A)(3) (PTI 01-3454)	<p>Particulate emissions shall not exceed 0.09 pound per hour.</p> <p>Sulfur dioxide emissions shall not exceed 0.85 pound per hour.</p> <p>Nitrogen oxides emissions shall not exceed 2.10 pounds per hour.</p> <p>Carbon monoxide emissions shall not exceed 0.40 pound per hour.</p> <p>Organic compound emissions shall not exceed 3.20 pounds per hour.</p> <p>Ammonia emissions shall not exceed 2.70 pounds per hour.</p> <p>Mercury emissions shall not exceed 0.0006 pound per hour.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).</p>
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)(2)	<p>See A.I.2.d through A.I.2.h below.</p> <p>The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).</p>
	OAC rule 3745-17-07(A)	<p>Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.</p>
	OAC rule 3745-21-07(G)(2)	<p>See A.I.2.a below.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-09(Y)	See A.I.2.b below.
	OAC rule 3745-21-09(U)	See A.I.2.c below.

## 2. Additional Terms and Conditions

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** Pursuant to OAC rule 3745-21-09(Y)(2)(b), this emissions unit is exempt from the emission limitations specified in OAC rule 3745-21-09(Y) because the maximum potential usage of inks from all printing lines at this facility (P019) is less than 148 tons per year.
- 2.c** Pursuant to OAC rule 3745-21-09(U)(2)(e)(ii), this emissions unit is exempt from the emission limitation specified in OAC rule 3745-21-09(U)(1)(d) because the emissions unit's maximum potential usage of coating is less than 10 gallons per day.
- 2.d** The permittee shall use water-based coatings at all times this emissions unit is in operation.
- "Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.
- 2.e** The permittee shall vent all mercury emissions from this emissions unit to a carbon adsorption unit.
- 2.f** The permittee shall maintain the carbon adsorption system controlling the central vacuum system which serves emissions units P038-group 4, P039-group 7, P040-group 10, P041-group 11, P029-group 12, P019-group 14, P024-group 16, P044-group 17, P004-group 18, P042-group 22, P043-group 24, P025-group 25 and P026-group 26 at a control efficiency of at least 90% and a mercury emission rate of less than 0.0196 pound per hour at all times.
- 2.g** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.
- 2.h** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain a log identifying the dates when the carbon, used in the carbon adsorber serving this emissions unit, is replaced.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

#### **V. Testing Requirements**

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 0.09 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mmcu.ft. (AP-42, 1.4, 1998) by the maximum lehr throughput of 6,447 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

- 1.b Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.85 pound per hour.

Applicable Compliance Methods -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.84 lb SO<sub>2</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 6,447 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c Emission Limitation -  
Nitrogen oxides emissions shall not exceed 2.10 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.28 lb NO<sub>x</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 6,447 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation -

Carbon monoxide emissions shall not exceed 0.40 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 6,447 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

**1.e** Emission Limitation -

Organic compound emissions shall not exceed 3.20 pounds per hour.

Applicable Compliance Methods -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 3.17 lbs OC/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mm<sup>3</sup>.ft. (AP-42, 1.4 1998) by the maximum dryer throughput of 6,447 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

**1.f** Emission Limitation -

Mercury emissions shall not exceed 0.0006 pound per hour.

Applicable Compliance Method -

Compliance was demonstrated through emission testing conducted 6/29/90.

If required, the permittee shall demonstrate compliance by emission testing as specified in Section A.V.1.i.

**1.g** Emission Limitation -

Ammonia emissions shall not exceed 2.70 pounds per hour.

Applicable Compliance Method -

The maximum emissions from the process are 2.70 lbs ammonia/hr (Ohio EPA's 1990 Air Assessment).

If required, the permittee shall demonstrate compliance by emission testing in accordance with U.S. EPA approved test methods.

**1.h** Emission Limitation -

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**1.i** Emission Limitation -

The carbon adsorption system controlling the central vacuum system which serves emissions units P038-group 4, P039-group 7, P040-group 10, P041-group 11, P029-group 12, P019-group 14, P024-group 16, P044-group 17, P004-group 18, P042-group 22, P043-group 24, P025-group 25, and P026-group 26 shall maintain a control efficiency of at least 90% and a mercury emission rate of less than 0.0196 pound per hour at all times.

Applicable Compliance Method -

If required, the permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 101. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Facility Name: **G. E. Lighting, Inc. - Circleville Lamp Plant**  
Facility ID: **01-65-01-0026**  
Emissions Unit: **Group No. 14 (P019)**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 14 with carbon adsorption unit		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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 still 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Group No. 15 (P020)

**Activity Description:** Medium speed horizontal line with lehr group no.15

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 15 with baghouse	OAC rule 3745-31-05(A)(3) (PTI 01-08180)	<p>Particulate emissions shall not exceed 0.20 pound per hour and 0.9 ton per year.</p> <p>Sulfur dioxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.</p> <p>Nitrogen oxides emissions shall not exceed 1.60 pounds per hour and 7.0 tons per year.</p> <p>Carbon monoxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.</p> <p>Volatile organic compound emissions shall not exceed 3.25 pounds per hour and 14.2 tons per year.</p> <p>Mercury emissions shall not exceed 0.006 pound per hour and 0.026 ton per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).</p> <p>See A.I.2.c through A.I.2.e below.</p> <p>The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)(2)	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	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 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-21-09(U)	See A.I.2.b below.

**2. Additional Terms and Conditions**

**2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

**2.b** Pursuant to OAC rule 3745-21-09(U)(2)(e)(ii), this emissions unit is exempt from the emission limitation specified in OAC rule 3745-21-09(U)(1)(d) because the emissions unit's maximum potential usage of coating is less than 10 gallons per day.

**2.c** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

**2.d** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

**2.e** The permittee shall vent all emissions from this emissions unit to a baghouse.

**II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.
2. The pressure drop across the baghouse shall be maintained within the range of 2-4 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

**III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the cause of the visible emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
4. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

### **V. Testing Requirements**

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

- 1.a Emission Limitations -  
Particulate emissions shall not exceed 0.20 pound per hour and 0.9 ton per year.

Applicable Compliance Method -

Compliance with the pound per hour and ton per year emission limitations shall be demonstrated by summing the combustion and assembly operation emissions.

The pound per hour combustion emissions may be calculated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The pound per hour assembly operation emissions shall be calculated using a baghouse emission rate of 0.10 lb/hr (Ohio EPA's 1990 Air Assessment).

If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

Compliance with the ton per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the ton per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitations -  
Sulfur dioxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.

Applicable Compliance Method -

Compliance with the pounds per hour and tons per year emission limitations shall be demonstrated by summing the combustion and assembly operation emissions.

The pound(s) per hour combustion emissions may be calculated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The pound(s) per hour 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).

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Compliance with the tons per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the tons per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

- 1.c** Emission Limitations -  
Nitrogen oxides emissions shall not exceed 1.60 pounds per hour and 7.0 tons per year.

Applicable Compliance Method -

Compliance with the pounds per hour emission limitation may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr.

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

Compliance with the tons per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the tons per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

- 1.d** Emission Limitations -  
Carbon monoxide emissions shall not exceed 1.25 pounds per hour and 5.5 tons per year.

Applicable Compliance Method -

Compliance with the pounds per hour emission limitation may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr.

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Compliance with the tons per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the tons per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

## V. Testing Requirements (continued)

- 1.e** Emission Limitations -  
Volatile organic compound emissions shall not exceed 3.25 pounds per hour and 14.2 tons per year.

Applicable Compliance Method -

Compliance with the pounds per hour and tons per year emission limitations shall be demonstrated by summing the combustion operation and the two assembly operation emissions.

The pound(s) per hour combustion emissions may be calculated by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mm<sup>3</sup>.ft. (AP-42, 1998) by the maximum dryer throughput of 13,300 cu.ft./hr. The pound(s) per hour 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 pound(s) per hour assembly "base cement" operation emissions shall be calculated by multiplying the emission rate of 1.93 lbs/hr (SEC, Inc., Chemical Usage Evaluation, 1997) by the percent increase in throughput of 25% (1.25).

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Compliance with the tons per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the tons per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

- 1.f** Emission Limitations -  
Mercury emissions shall not exceed 0.006 pound per hour and 0.026 ton per year.

Applicable Compliance Method -

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

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 101.

Compliance with the ton per year emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the ton per year emission limitation was calculated by multiplying the hourly emission limitation by 8760, and then dividing by 2000 lbs/ton).

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 15 with baghouse		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping 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

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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.).
3. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Group No. 12 (P029)

**Activity Description:** Vertical lamp assembly line with lehr group no. 12

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 12 with carbon adsorption unit	OAC rule 3745-31-05(A)(3) (PTI 01-3454)	Particulate emissions shall not exceed 0.04 pound per hour.  Sulfur dioxide emissions shall not exceed 0.62 pound per hour.  Nitrogen oxides emissions shall not exceed 1.00 pound per hour.  Carbon monoxide emissions shall not exceed 0.15 pound per hour.  Organic compound emissions shall not exceed 0.89 pound per hour.  Mercury emissions shall not exceed 0.0015 pound per hour.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)(2)	See A.I.2.c through A.I.2.d below.  The emission limitations specified by these rules are 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 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-21-09(U)	See A.I.2.b below.

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** Pursuant to OAC rule 3745-21-09(U)(2)(e)(ii), this emissions unit is exempt from the emission limitation specified in OAC rule 3745-21-09(U)(1)(d) because the emissions unit's maximum potential usage of coating is less than 10 gallons per day.
- 2.c** The permittee shall vent all mercury emissions from this emissions unit to a carbon adsorption unit.
- 2.d** The permittee shall maintain the carbon adsorption system controlling the central vacuum system which serves emissions units P038-group 4, P039-group 7, P040-group 10, P041-group 11, P029-group 12, P019-group 14, P024-group 16, P044-group 17, P004-group 18, P042-group 22, P043-group 24, P025-group 25 and P026-group 26 at a control efficiency of at least 90% and a mercury emission rate of less than 0.0196 pound per hour at all times.
- 2.e** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain a log identifying the dates when the carbon, used in the carbon adsorber serving this emissions unit, is replaced.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

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

- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.04 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42, 1.4, 1998) by the maximum lehr throughput of 5,900 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.62 pound per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.62 lb SO<sub>2</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 5,900 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 1.00 pound per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.23 lb NO<sub>x</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 5,900 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.15 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 5,900 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Organic compound emissions shall not exceed 0.89 pound per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.85 lb OC/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1.4 1998) by the maximum dryer throughput of 5,900 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

## **V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Mercury emissions shall not exceed 0.0015 pound per hour.

Applicable Compliance Method -  
Compliance was demonstrated through emission testing conducted 6/29/90.

If required, the permittee shall demonstrate compliance by emission testing as specified in Section A.V.1.i.

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

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

- 1.h** Emission Limitation -  
The carbon adsorption system controlling the central vacuum system which serves emissions units P038-group 4, P039-group 7, P040-group 10, P041-group 11, P029-group 12, P019-group 14, P024-group 16, P044-group 17, P004-group 18, P042-group 22, P043-group 24, P025-group 25 and P026-group 26 shall maintain a control efficiency of at least 90% and a mercury emission rate of less than 0.0196 pound per hour at all times.

Applicable Compliance Method -  
If required, the permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 101. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
lamp assembly line - group 12 with carbon adsorption unit		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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 still 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mandrel dissolving (P031)  
**Activity Description:** Coiling operations - coil mandrel dissolving

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
coil mandrel dissolving	OAC rule 3745-31-05(A)(3) (PTI 01-3133)	<p>Particulate emissions shall not exceed 0.003 pound per hour.</p> <p>Sulfur dioxide emissions shall not exceed 0.0003 pound per hour.</p> <p>Organic compound emissions shall not exceed 0.003 pound per hour.</p> <p>Carbon monoxide emissions shall not exceed 0.01 pound per hour.</p> <p>Nitrogen oxides emissions shall not exceed 0.05 pound per hour.</p> <p>Hydrochloric acid (HCl) emissions shall not exceed 0.06 pound per hour.</p> <p>Nitric acid (HNO<sub>3</sub>) emissions shall not exceed 0.0005 pound per hour.</p> <p>Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) emissions shall not exceed 0.007 pound per hour.</p> <p>The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-17-07(A).</p> <p>See A.I.2.a below.</p>
	OAC rule 3745-17-07(A)	<p>Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)	The emission limitation specified in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a The permittee shall vent all emissions from this emissions unit to a scrubber with a control efficiency of 99.7% or greater.

## II. Operational Restrictions

1. The permittee shall vent emissions from this emissions unit to the scrubber at all times the emissions unit is in operation.
2. The pH of the scrubber liquor shall be maintained within the range of 6 to 8.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall record the pH of the scrubber liquor on a daily basis.

The permittee shall maintain a log of the downtime for the scrubber, when the associated emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

## V. Testing Requirements

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 0.003 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mmcu.ft. (AP-42, 1.4, 1998) by the maximum Lehr throughput of 400 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.0003 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lbs SO<sub>2</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 400 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Organic compound emissions shall not exceed 0.003 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1.4 1998) by the maximum dryer throughput of 400 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 400 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 0.05 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 400 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.f** Emission Limitation -  
HCl emissions shall not exceed 0.06 pound per hour.

Applicable Compliance Method -

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26 or 26A, as appropriate.

- 1.g** Emission Limitation -  
HNO<sub>3</sub> emissions shall not exceed 0.0005 pound per hour.

Applicable Compliance Method -

If required, the permittee shall demonstrate compliance by emission testing in accordance with U.S. EPA approved test methods.

- 1.h** Emission Limitation -  
H<sub>2</sub>SO<sub>4</sub> emissions shall not exceed 0.007 pound per hour.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 8.

**V. Testing Requirements (continued)**

- 1.i** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
coil mandrel dissolving		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Central Lehr 1 (P045)  
**Activity Description:** Central Lehr 1

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
central Lehr number 1 controlled with a baghouse	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 3745-17-11(B)	Particulate emissions shall not exceed 4.61 pounds per hour.
	OAC rule 3745-18-06(E)	Sulfur dioxide emissions shall not exceed 33.71 pounds per hour.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.
- The pressure drop across the baghouse shall be maintained within the range of 2-4 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

##### III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas 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 that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

#### **V. Testing Requirements**

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 4.61 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.880 lb PE/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mmcf.ft. (AP-42, 1.4, 1998) by the maximum Lehr throughput of 0.0136 mmcf.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- 1.b Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.c Emission Limitation -  
Sulfur dioxide emissions shall not exceed 33.71 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.697 lb SO<sub>2</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcf.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 0.0136 mmcf.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Central Lehr 2 (P046)  
**Activity Description:** Central Lehr 2

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
central Lehr number 2 controlled with a baghouse	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 3745-17-11(B)	Particulate emissions shall not exceed 7.74 pounds per hour.
	OAC rule 3745-18-06(E)	Sulfur dioxide emissions shall not exceed 56.61 pounds per hour.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.
- The pressure drop across the baghouse shall be maintained within the range of 2-4 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

##### III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas 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 that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

#### **V. Testing Requirements**

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 7.74 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.990 lb PE/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mmcf.ft. (AP-42, 1.4, 1998) by the maximum Lehr throughput of 0.0313 mmcf.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- 1.b Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.c Emission Limitation -  
Sulfur dioxide emissions shall not exceed 56.61 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.630 lb SO<sub>2</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcf.ft. (AP-42, 1.4, 1998) by the maximum dryer throughput of 0.0313 mmcf.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

## Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Central Lehr 3 (P047)  
**Activity Description:** Central Lehr 3

### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
central Lehr number 3 controlled with a baghouse	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 3745-17-11(B)	Particulate emissions shall not exceed 6.85 pounds per hour.
	OAC rule 3745-18-06(E)	Sulfur dioxide emissions shall not exceed 50.10 pounds per hour.

#### 2. Additional Terms and Conditions

None

#### II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. The pressure drop across the baghouse shall be maintained within the range of 2-4 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

#### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. 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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas 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 that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

#### **V. Testing Requirements**

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

- 1.a Emission Limitation -  
Particulate emissions shall not exceed 6.85 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.880 lb PE/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mmcf. (AP-42, 1.4, 1998) by the maximum Lehr throughput of 0.0236 mmcf./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- 1.b Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.c Emission Limitation -  
Sulfur dioxide emissions shall not exceed 50.10 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the emissions from the process and from the combustion of natural gas.

The maximum emissions from the process are 0.630 lb SO<sub>2</sub>/hr (Ohio EPA's 1990 Air Assessment).

The emissions from the combustion of natural gas may be determined by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcf. (AP-42, 1.4, 1998) by the maximum dryer throughput of 0.0236 mmcf./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Glass Cullet truck loading system (P901)  
**Activity Description:** Glass Cullet truck loading operation

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
glass cullet truck loading system controlled by a baghouse and carbon absorption system	OAC rule 3745-31-05(A)(3) (PTI 01-6394)	Particulate emissions shall not exceed 0.02 gr/dscf.
		Particulate emissions shall not exceed 0.37 pound per hour.
		Mercury emissions shall not exceed 0.017 pound per hour.
		Mercury emissions shall not exceed 0.01 ton per year.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
		See A.I.2.a and A.I.2.b below.
	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 3745-17-11(B)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

##### 2. Additional Terms and Conditions

- 2.a The permittee shall employ the telescoping shoot and partial enclosure at their maximum control capabilities during all times of operation.
- 2.b Visible particulate emissions of fugitive dust shall not exceed 10% opacity as a 3-minute average.

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to: doorways, windows, and roof monitors.

## II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3-8 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

2. The magnahelic gauge on the carbon absorption system shall be maintained within the range of 1-4 inches of water while the emissions unit is in operation. A value of 1 indicates the maximum pressure achieved by a new filter. A value of greater than 4 indicates that the filter needs to be replaced.

The operation of the control equipment outside the range specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Central District Office, compliance with the mass emission limitation and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA-approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the cause of the visible emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
2. The permittee shall perform daily checks for visible particulate emissions from the non-stack egress points from the building housing this emissions unit. These egress points shall include, but not be limited to: doorways, windows, and roof monitors. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
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 the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.
4. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the carbon absorber while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the magnahelic gauge reading on daily basis.

#### **IV. Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit; (b) describe any corrective actions taken to eliminate the visible particulate emissions; (c) identify all days during which any visible fugitive particulate emissions were observed from the emissions unit and (d) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above; and
  - b. all periods of time during which the magnahelic gauge on the carbon unit did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

3. The permittee shall submit semiannual written reports that include a log of the downtime for the baghouse and carbon absorption system when this emissions unit was in operation. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the non-stack egress points from the building housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (Ohio EPA, Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
  - 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method -  
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
  - 1.b Emission Limitation -  
Particulate emissions shall not exceed 0.02 gr/dscf.  
  
Applicable Compliance Method -  
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
    - i. The emission testing shall be conducted once per term of permit.
    - ii. The emission testing shall be conducted to demonstrate compliance with the allowable particulate mass emission rate.
    - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable particulate emission rate: 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
    - iv. 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 Ohio EPA, Central District Office.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
Particulate emissions shall not exceed 0.37 pound per hour.

Applicable Compliance Method -  
Compliance shall be demonstrated based on the emission testing specified in Section A.V.1.b.

- 1.d** Emission Limitation -  
Mercury emissions shall not exceed 0.017 pound per hour.

Applicable Compliance Method -  
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted once every 2.5 years.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mercury mass emission rate.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mercury mass emission rate: 40 CFR Part 60, Appendix A, Methods 1 through 4 and 101. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- iv. 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 Ohio EPA, Central District Office.

- 1.e** Emission Limitation -  
Mercury emissions shall not exceed 0.01 ton per year.

Applicable Compliance Method -  
Compliance shall be demonstrated by multiplying the results of the emission testing required in Section A.V.1.d above by the maximum hours of operation of 1095 hours per year (PTI application 01-6394 submitted 4/96) and dividing by 2000 pounds per ton.

- 1.f** Emission Limitation -  
Visible particulate emissions of fugitive dust shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method -  
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2.** 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, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central 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, Central District Office.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #6 (R001)

**Activity Description:** Downflush coater # 6 with drying oven; 7.7 mmBtu/hr; non-insignificant only for ammonia

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #6 with 7.7 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-2717)	<p>Particulate emissions shall not exceed 0.04 pound per hour.</p> <p>Sulfur dioxide emissions shall not exceed 0.004 pound per hour.</p> <p>Nitrogen oxides emissions shall not exceed 0.70 pound per hour.</p> <p>Carbon monoxide emissions shall not exceed 0.20 pound per hour.</p> <p>Volatile organic compound emissions shall not exceed 1.00 pound per hour.</p> <p>Ammonia emissions shall not exceed 1.80 pounds per hour.</p> <p>The requirements of this rule also include compliance with OAC rule 3745-17-07(A).</p> <p>See A.I.2.b through A.I.2.d below. See A.I.2.a below.</p>
	OAC rule 3745-21-07(G)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)(2)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(A)	

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.04 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 7333 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.004 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 7333 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 0.70 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 7333 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.20 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 7333 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.00 pound per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 7333 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (16 gals/hr) by the primary coating's maximum VOC content of 0.06 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.003 gal/hr) by the secondary coating's maximum VOC content of 5.78 lbs/gal and summing the two emission rates (PTI application 01-2717, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Ammonia emissions shall not exceed 1.80 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (16 gals/hr) by the ammonia content (0.11 lb/gal) (PTI 01-2717 application, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #6 with 7.7 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #10 (R002)

**Activity Description:** Downflush coater # 10 with drying oven; 11.1 mmBtu/hr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #10 with 11.1 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-2717)	Particulate emissions shall not exceed 0.05 pound per hour.  Sulfur dioxide emissions shall not exceed 0.006 pound per hour.  Nitrogen oxides emissions shall not exceed 1.5 pounds per hour.  Carbon monoxide emissions shall not exceed 0.40 pound per hour.  Volatile organic compound emissions shall not exceed 1.60 pounds per hour.  Ammonia emissions shall not exceed 2.80 pounds per hour.  The requirements of this rule also include compliance with OAC rule 3745-17-07(A).
	OAC rule 3745-21-07(G)	See A.I.2.b through A.I.2.d below. See A.I.2.a below.
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are 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.

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.05 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 10,571 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 10,571 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 1.5 pounds per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 10,571 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.40 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 10,571 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.60 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 10,571 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (25 gals/hr) by the primary coating's maximum VOC content of 0.06 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.003 gal/hr) by the secondary coating's maximum VOC content of 5.78 lbs/gal and summing the two emission rates (PTI application 01-2717, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.80 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (25 gals/hr) by the ammonia content (0.11 lb/gal) (PTI 01-2717 application, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #10 with 11.1 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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 still 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #12 (R003)

**Activity Description:** Downflush coater # 12 with drying oven; 6.0 mmBtu/hr; non-insignificant only for ammonia

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #12 with 6.0 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-3584)	Particulate emissions shall not exceed 0.03 pound per hour.  Sulfur dioxide emissions shall not exceed 0.003 pound per hour.  Nitrogen oxides emissions shall not exceed 0.6 pound per hour.  Carbon monoxide emissions shall not exceed 0.1 pound per hour.  Volatile organic compound emissions shall not exceed 1.20 pounds per hour.  Ammonia emissions shall not exceed 2.0 pounds per hour.  The requirements of this rule also include compliance with OAC rule 3745-17-07(A).
	OAC rule 3745-21-07(G)	See A.I.2.b through A.I.2.d below. See A.I.2.a below.
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are 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.

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.03 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 5,714 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## V. Testing Requirements (continued)

### 1.b Emission Limitation -

Sulfur dioxide emissions shall not exceed 0.003 pound per hour.

#### Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 5,714 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

### 1.c Emission Limitation -

Nitrogen oxides emissions shall not exceed 0.6 pound per hour.

#### Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 5,714 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

### 1.d Emission Limitation -

Carbon monoxide emissions shall not exceed 0.1 pound per hour.

#### Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 5,714 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

### 1.e Emission Limitation -

Volatile organic compound emissions shall not exceed 1.20 pounds per hour.

#### Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 5,714 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (12 gals/hr) by the primary coating's maximum VOC content of 0.06 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.003 gal/hr) by the secondary coating's maximum VOC content of 5.78 lbs/gal and summing the two emission rates (PTI application 01-2717, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.0 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (12 gals/hr) by the ammonia content (0.11 lb/gal) (PTI 01-2717 application, submitted 8/90).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #12 with 6.0 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #8 (R005)

**Activity Description:** Downflush coater # 8 with drying oven; 6.9 mmBtu/hr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #8 with 6.9 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-2988)	Particulate emissions shall not exceed 0.03 pound per hour.  Sulfur dioxide emissions shall not exceed 0.004 pound per hour.  Nitrogen oxides emissions shall not exceed 0.66 pound per hour.  Carbon monoxide emissions shall not exceed 0.13 pound per hour.  Volatile organic compound emissions shall not exceed 1.60 pounds per hour.  Ammonia emissions shall not exceed 2.70 pounds per hour.  The requirements of this rule also include compliance with OAC rule 3745-17-07(A).
	OAC rule 3745-21-07(G)	See A.I.2.b through A.I.2.d below. See A.I.2.a below.
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are 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.

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.03 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 6,593 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.004 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 6,593 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 0.66 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 6,593 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 6,593 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.60 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 6,593 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (24.4 gals/hr) by the primary coating's maximum VOC content of 0.06 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.0026 gal/hr) by the secondary coating's maximum VOC content of 5.78 lbs/gal and summing the two emission rates (PTI application 01-2988, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.70 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (24.4 gals/hr) by the ammonia content (0.11 lb/gal) (PTI 01-2988 application, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

- 1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #8 with 6.9 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #11 (R006)

**Activity Description:** Downflush coater # 11 with drying oven; 8.2 mmBtu/hr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #11 with 8.2 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-2988)	Particulate emissions shall not exceed 0.04 pound per hour.  Sulfur dioxide emissions shall not exceed 0.005 pound per hour.  Nitrogen oxides emissions shall not exceed 0.78 pound per hour.  Carbon monoxide emissions shall not exceed 0.16 pound per hour.  Volatile organic compound emissions shall not exceed 1.40 pounds per hour.  Ammonia emissions shall not exceed 2.40 pounds per hour.  The requirements of this rule also include compliance with OAC rule 3745-17-07(A).
	OAC rule 3745-21-07(G)	See A.I.2.b through A.I.2.d below. See A.I.2.a below.
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are 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.

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.04 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 7,826 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## V. Testing Requirements (continued)

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.005 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 7,826 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 0.78 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 7,826 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.16 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 7,826 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.40 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 7,826 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (22.2 gals/hr) by the primary coating's maximum VOC content of 0.06 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.0025 gal/hr) by the secondary coating's maximum VOC content of 5.78 lbs/gal and summing the two emission rates (PTI application 01-2988, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

**1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.7 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (22.2 gals/hr) by the ammonia content (0.11 lb/gal) (PTI 01-2988 application, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

**1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #11 with 8.2 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #15 (R007)

**Activity Description:** Downflush coater # 15 with drying oven; 10.4 mmBtu/hr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #15 with 10.4 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-4306)	Particulate emissions shall not exceed 0.052 pound per hour.  Sulfur dioxide emissions shall not exceed 0.006 pound per hour.  Nitrogen oxides emissions shall not exceed 1.46 pounds per hour.  Carbon monoxide emissions shall not exceed 0.37 pound per hour.  Volatile organic compound emissions shall not exceed 1.47 pounds per hour.  Ammonia emissions shall not exceed 2.50 pounds per hour.  The requirements of this rule also include compliance with OAC rule 3745-17-07(A).  See A.I.2.b through A.I.2.d below. See A.I.2.a below.
	OAC rule 3745-21-07(G)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(A)	

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.052 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42,1.4-5, 1998) by the maximum dryer throughput of 9,905 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## V. Testing Requirements (continued)

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 9,905 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 1.46 pounds per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 9,905 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.37 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 9,905 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.47 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 9,905 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (117.4 gals/hr) by the primary coating's maximum VOC content of 0.45 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.044 gal/hr) by the secondary coating's maximum VOC content of 3.94 lbs/gal and summing the two emission rates (PTI application 01-2988, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

**1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.50 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (117.4 gals/hr) by the ammonia content (3.94 lbs/gal) (PTI 01-2988 application, submitted 2/91).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

**1.g** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #15 with 10.4 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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; 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.).
2. 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). 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush room Coater (R010)  
**Activity Description:** Nitro coating - upflush room coater # 6 OEPA ID R010

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #6 - Nitro coating	OAC rule 3745-31-05(A)(3) (PTI 01-2780)	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-31-05(D) (PTI 01-2780)	See A.I.2.c through A.I.2.f and A.II.1 and A.II.2 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The organic compound (OC) content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.
- 2.c The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.
- 2.d The combined OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per rolling, 12-month period.
- 2.e The total combined OC emission rate from any two coaters (R010, R011, R012, R013, and R014 combined) shall not exceed 30.3 pounds per hour.

The pound(s) per hour emission limitation reflects the potential to emit for these emissions units based upon the maximum hourly coating throughputs for any two coaters combined using the coating with the highest OC content. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with this emission limitation.

- 2.f OC emissions from emissions units R010, R011, R012, R013, and R014, combined shall not exceed 3.02 tons per month. OC emissions from cleanup materials shall be included in determining compliance with the monthly OC emission limitation.

##### II. Operational Restrictions

1. The total monthly coating usage in emissions units R010, R011, R012, R013, and R014 shall not exceed 920.0 gallons.

## **II. Operational Restrictions (continued)**

2. The total monthly usage of cleanup material in emissions units R010, R011, R012, R013, and R014 shall not exceed 69.0 gallons.
3. The permittee shall not operate more than two upflush room coaters (R010, R011, R012, R013, or R014) at any time.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for emissions units R010, R011, R012, R013, and R014:
  - a. the actual coating time for each emissions unit;
  - b. the duration of time during which more than two emissions units (R010, R011, R012, R013, or R014) operate at one time, in hours;
  - c. the name and identification of each coating and cleanup material as applied;
  - d. the OC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - e. the OC content of each cleanup material, in pounds per gallon, as applied; and
  - f. the number of gallons of each coating, excluding water and exempt solvents, and each cleanup material as applied.
2. The permittee shall collect and record the following information each month for emissions units R010, R011, R012, R013, and R014 combined:
  - a. the total number of gallons of coating, excluding water and exempt solvents, as applied;
  - b. the total number of gallons of cleanup materials, as applied;
  - c. the total OC emissions from coating and cleanup operations, in tons; and
  - d. the rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials, in tons.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of each day during which more than two emissions units (R010, R011, R012, R013, and R014) operated at one time;
  - b. any exceedences of the coating OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - c. any exceedences of the cleanup material OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - d. any exceedences of the monthly OC emission limitation for emissions units R010, R011, R012, R013, and R014;
  - e. any exceedences of the combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

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

- 1.a** Emission Limitation -  
The total combined OC emission rate from any two coaters (R010, R011, R012, R013 and R014, combined) shall not exceed 30.3 pounds per hour.

Applicable Compliance Method -

The hourly emission limitation was developed by multiplying the maximum hourly coating throughput for any two coaters (R010, R011, R012, R013, and R014), of 5.0 gallons per hour by the maximum OC content of 6.06 pounds per gallon (PTI application 01-2780 submitted 7/90).

If required, the permittee shall demonstrate compliance with this emission limitation by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

- 1.b** Emission Limitation -  
OC emissions from emissions units R010, R011, R012, R013, and R014 shall not exceed 3.02 tons per month.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

- 1.c** Emission Limitation -  
The OC content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.d** Emission Limitation -  
The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.e** Emission Limitation -  
The combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per year.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

- 2.** Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Director may require that USEPA Method 24 be used to determine the OC contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## **VI. Miscellaneous Requirements**

- 1.** Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.III.2.d. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

**VI. Miscellaneous Requirements (continued)**

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.IV.1.e. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #6 - Nitro coating		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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 still 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.).

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush room Coater (R011)

**Activity Description:** Nitro coating - upflush room coater #10 OEPA ID R011

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #10 - Nitro coating	OAC rule 3745-31-05(A)(3) (PTI 01-2780)	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-31-05(D) (PTI 01-2780)	See A.I.2.c through A.I.2.f and A.II.1 and A.II.2 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The organic compound (OC) content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.
- 2.c The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.
- 2.d The combined OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per rolling, 12-month period.
- 2.e The total combined OC emission rate from any two coaters (R010, R011, R012, R013, and R014 combined) shall not exceed 30.3 pounds per hour.

The pound(s) per hour emission limitation reflects the potential to emit for these emissions units based upon the maximum hourly coating throughputs for any two coaters combined using the coating with the highest OC content. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with this emission limitation.

- 2.f OC emissions from emissions units R010, R011, R012, R013, and R014, combined shall not exceed 3.02 tons per month. OC emissions from cleanup materials shall be included in determining compliance with the monthly OC emission limitation.

##### II. Operational Restrictions

1. The total monthly coating usage in emissions units R010, R011, R012, R013, and R014 shall not exceed 920.0 gallons.

## **II. Operational Restrictions (continued)**

2. The total monthly usage of cleanup material in emissions units R010, R011, R012, R013, and R014 shall not exceed 69.0 gallons.
3. The permittee shall not operate more than two upflush room coaters (R010, R011, R012, R013, or R014) at any time.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for emissions units R010, R011, R012, R013, and R014:
  - a. the actual coating time for each emissions unit;
  - b. the duration of time during which more than two emissions units (R010, R011, R012, R013, or R014) operate at one time, in hours;
  - c. the name and identification of each coating and cleanup material as applied;
  - d. the OC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - e. the OC content of each cleanup material, in pounds per gallon, as applied; and
  - f. the number of gallons of each coating, excluding water and exempt solvents, and each cleanup material as applied.
2. The permittee shall collect and record the following information each month for emissions units R010, R011, R012, R013, and R014 combined:
  - a. the total number of gallons of coating, excluding water and exempt solvents, as applied;
  - b. the total number of gallons of cleanup materials, as applied;
  - c. the total OC emissions from coating and cleanup operations, in tons; and
  - d. the rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials, in tons.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of each day during which more than two emissions units (R010, R011, R012, R013, and R014) operated at one time;
  - b. any exceedences of the coating OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - c. any exceedences of the cleanup material OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - d. any exceedences of the monthly OC emission limitation for emissions units R010, R011, R012, R013, and R014;
  - e. any exceedences of the combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

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

- 1.a** Emission Limitation -  
The total combined OC emission rate from any two coaters (R010, R011, R012, R013 and R014, combined) shall not exceed 30.3 pounds per hour.

Applicable Compliance Method -

The hourly emission limitation was developed by multiplying the maximum hourly coating throughput for any two coaters (R010, R011, R012, R013, and R014), of 5.0 gallons per hour by the maximum OC content of 6.06 pounds per gallon (PTI application 01-2780 submitted 7/90).

If required, the permittee shall demonstrate compliance with this emission limitation by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

- 1.b** Emission Limitation -  
OC emissions from emissions units R010, R011, R012, R013, and R014 shall not exceed 3.02 tons per month.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

- 1.c** Emission Limitation -  
The OC content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.d** Emission Limitation -  
The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.e** Emission Limitation -  
The combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per year.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

- 2.** Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Director may require that USEPA Method 24 be used to determine the OC contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## **VI. Miscellaneous Requirements**

- 1.** Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.III.2.d. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

**VI. Miscellaneous Requirements (continued)**

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.IV.1.e. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #10 - Nitro coating		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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 still 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.).

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush room Coater (R012)

**Activity Description:** Nitro coating - upflush room coater #11 OEPA ID R012

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #11 - Nitro coating	OAC rule 3745-31-05(A)(3) (PTI 01-2780)	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-31-05(D) (PTI 01-2780)	See A.I.2.c through A.I.2.f and A.II.1 and A.II.2 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The organic compound (OC) content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.
- 2.c The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.
- 2.d The combined OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per rolling, 12-month period.
- 2.e The total combined OC emission rate from any two coaters (R010, R011, R012, R013, and R014 combined) shall not exceed 30.3 pounds per hour.

The pound(s) per hour emission limitation reflects the potential to emit for these emissions units based upon the maximum hourly coating throughputs for any two coaters combined using the coating with the highest OC content. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with this emission limitation.

- 2.f OC emissions from emissions units R010, R011, R012, R013, and R014, combined shall not exceed 3.02 tons per month. OC emissions from cleanup materials shall be included in determining compliance with the monthly OC emission limitation.

##### II. Operational Restrictions

1. The total monthly coating usage in emissions units R010, R011, R012, R013, and R014 shall not exceed 920.0 gallons.

## **II. Operational Restrictions (continued)**

2. The total monthly usage of cleanup material in emissions units R010, R011, R012, R013, and R014 shall not exceed 69.0 gallons.
3. The permittee shall not operate more than two upflush room coaters (R010, R011, R012, R013, or R014) at any time.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for emissions units R010, R011, R012, R013, and R014:
  - a. the actual coating time for each emissions unit;
  - b. the duration of time during which more than two emissions units (R010, R011, R012, R013, or R014) operate at one time, in hours;
  - c. the name and identification of each coating and cleanup material as applied;
  - d. the OC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - e. the OC content of each cleanup material, in pounds per gallon, as applied; and
  - f. the number of gallons of each coating, excluding water and exempt solvents, and each cleanup material as applied.
2. The permittee shall collect and record the following information each month for emissions units R010, R011, R012, R013, and R014 combined:
  - a. the total number of gallons of coating, excluding water and exempt solvents, as applied;
  - b. the total number of gallons of cleanup materials, as applied;
  - c. the total OC emissions from coating and cleanup operations, in tons; and
  - d. the rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials, in tons.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of each day during which more than two emissions units (R010, R011, R012, R013, and R014) operated at one time;
  - b. any exceedences of the coating OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - c. any exceedences of the cleanup material OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - d. any exceedences of the monthly OC emission limitation for emissions units R010, R011, R012, R013, and R014;
  - e. any exceedences of the combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
  - 1.a **Emission Limitation -**  
The total combined OC emission rate from any two coaters (R010, R011, R012, R013 and R014, combined) shall not exceed 30.3 pounds per hour.  
  
Applicable Compliance Method -  
The hourly emission limitation was developed by multiplying the maximum hourly coating throughput for any two coaters (R010, R011, R012, R013, and R014), of 5.0 gallons per hour by the maximum OC content of 6.06 pounds per gallon (PTI application 01-2780 submitted 7/90).  
  
If required, the permittee shall demonstrate compliance with this emission limitation by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.
  - 1.b **Emission Limitation -**  
OC emissions from emissions units R010, R011, R012, R013, and R014 shall not exceed 3.02 tons per month.  
  
Applicable Compliance Method -  
Compliance shall be based on the record keeping in Section A.III.2.
  - 1.c **Emission Limitation -**  
The OC content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.  
  
Applicable Compliance Method -  
Compliance shall be based on the record keeping in Section A.III.1.
  - 1.d **Emission Limitation -**  
The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.  
  
Applicable Compliance Method -  
Compliance shall be based on the record keeping in Section A.III.1.
  - 1.e **Emission Limitation -**  
The combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per year.  
  
Applicable Compliance Method -  
Compliance shall be based on the record keeping in Section A.III.2.
2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Director may require that USEPA Method 24 be used to determine the OC contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## VI. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.III.2.d. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

**VI. Miscellaneous Requirements (continued)**

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.IV.1.e. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #11 - Nitro coating		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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 still 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.).

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush room Coater (R013)

**Activity Description:** Nitro coating - upflush room coater #12 OEPA ID R013

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #12 - Nitro coating	OAC rule 3745-31-05(A)(3) (PTI 01-2780)	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-31-05(D) (PTI 01-2780)	See A.I.2.c through A.I.2.f and A.II.1 and A.II.2 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The organic compound (OC) content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.
- 2.c The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.
- 2.d The combined OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per rolling, 12-month period.
- 2.e The total combined OC emission rate from any two coaters (R010, R011, R012, R013, and R014 combined) shall not exceed 30.3 pounds per hour.

The pound(s) per hour emission limitation reflects the potential to emit for these emissions units based upon the maximum hourly coating throughputs for any two coaters combined using the coating with the highest OC content. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with this emission limitation.

- 2.f OC emissions from emissions units R010, R011, R012, R013, and R014, combined shall not exceed 3.02 tons per month. OC emissions from cleanup materials shall be included in determining compliance with the monthly OC emission limitation.

##### II. Operational Restrictions

1. The total monthly coating usage in emissions units R010, R011, R012, R013, and R014 shall not exceed 920.0 gallons.

## **II. Operational Restrictions (continued)**

2. The total monthly usage of cleanup material in emissions units R010, R011, R012, R013, and R014 shall not exceed 69.0 gallons.
3. The permittee shall not operate more than two upflush room coaters (R010, R011, R012, R013, or R014) at any time.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for emissions units R010, R011, R012, R013, and R014:
  - a. the actual coating time for each emissions unit;
  - b. the duration of time during which more than two emissions units (R010, R011, R012, R013, or R014) operate at one time, in hours;
  - c. the name and identification of each coating and cleanup material as applied;
  - d. the OC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - e. the OC content of each cleanup material, in pounds per gallon, as applied; and
  - f. the number of gallons of each coating, excluding water and exempt solvents, and each cleanup material as applied.
2. The permittee shall collect and record the following information each month for emissions units R010, R011, R012, R013, and R014 combined:
  - a. the total number of gallons of coating, excluding water and exempt solvents, as applied;
  - b. the total number of gallons of cleanup materials, as applied;
  - c. the total OC emissions from coating and cleanup operations, in tons; and
  - d. the rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials, in tons.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of each day during which more than two emissions units (R010, R011, R012, R013, and R014) operated at one time;
  - b. any exceedences of the coating OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - c. any exceedences of the cleanup material OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - d. any exceedences of the monthly OC emission limitation for emissions units R010, R011, R012, R013, and R014;
  - e. any exceedences of the combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## V. Testing Requirements

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

- 1.a Emission Limitation -  
The total combined OC emission rate from any two coaters (R010, R011, R012, R013 and R014, combined) shall not exceed 30.3 pounds per hour.

Applicable Compliance Method -

The hourly emission limitation was developed by multiplying the maximum hourly coating throughput for any two coaters (R010, R011, R012, R013, and R014), of 5.0 gallons per hour by the maximum OC content of 6.06 pounds per gallon (PTI application 01-2780 submitted 7/90).

If required, the permittee shall demonstrate compliance with this emission limitation by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

- 1.b Emission Limitation -  
OC emissions from emissions units R010, R011, R012, R013, and R014 shall not exceed 3.02 tons per month.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

- 1.c Emission Limitation -  
The OC content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.d Emission Limitation -  
The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.1.

- 1.e Emission Limitation -  
The combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per year.

Applicable Compliance Method -

Compliance shall be based on the record keeping in Section A.III.2.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Director may require that USEPA Method 24 be used to determine the OC contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## VI. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.III.2.d. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

**VI. Miscellaneous Requirements (continued)**

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.IV.1.e. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #12 - Nitro coating		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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.).

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Upflush room Coater (R014)

**Activity Description:** Nitro coating - upflush room coater #13 OEPA ID R014.

#### A. State and Federally Enforceable Section

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #13 - Nitro coating	OAC rule 3745-31-05(A)(3) (PTI 01-2780)	See A.I.2.b below.
	OAC rule 3745-21-07(G)	See A.I.2.a below.
	OAC rule 3745-31-05(D) (PTI 01-2780)	See A.I.2.c through A.I.2.f and A.II.1 and A.II.2 below.

##### 2. Additional Terms and Conditions

- 2.a To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b The organic compound (OC) content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.
- 2.c The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.
- 2.d The combined OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per rolling, 12-month period.
- 2.e The total combined OC emission rate from any two coaters (R010, R011, R012, R013, and R014 combined) shall not exceed 30.3 pounds per hour.

The pound(s) per hour emission limitation reflects the potential to emit for these emissions units based upon the maximum hourly coating throughputs for any two coaters combined using the coating with the highest OC content. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with this emission limitation.

- 2.f OC emissions from emissions units R010, R011, R012, R013, and R014, combined shall not exceed 3.02 tons per month. OC emissions from cleanup materials shall be included in determining compliance with the monthly OC emission limitation.

##### II. Operational Restrictions

1. The total monthly coating usage in emissions units R010, R011, R012, R013, and R014 shall not exceed 920.0 gallons.

## **II. Operational Restrictions (continued)**

2. The total monthly usage of cleanup material in emissions units R010, R011, R012, R013, and R014 shall not exceed 69.0 gallons.
3. The permittee shall not operate more than two upflush room coaters (R010, R011, R012, R013, or R014) at any time.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for emissions units R010, R011, R012, R013, and R014:
  - a. the actual coating time for each emissions unit;
  - b. the duration of time during which more than two emissions units (R010, R011, R012, R013, or R014) operate at one time, in hours;
  - c. the name and identification of each coating and cleanup material as applied;
  - d. the OC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - e. the OC content of each cleanup material, in pounds per gallon, as applied; and
  - f. the number of gallons of each coating, excluding water and exempt solvents, and each cleanup material as applied.
2. The permittee shall collect and record the following information each month for emissions units R010, R011, R012, R013, and R014 combined:
  - a. the total number of gallons of coating, excluding water and exempt solvents, as applied;
  - b. the total number of gallons of cleanup materials, as applied;
  - c. the total OC emissions from coating and cleanup operations, in tons; and
  - d. the rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials, in tons.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of each day during which more than two emissions units (R010, R011, R012, R013, and R014) operated at one time;
  - b. any exceedences of the coating OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - c. any exceedences of the cleanup material OC content limitation for emissions units R010, R011, R012, R013, and R014;
  - d. any exceedences of the monthly OC emission limitation for emissions units R010, R011, R012, R013, and R014;
  - e. any exceedences of the combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## V. Testing Requirements

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

- 1.a **Emission Limitation -**  
The total combined OC emission rate from any two coaters (R010, R011, R012, R013 and R014, combined) shall not exceed 30.3 pounds per hour.

**Applicable Compliance Method -**

The hourly emission limitation was developed by multiplying the maximum hourly coating throughput for any two coaters (R010, R011, R012, R013, and R014), of 5.0 gallons per hour by the maximum OC content of 6.06 pounds per gallon (PTI application 01-2780 submitted 7/90).

If required, the permittee shall demonstrate compliance with this emission limitation by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

- 1.b **Emission Limitation -**  
OC emissions from emissions units R010, R011, R012, R013, and R014 shall not exceed 3.02 tons per month.

**Applicable Compliance Method -**

Compliance shall be based on the record keeping in Section A.III.2.

- 1.c **Emission Limitation -**  
The OC content of each coating, excluding water and exempt solvents, employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.06 pounds per gallon.

**Applicable Compliance Method -**

Compliance shall be based on the record keeping in Section A.III.1.

- 1.d **Emission Limitation -**  
The OC content of each cleanup material employed in emissions units R010, R011, R012, R013, and R014 shall not exceed 6.8 pounds per gallon.

**Applicable Compliance Method -**

Compliance shall be based on the record keeping in Section A.III.1.

- 1.e **Emission Limitation -**  
The combined rolling, 12-month summation of the OC emission rate for all coatings and cleanup materials from emissions units R010, R011, R012, R013, and R014 shall not exceed 36.24 tons per year.

**Applicable Compliance Method -**

Compliance shall be based on the record keeping in Section A.III.2.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Director may require that USEPA Method 24 be used to determine the OC contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## VI. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.III.2.d. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

**VI. Miscellaneous Requirements (continued)**

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 01-2780, issued on 10/28/92: Section A.IV.1.e. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
upflush room coater #13 - Nitro coating		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. 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.).

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. 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**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Downflush coater #16 (R015)

**Activity Description:** Downflush coater # 16 for fluorescent lamp manufacturing with dryer and bulb wash; 10.8 mmBtu/hr

#### A. State and Federally Enforceable Section

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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #16 with 10.8 mmBtu/hr drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-4603)	Particulate emissions shall not exceed 0.22 pound per hour.
		Sulfur dioxide emissions shall not exceed 0.006 pound per hour.
		Nitrogen oxides emissions shall not exceed 1.03 pounds per hour.
		Carbon monoxide emissions shall not exceed 0.21 pound per hour.
		Volatile organic compound emissions shall not exceed 1.41 pounds per hour.
		Ammonia emissions shall not exceed 2.56 pounds per hour.
		Monoethanolamine (MEA) emissions shall not exceed 1.40 pounds per hour.
		The requirements of this rule also include compliance with OAC rule 3745-17-07(A).
		See A.I.2.b through A.I.2.d below. See A.I.2.a below.
		The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.	
	OAC rule 3745-21-07(G)	
	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	
	OAC rule 3745-17-07(A)	

## **2. Additional Terms and Conditions**

- 2.a** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.b** The permittee shall maintain tight fitting covers on the coating mixing tanks except that no hose opening shall have a diameter more than 1.5 inches greater than the outside diameter of the hose to be situated in the opening.

- 2.c** The permittee shall use water-based coatings at all times this emissions unit is in operation.

"Water-based coatings" shall be defined as a material in which the water content of the volatile fraction is at least 95%, by weight.

- 2.d** The pound(s) per hour emission limitations are based on the emissions unit's potential to emit. Therefore, additional monitoring, record keeping and reporting requirements are not necessary to ensure compliance with these emission limitations.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

## **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

## **V. Testing Requirements**

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

- 1.a** Emission Limitation -  
Particulate emissions shall not exceed 0.22 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 7.6 lbs PE/mm<sup>3</sup>.ft. (AP-42, 1.4-5, 1998) by the maximum dryer throughput of 10,281 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## V. Testing Requirements (continued)

- 1.b** Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 0.6 lb SO<sub>2</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 10,281 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- 1.c** Emission Limitation -  
Nitrogen oxides emissions shall not exceed 1.03 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NO<sub>x</sub>/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 10,281 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- 1.d** Emission Limitation -  
Carbon monoxide emissions shall not exceed 0.21 pound per hour.

Applicable Compliance Method -

Compliance may be demonstrated by multiplying the emission factor for natural gas combustion of 84 lbs CO/mmcu.ft. (AP-42, 1998) by maximum dryer throughput of 10,281 cu.ft./hr.

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
Volatile organic compound emissions shall not exceed 1.41 pounds per hour.

Applicable Compliance Method -

Compliance shall be demonstrated by summing the maximum VOC emissions from natural gas combustion and the coating operation.

The VOC emissions from natural gas combustion may be determined by multiplying the emission factor for natural gas combustion of 5.5 lbs VOC/mmcu.ft. (AP-42, 1998) by the maximum dryer throughput of 10,281 cu.ft./hr.

The VOC emissions from the coating operation may be determined by multiplying the maximum usage of the primary coating (112.1 gals/hr) by the primary coating's maximum VOC content of 0.449 lb VOC/gal. Then multiplying the maximum usage of the secondary coating (0.044 gal/hr) by the secondary coating's maximum VOC content of 3.94 lbs/gal and summing the two emission rates (PTI application 01-4603, submitted 7/93).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the volatile organic compound contents of the coatings. The Director may require that USEPA Method 24 be used to determine the volatile organic compound contents of the coatings. If, pursuant to section 4.3 of Method 24, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## **V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
Ammonia emissions shall not exceed 2.56 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the ammonia containing coating (112.1 gals/hr) by the ammonia content (0.825 lbs/gal) (PTI application 01-4603, submitted 7/93).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 206.

- 1.g** Emission Limitation -  
Monoethanolamine (MEA) emissions shall not exceed 1.40 pounds per hour.

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum usage of the MEA containing coating (23.3 gals/hr) by the MEA content (0.06 lbs/gal) (PTI application 01-4603, submitted 7/93).

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18.

- 1.h** Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
downflush coater #15 with 10.4 mmBtu/hr drying oven		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. Physical changes to or changes in the method of operation of the emissions unit 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 still 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; 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.).
2. 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). 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.

Facility Name: **G. E. Lighting, Inc. - Circleville Lamp Plant**

Facility ID: **01-65-01-0026**

Emissions Unit: **Downflush coater #16 (R015)**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

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