State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

**TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

08/30/04

**CERTIFIED MAIL**

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

14-31-01-0054
Lanxess Corporation Addyston, OH Plant
TERRY A. HARRIS
356 THREE RIVERS PARKWAY
ADDYSTON, OH 45001-0039

Dear TERRY A. HARRIS:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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

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

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

If you have any questions, please contact Hamilton County Dept. of Environmental Services.

Sincerely,

Michael W. Ahern

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

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU

State of Ohio Environmental Protection Agency

# FINAL TITLE V PERMIT

| Issue Date: **08/30/04** | Effective Date: **09/20/04** | Expiration Date: **09/20/09** |
|---|---|---|

This document constitutes issuance of a Title V permit for Facility ID: 14-31-01-0054 to:
Lanxess Corporation Addyston, OH Plant
356 THREE RIVERS PARKWAY
ADDYSTON, OH 45001-0039

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

B002 (BOILER #5)
BOILER

B004 (BOILER #4)
BOILER

B005 (THERMINOL HEATER)
HEATER

B006 (BOILER #7)
BOILER

B007 (BOILER #8)
BOILER

F001 (COAL/ASH HANDLING)
FUGITIVE DUST

J001 (STYRENE LOADING)
RAW MATERIAL LOADING

P001 (ABS #1 POLY)
PROCESS UNIT

P004 (D#1 POLY)
PROCESS UNIT

P010 (ABS #1 DRYING)
PROCESS UNIT

P015 (D#2 POLY)
PROCESS UNIT

P021 (SAN #1A POLY)
PROCESS UNIT

P022 (SAN #1B POLY)
PROCESS UNIT

P029 (CMPD #8)
PROCESS UNIT

P030 (CMPD #9)
PROCESS UNIT

P031 (CMPD #10)
PROCESS UNIT

P035 (CMPD #14)
PROCESS UNIT

P036 (ABS #3 DRYING)
PROCESS UNIT

P039 (SAN #1A DRYING)
PROCESS UNIT

P040 (SAN #1B DRYING)
PROCESS UNIT

P042 (D #3 POLY)
PROCESS UNIT

P047 (D#6 POLY)
PROCESS UNIT

P048 (COPOLY PROCESS)
PROCESS UNIT

P049 (WWTP GENERATOR)
BACKUP ELECTRICITY GENERATOR

P901 (B8 PELLET HANDLING)
PELLET HANDLING

P902 (B9 PELLET HANDLING)
PELLET HANDLING

P903 (B30 PELLET HANDLING)
PELLET HANDLING

T003 (A-8 TANK)
TANK

T004 (A-9 TANK)
TANK

T005 (A-13 TANK)
TANK

T006 (A-15 TANK)
TANK

T007 (C-1 TANK)
TANK

T008 (C-2 TANK)
TANK

T009 (C-3 TANK)
TANK

T011 (C-5 TANK)
TANK

T012 (C-6 TANK)
TANK

T013 (C-7 TANK)
TANK

T014 (C-8 TANK)
TANK

T016 (B9 SPENT MON)
TANK

T020 (A-14 TANK)
TANK

T021 (A-21 TANK)
TANK

T022 (A-24 TANK)
TANK

T023 (A-25 TANK)
TANK

T024 (B9 MEK)
TANK

T025 (A-28 TANK)
TANK

T026 (B4 MA TANK)
TANK

T027 (B30 MEK TANK)
TANK

T028 (MIN OIL TANK)
TANK

T031 (B30 SM TANK)
TANK

T036 (A-17 TANK )
TANK

T037 (A-16 TANK)
TANK -INORGANIC LIQUID

T044 (SEC BUOH TANK)
TANK

T045 (IBA TANK)
TANK

T050 (T16-1 FUEL OIL TANK)
TANK

T051 (T16-2 FUEL OIL TANK)
TANK

T054 (B30 EB TANK)
RAW MATERIAL STORAGE TANK

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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Rd
Cincinnati, OH 45219-2660
(513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

# PART I - GENERAL TERMS AND CONDITIONS

## *A. State and Federally Enforceable Section*

### 1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, 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.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

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.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

**2. Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

**3. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

**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.
*(Authority for term: OAC rule 3745-77-07(A)(5))*

**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.
*(Authority for term: OAC rule 3745-77-07(A)(6))*

**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, in accordance with A.10 below. 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.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**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.
*(Authority for term: OAC rule 3745-77-07(A)(8))*

**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.
*(Authority for term: OAC rule 3745-77-07(A)(9))*

**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.
*(Authority for term: OAC rule 3745-77-07(A)(10))*

**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 (18) 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.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**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.

*(Authority for term: OAC rule 3745-77-07(B))*

**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 Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA 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.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**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.

*(Authority for term: OAC rule 3745-77-07(F))*

**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).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**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.
*(Authority for term: OAC rule 3745-77-07(G))*

**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 of the U.S. EPA. 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.

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.
*(Authority for term: OAC rule 3745-77-07(I))*

**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.
*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**19. 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.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. 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.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

## B. *State Only Enforceable Section*

### 1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

### 2. 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.

### 3. 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.

### 4. 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).

### 5. 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.

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

# Part II - Specific Facility Terms and Conditions

## A. State and Federally Enforceable Section

**1.** The following emissions units are currently subject to the requirements in 40 CFR Part 63, Subpart JJJ identified in sections II.A.2 through II.A.7 of this permit:

P001;
P004;
P010;
P015;
P021;
P022;
P036;
P039;
P040;
P042;
P047;
T003;
T004;
T005;
T006;
T007;
T011;
T012;
T013;
T014;
T016;
T022;
T024;
T027;
T031; and
T054.

**2.** A number of terms and conditions contained in this Title V Operating Permit for Lanxess Corporation, OEPA Premise Number 1431010054, are based upon:

**2.a** the most recent Process Vent, Wastewater, and Storage Tank group determinations for the facility's 40 CFR 63, Subpart JJJ affected sources (as defined in 40 CFR 63.1310) at the time of permit issuance, and

**2.b** the respective Process Vent, Wastewater, Storage tank, Heat Exchange System, and Equipment Leak emission control, monitoring, and recordkeeping methods that were being utilized by the permittee at the time of permit issuance. This permit does not prohibit the future use of alternative 40 CFR 63 Subpart JJJ emission control, monitoring, and/or recordkeeping methodologies by the permittee provided that the methodology is listed as an acceptable compliance alternative by the standard. Should a change occur to an existing Subpart JJJ affected source or its emission control, monitoring, and/or recordkeeping methodology is modified during the life of this permit, the permittee shall comply with the applicable requirements specified in 40 CFR 63.1310(i), 63.1335(e)(6), and 63.1335(h).

**2.c** Except as provided in 40 CFR 63.1313(b) through (d), after a change in determination status for an affected source, the permittee shall comply with the applicable provisions of the following:

i. 40 CFR 63.1314 for storage vessels;
ii. 40 CFR 63.1315, or 40 CFR 63.1316 through 63.1320, as appropriate, for continuous process vents;
iii. 40 CFR 63.1321 for batch process vents;
iv. 40 CFR 63.1328 for heat exchange systems;
v. 40 CFR 63.1329 for process contact cooling towers;
vi. 40 CFR 63.1330 for wastewater;
vii. 40 CFR 63.1331 for equipment leaks;
viii. 40 CFR 63.1333 for additional test methods and procedures;
ix. 40 CFR 63.1334 for parameter monitoring levels and excursions; and
x. 40 CFR 63.1335 for general recordkeeping and reporting requirements.

## A. State and Federally Enforceable Section (continued)

**2.d** Heat Exchange Provisions

The permittee's 40 CFR 63, Subpart JJJ affected emissions units shall comply with the heat exchange system provisions of 40 CFR 63.1328. 40 CFR 63.1328 requires the permittee to comply with 40 CFR 63.104, with the differences noted in 40 CFR 63.1328(c) through (h).

[40 CFR 63.1328(a)]

Unless one or more of the conditions specified in paragraphs (a)(1) through (a)(6) of 40 CFR 63.104 are met, the permittee shall monitor each heat exchange system used to cool process equipment in a TPPU, except for TPPUs meeting the conditions specified in 40 CFR 63.1310(b), according to the provisions in either paragraph (b) or (c) 40 CFR 63.104. Whenever a leak is detected, the permittee shall comply with the requirements in paragraph (d) of 40 CFR 63.104.

[40 CFR 63.104(a)]

**2.e** Should the permittee elect to comply with the requirements of paragraph (a) of 40 CFR 63.104 by monitoring the cooling water for the presence of one or more organic hazardous air pollutants or other representative substances whose presence in cooling water indicates a leak, the requirements specified in paragraphs (b)(1) through (b)(6) of 40 CFR 63.104 shall apply. The cooling water shall be monitored for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system.

[40 CFR 63.104(b)]

**2.f** Should the permittee elect to comply with the requirement of paragraph (a) of 40 CFR 63.104 by monitoring using a surrogate indicator of heat exchange system leaks, the requirements specified in paragraphs (c)(1) through (c)(3) of 40 CFR 63.104 shall apply. Surrogate indicators that could be used to develop an acceptable monitoring program are ion specific electrode monitoring, pH, conductivity or other representative indicators.

[40 CFR 63.104(c)]

**2.g** If a leak is detected according to the criteria of paragraph (b) or (c) of 40 CFR 63.104 the permittee shall comply with the requirements in paragraphs (d)(1) and (d)(2) of 40 CFR 63.104, except as provided in paragraph (e) of 40 CFR 63.104.

[40 CFR 63.104(d)

**2.h** Delay of repair of heat exchange systems for which leaks have been detected is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions in paragraph (e)(1) or (e)(2) of 40 CFR 63.104 is met. All time periods in paragraphs (e)(1) and (e)(2) of 40 CFR 63.104 shall be determined from the date when the permittee determines that delay of repair is necessary.

[40 CFR 63.104(e)]

## A. State and Federally Enforceable Section (continued)

**2.i** Records for Heat Exchange Provisions.

The permittee shall retain the records identified in paragraphs (f)(1) through (f)(4) of 40 CFR 63.104 as specified in 40 CFR 63.103(c)(1). These requirements are specified below:

i. monitoring data required by 40 CFR 63.104 indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination;

ii. records of any leaks detected by procedures subject to paragraph (c)(2) of 40 CFR 63.104 and the date the leak was discovered;

iii. the dates of efforts to repair leaks; and

iv. the method or procedure used to confirm repair of a leak and the date repair was confirmed.

[40 CFR 63.104(f)(1)]

**2.j** Delay of Repair.

If the permittee invokes the delay of repair provisions for a heat exchange system, the following information shall be submitted in the next semi-annual periodic report required by 40 CFR 63.1335(e)(6). If the leak remains unrepaired, the information shall also be submitted in each subsequent periodic report, until repair of the leak is reported.

i. The permittee shall report the presence of the leak and the date that the leak was detected.

ii. The permittee shall report whether or not the leak has been repaired.

iii. The permittee shall report the reasons for delay of repair. If delay of repair is invoked due to the reasons described in paragraph (e)(2)(i) of 40 CFR 63.104, documentation of emissions estimates must also be submitted.

iv. If the leak remains unrepaired, the permittee shall report the expected date of repair.

v. If the leak is repaired, the permittee shall report the date the leak was successfully repaired.

[40 CFR 63.104(f)(2)]

**3.** Start Up, Shutdown, Malfunction Plan (SSM)

The permittee shall develop and implement a written start-up, shutdown, and malfunction plan as specified in 40 CFR 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with the requirements of 40 CFR Part 63, Subpart A. Inclusion of Group 2 emission points is not required, unless these points are included in an emissions average. For equipment leaks (subject to 40 CFR 63.1331), the start-up, shutdown, and malfunction plan requirement is limited to control devices and is optional for other equipment. For equipment leaks, the start-up, shutdown, and malfunction plan may include written procedures that identify conditions that justify a delay of repair. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of 40 CFR Part 63, Subpart A may be included in the start-up, shutdown, and malfunction plan only if the permittee has demonstrated to the Administrator, through the Precompliance Report or a supplement to the Precompliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The affected source shall keep the start-up, shutdown, and malfunction plan on-site. Records associated with the plan shall be kept as specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(C) of 40 CFR 63.1335. Reports related to the plan shall be submitted as specified in paragraph (b)(1)(ii) of 40 CFR 63.1335.

[40 CFR 63.1335(b)(1)]

## A. State and Federally Enforceable Section (continued)

**3.a** The purpose of the startup, shutdown, and malfunction plan is to:

i. Ensure that, during start-ups, shutdowns, and malfunctions when the emission limitations of 40 CFR Part 63, Subpart JJJ do not apply pursuant to 40 CFR 63.1310 (j)(1) through (j)(3), the permittee shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this section, the term "excess emissions" means emissions greater than those allowed by the emissions limitation which would apply during operational periods other than start-up, shutdown, and malfunction. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available.

ii. Ensure that the permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants.

iii. Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

**3.b** During periods of startup, shutdown, and malfunction, the permittee shall operate and maintain such source (including associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of 40 CFR 63.6.

**3.c** The permittee shall keep the records specified in 40 CFR 63.1335 (b)(1)(i)(A) through (b)(1)(i)(C).

(i) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or control devices or recovery devices or continuous monitoring systems used to comply with 40 CFR Part 63, Subpart JJJ during which excess emissions (as defined in 40 CFR 63.1310(j)(4)) occur.

(ii) For each start-up, shutdown, or malfunction during which excess emissions (as defined in 40 CFR 63.1310(j)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a control device to a backup control device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up shutdown, and malfunction plan for the event.

(iii) Records specified in 40 CFR 63.1335 (b)(1)(i)(A) through (b)(1)(i)(B) are not required if they pertain solely to Group 2 emission points that are not included in an emissions average.

**3.d** For the purposes of 40 CFR Part 63, Subpart JJJ, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under 40 CFR 63.1335 (e)(6) instead of being submitted on the schedule specified in 40 CFR 63.10(d)(5)(i). The reports shall include the information specified in 40 CFR 63.10(d)(5)(i).

[40 CFR 63.1335 (b)(1)(ii)]

## A. State and Federally Enforceable Section (continued)

**3.e** The permittee shall maintain at its facility a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Director. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in section II.A.3.i, the permittee shall maintain at the facility each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and shall make each such previous version available for inspection and copying by the Director for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the facility ceases operation or is otherwise no longer subject to the provisions of 40 CFR Part 63, Subpart JJJ, the permittee shall retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Director. The Director may at any time request in writing that the permittee submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the facility or in the possession of the permittee. Upon receipt of such a request, the permittee shall promptly submit a copy of the requested plan (or a portion thereof) to the Director. The Director shall request that the permittee submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. The permittee may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Director in an electronic format.

**3.f** If the permittee claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act, as defined in 40 CFR 63.2, or 40 CFR 2.301, the material which is claimed as confidential shall be clearly designated in the submission.

**3.g** To satisfy the requirements of section II.A.3 to develop a startup, shutdown, and malfunction plan, the permittee may use the affected source's Standard Operating Procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of 40 CFR 63.6 (e) and are made available for inspection or submitted when requested by the Director.

**3.h** Based on the results of a determination made under paragraph 40 CFR 63.1335 (e)(1)(i), the Director may require that the permittee make changes to the startup, shutdown, and malfunction plan for the facility. The Director shall require appropriate revisions to a startup, shutdown, and malfunction plan, if the Director finds that the plan:

(i) does not address a startup, shutdown, or malfunction event that has occurred;

(ii) fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by 40 CFR 63.6 (e)(1)(i);

(iii) does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(iv) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR 63.2.

[40 CFR 63.6 (e)(3)(vii)]

## A. State and Federally Enforceable Section (continued)

**3.i** The permittee may periodically revise the startup, shutdown, and malfunction plan for the facility as necessary to satisfy the requirements of this permit or to reflect changes in equipment or procedures at the facility. Unless the Director provides otherwise, the permittee may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Director. However, each such revision to a startup, shutdown, and malfunction plan shall be reported in the semiannual report required by 40 CFR 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the permittee developed the plan, the permittee shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this permit, the revised plan shall not take effect until after the permittee has provided a written notice describing the revision to the Director.

[40 CFR 63.6 (e)(3)(viii)]

**4.** Process Wastewater Provisions

The permittee's 40 CFR 63, Subpart JJJ affected emissions units shall comply with the following requirements, with the differences and exceptions noted in 40 CFR 63.1330(b)(1) through (b)(22), (c), (d) and (e):

40 CFR 63.132 Process wastewater provisions - general;
40 CFR 63.133 Process wastewater provisions - wastewater tanks;
40 CFR 63.134 Process wastewater provisions - surface impoundments;
40 CFR 63.135 Process wastewater provisions - containers;
40 CFR 63.136 Process wastewater provisions - individual drain systems;
40 CFR 63.137 Process wastewater provisions - oil-water separators;
40 CFR 63.138 Process wastewater provisions - performance standards for treatment processes managing Group 1 wastewater streams and/or residuals removed from Group 1 wastewater streams;
40 CFR 63.139 Process wastewater provisions - control devices;
40 CFR 63.140 Process wastewater provisions - delay of repair;
40 CFR 63.143 Process wastewater provisions - inspections and monitoring of operations;
40 CFR 63.144 Process wastewater provisions - test methods and procedures for determining applicability and Group 1/Group 2; determinations (determining which wastewater streams require control)
40 CFR 63.145 Process wastewater provisions - test methods and procedures to determine compliance;
40 CFR 63.146 Process wastewater provisions - reporting;
40 CFR 63.147 Process wastewater provisions - recordkeeping;
40 CFR 63.148 Leak inspection provisions; and
40 CFR 63.149 Control requirements for certain liquid streams in open systems within a chemical manufacturing process unit.

[40 CFR Part 63.1330(b)]

## A. State and Federally Enforceable Section (continued)

**4.a** The following Group 1 wastewater streams and residuals are currently subject to 40 CFR 63.1330 treatment requirements:

| Wastewater Stream | Emissions Unit | Stream ID |
|---|---|---|
| P004 RR purge | P004 | WS-P004RR |
| P004/P015 Vent Condenser | P004/15 | WS-P4/15VC |
| P015 RR purge | P015 | WS-P015RR |
| P021 Stripping | P021 | WS-P021STS |
| P022 Stripping | P022 | WS-P022STS |
| P042 Vacuum jets | P042 | WS-P042VJ |
| P042/47 Vent Scrubber | P042/47 | WS-B30VS |
| P042/47 Barometric sump | P042/47 | WS-B30BS |
| P047 Vacuum jets | P047 | WS-P047VJ |
| B30 OT residual | P042/P047 | R- B30OT |
| B9 OT residual | P004/P015 | R- B9OT |
| . | P021/P022 | |
| Steam Stripper residual | P042/P047 | R- SSC |
| . | P004/P015 | |
| . | P021/P022 | |

Stream ID # WS-P001EKT (emissions unit P001 E KT Auto Clean Drain) shall remain exempt from 40 CFR 63.1330 wastewater requirements provided that it continues to be recycled to emissions units P010 and P036 for product recovery.

**4.b** The permittee has currently elected to control Group 1 Streams ID numbers WS-P004RR, WS-P4/P15VC, WS-P015RR, WS-P021STS, WS-P022STS, WS-P042VJ, WS-B30VS, WS-B30BS, and WS-P047VJ using the 40 CFR 63.138(d) design steam stripper option.

**4.c** The permittee shall operate its design steam stripper in accordance with requirements sections II.A.4.c.i through II.A.4.c.vi below:

i. minimum active column height of 5 meters;

ii. countercurrent flow configuration with a minimum of 10 actual trays;

iii. minimum steam flow rate of 0.04 kilograms of steam per liter of wastewater feed within the column;

iv. minimum wastewater feed temperature to the steam stripper of 95 degrees centigrade, or minimum column operating temperature of 95 degrees centigrade;

v. maximum liquid loading of 67,100 liters per hour per square meter; and

vi. operate at nominal atmospheric pressure.

[40 CFR 63.138(d)]

## A. State and Federally Enforceable Section (continued)

**4.d** As required in 40 CFR 63.143(1)(b), each design steam stripper used to comply with 40 CFR 63.138 shall comply with the monitoring requirements specified in Table 12 of 40 CFR Part 63, Subpart G. These requirements are as follows:

i. continuously monitor the steam flow rate by use of an integrated steam flow monitoring device with a continuous recorder;

ii. continuously monitor the wastewater feed mass flow rate by use of a flow meter installed at stripper influent and equipped with a continuous recorder; and

iii. continuously monitor the wastewater feed temperature with a liquid temperature monitoring device installed at stripper influent and equipped with a continuous recorder; or continuously monitor the stripper column temperature with a temperature monitoring device equipped with a continuous recorder.

[40 CFR 63.143(b) and Table 12 of 40 CFR Part 63, Subpart G]

**4.e** Performance tests and design evaluations.

The design steam stripper option was elected to control Group 1 process waste water streams [40 CFR 138(d)]. Therefore, neither a design evaluation nor a performance test is required.

[40 CFR 63.138(J)(3)]

The permittee shall maintain a record of the information required by paragraphs II.A.4.b and II.A.4.c of this section as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).

[40 CFR 63.105(e)]

**4.f** The permittee shall submit as part of the next Periodic Report required by 40 CFR 63.1335(e) the results of each inspection required by 40 CFR 63.143(a) in which a control equipment failure was identified. Control equipment failure is defined for each waste management unit in 40 CFR 63.133 through 63.137. Each Periodic Report shall include the date of the inspection, identification of each waste management unit in which a control equipment failure was detected, description of the failure, and description of the nature of and date the repair was made.

[40 CFR 63.146(c)]

For each control device used to comply with 40 CFR 63.133 through 40 CFR 63.139 (the main duct boilers and thermal oxidizer), the permittee shall submit as part of the Periodic Report required by 40 CFR 63.1335(e), the information specified in Table 20 of 40 CFR Part 63, Subpart G.

[40 CFR 63.146(e)]

**4.g** The permittee shall submit as part of the next Periodic Report required by 40 CFR 63.1335(e), the monitoring results for each operating day during which the daily average value of a continuously monitored parameter (the design steam stripper, the main duct boilers (Boilers 5 and 7 only) and the thermal oxidizer) is outside the range established in the Notification of Compliance Status or operating permit.

[40 CFR 63.146(d)]

## A. State and Federally Enforceable Section (continued)

**4.h** The following Group 1 wastewater management units currently exist:

UNIT ID: B9-TK
Description: fixed roof tank
Group 1 streams/residuals managed: WS-P004VJ, WS-P015VJ, WS-P004RR, WS-P015RR, WS-P4/15VC, WS-P021STS, WS-P022STS

UNIT ID: B9-OT
Description: oil/water separator venting to boilers
Group 1 streams/residuals managed: WS-P004VJ, WS-P015VJ, WS-P004RR, WS-P015RR, WS-P4/15VC, WS-P021STS, WS-P022STS, R-B9OT

UNIT ID: P4-SP
Description: fixed roof tank
Group 1 streams/residuals managed: WS-P004VJ

UNIT ID: P15-SP
Description: fixed roof tank
Group 1 streams/residuals managed: WS-P015VJ

UNIT ID: B30-TK
Description: fixed roof tank
Group 1 streams/residuals managed: WS-B30BS, WS-P042VJ, WS-P047VJ, WS-B30VS

UNIT ID: B30-OT
Description: oil/water separator venting to thermal oxidizer (TOX)
Group 1 streams/residuals managed: WS-B30BS, WS-P042VJ, WS-P047VJ, WS-B30VS, R-B30OT

UNIT ID: B30-BS
Description: fixed roof tank
Group 1 streams/residuals managed: WS-B30BS, WS-P042VJ, WS-P047VJ

UNIT ID: SS-EQTK
Description: fixed roof tank
Group 1 streams/residuals managed: WS-P004VJ, WS-P015VJ, WS-P004RR, WS-P015RR, WS-P4/15VC, WS-P021STS, WS-P022STS, WS-B30BS, WS-P042VJ, WS-P047VJ,WS-B30VS

UNIT ID: SS-D
Description: fixed roof tank venting to boilers (MDUCT)
Group 1 streams/residuals managed: R-SSC

UNIT ID: T031-TK
Description: fixed roof tank venting to boilers (MDUCT)
Group 1 streams/residuals managed: R-SSC, R-B30OT

UNIT ID: T016-TK
Description: fixed roof tank venting to boilers (MDUCT)
Group 1 streams/residuals managed: R-B9OT

## A. State and Federally Enforceable Section (continued)

**4.i** The permittee may elect to transfer a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream to an on-site treatment operation not owned or operated by the permittee or to an off-site treatment operation.

i. The permittee transferring the wastewater stream or residual shall:

(a) Comply with the provisions specified in 40 CFR 63.133 through 63.137 for each waste management unit that receives or manages a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream prior to shipment or transport.

(b) Include a notice with the shipment or transport of each Group 1 wastewater stream or residual removed from a Group 1 wastewater stream. The notice shall state that the wastewater stream or residual contains organic hazardous air pollutants that are to be treated in accordance with the provisions of 40 CFR Part 63, Subpart G. When the transport is continuous or ongoing (for example, discharge to a publicly-owned treatment works), the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment.

ii. The permittee may not transfer the wastewater stream or residual unless the transferee has submitted to the Director a written certification that the transferee will manage and treat any Group 1 wastewater stream or residual removed from a Group 1 wastewater stream received from a source subject to the requirements of 40 CFR Part 63, Subpart G in accordance with the requirements of either 40 CFR 63.133 through 63.147, or 40 CFR 63.102(b), or 40 CFR Part 63, Subpart D, if alternative emission limitations have been granted the transferor in accordance with those provisions. The certifying entity may revoke the written certification by sending a written statement to the Director and the permittee giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this section. Upon expiration of the notice period, the permittee may not transfer the wastewater stream or residual to the treatment operation.

iii. By providing this written certification to the Director, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph 40 CFR 63.132 (g)(2) with respect to any shipment of wastewater or residual covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the Director against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by the permittee.

iv. Written certifications and revocation statements, to the EPA from the transferees of wastewater or residuals shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the treater.

v. If the permittee transfers a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream in accordance with 40 CFR 63.132(g) shall keep a record of the notice sent to the treatment operator stating that the wastewater stream or residual contains organic hazardous air pollutants which are required to be managed and treated in accordance with the provisions of 40 CFR Part 63, Subpart G.

## A. State and Federally Enforceable Section (continued)

The following Group 1 wastewater residuals currently exist:

Residual ID: R-SSC
Description: Condensed organics removed by design steam stripper
Fate: The residual is collected in the steam stripper's decanter tank (SS-D) and transferred to the emissions unit T031 tank (T031-TK), where it is stored until shipped off-site for destruction at a RCRA permitted facility or incinerated on-site in emissions unit B004 (a Part 266 Permit Boiler). Emissions from the decanter and emissions unit T031are vented to the MDUCT control device.

Residual ID: R-B30OT
Description: Residuals generated from B30-OT Oil/Water separator
Fate: The residual is collected from the B30-OT Oil/Water separator and transferred to emissions unit T031 tank (T031-TK) where it is stored until shipped off-site for destruction at a RCRA permitted facility or incinerated on-site in emissions unit B004 (a Part 266 Permit Boiler). Emissions from T031 are vented to the MDUCT control device.

Residual ID: R-B9OT
Description: Residuals generated from B9-OT oil/water separator
Fate: The residual is collected from the B9-OT oil/water separator and transferred to emissions unit T016 tank (T016-TK) where it is stored until shipped off-site for destruction at a RCRA permitted facility or incinerated on-site in emissions unit B004 (a Part 266 Permit Boiler). Emissions from T016 are vented to the MDUCT control device.

**5.** Maintenance wastewater provisions.

The permittee's 40 CFR Part 63, Subpart JJJ affected emissions units shall comply with the requirements for maintenance wastewater in 40 CFR 63.105, with the differences noted in 40 CFR 63.1330(c).

[40 CFR 63.1330(b)]

**5.a** The permittee shall comply with the requirements of sections II.A.5.b through II.A.5.e for maintenance wastewaters containing those organic HAP's listed in Table 9 of Subpart G of 40 CFR 63.105, and that meet the definition of organic HAP in 40 CFR 63.1312, except for ethylene glycol which need not be considered.

[40 CFR 63.105(a)]

**5.b** The permittee shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:

i. specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities;

ii. specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and

iii. specify the procedures to be followed when clearing materials from process equipment.

[40 CFR 63.105(b)]

**5.c** The permittee shall modify and update the information required by section II.A.5.b as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.

[40 CFR 63.105(c)]

**5.d** The permittee shall implement the procedures described in sections II.A.5.b and II.A.5.c as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).

[40 CFR 63.105(d)]

## A. State and Federally Enforceable Section (continued)

**6.** The permittee's 40 CFR 63, Subpart JJJ affected sources shall comply with the requirements for equipment leaks in 40 CFR 63, Subpart H, with the differences noted in paragraphs (a)(1) through (a)(13) of 40 CFR 63.1331. These requirements only apply to the equipment items specified in 40 CFR 63.160(a) that operate in organic HAP service greater than or equal to 300 hours in a calendar year, and are not in vacuum service.

**6.a** Monitoring Requirements for Light Liquid Pumps.

The permittee shall comply with 40 CFR 63.163, Monitoring Requirements for Pumps in Light Liquid Organic HAP Service. The following is a summary of the requirements for pumps that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.163 (e) through (j). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Monitoring Frequency: Monthly

Leak Definition:

| | |
|---|---|
| Phase 1 | 10,000 parts per million or greater |
| Phase 2 | 5,000 parts per million or greater |
| Phase 3 | 5,000 parts per million or greater for pumps in polymerizing monomer service |
| . | 2,000 parts per million or greater for pumps in food/medical service |
| . | 1,000 parts per million or greater for pumps in other service |

See CFR 63.163(a)(1)(i) for definitions of Phase I, Phase II, and Phase III.

Test Method: Method 21 of 40 CFR Part 60, Appendix A. See 40 CFR 63.180, Test Methods and Procedures, for additional details.

In addition to the monthly monitoring above, the permittee shall check each pump by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

[40 CFR 63.163]

**6.b** Monitoring and Design Requirements for Compressors.

The permittee shall comply with 40 CFR 63.164, Monitoring and Design Requirements for Compressors in Organic HAP Service. The following is a summary of the requirements for compressors that don't qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.164 (h) through (i). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Compressors should be equipped with a seal system that includes a barrier fluid system that prevents leakage of process fluid to the atmosphere.

This seal shall be operated with:

i. the barrier fluid at a pressure greater than the compressor stuffing box pressure, or

ii. equipped with a degassing reservoir that is routed to a process or fuel gas system, or connected to a closed vent system to a control device that is in compliance with the closed vent system requirements, or

iii. equipped with a closed-loop system that purges the barrier fluid directly into a process stream

The barrier fluid cannot be in light liquid service and shall have a sensor that detects failure of the seal system, barrier fluid system, or both. The sensor shall be observed daily or shall be equipped with an alarm, unless the compressor is located within the boundary of an unmanned plant site.

The permittee shall determine what conditions (based on design) designate a failure of the seal system, barrier fluid system, or both. If either fails, it shall be considered a leak.

[40 CFR 63.164]

## A. State and Federally Enforceable Section (continued)

**6.c** Monitoring Requirements for Pressure Relief Devices in Gas/Vapor service.

The permittee shall comply with 40 CFR 63.165, Monitoring Requirements for Pressure Relief Devices in gas/vapor Organic HAP Service. The following is a summary of the requirements for pressure relief devices that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.165 (c) through (d). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Monitoring Frequency: Monitor within 5 days of a pressure release.

Standard: A reading less than 500 parts per million, except during pressure releases.

Method: Method 21 of 40 CFR Part 60 Appendix A. See 40 CFR 63.180, Test Methods and Procedures, for additional details.

[40 CFR 63.165]

**6.d** Monitoring Requirements for Sampling Connection Systems.

The permittee shall comply with 40 CFR 63.166, Monitoring Requirements for Sampling Connection Systems in Organic HAP Service. The following is a summary of the requirements for sampling connection systems that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.166(c). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Gases displaced during filling of the sample container are not required to be collected or captured.

Each closed-purge, closed-loop, or closed-vent system as required above shall:

i. return the purged process fluid directly to the process line; or

ii. collect and recycle the purged process fluid to a process; or

iii. be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of 40 CFR 63.172; or

iv. collect, store, and transport the purged process fluid to a system or facility identified in 40 CFR 63.166(b)(4)(i), (ii), or (iii).

In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 63.166(a) and (b).

[40 CFR 63.166]

**6.e** Requirements for Open-ended Valves and Lines.

The permittee shall comply with 40 CFR 63.167, Requirements for Open-ended Lines and Valves in Organic HAP Service. The following is a summary of the requirements for open-ended lines and valves that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.167(b). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or second valve.

[40 CFR 63.167]

## A. State and Federally Enforceable Section (continued)

**6.f** Monitoring Requirements for Valves in Gas/Vapor and Light Liquid Service.

The permittee shall comply with 40 CFR 63.168, Requirements for Valves in gas/vapor and Light Liquid Organic HAP Service. The following is a summary of the requirements for valves that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.168 (h) through (j ). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Monitoring Frequency:

During Phase I and II: Each valve shall be monitored quarterly.
During Phase III: Frequency based upon leak rate as calculated per 40 CFR 63.168(e).
Leak rate greater than 2%: monitor each valve once per month, or implement Quality Improvement Program and monitor quarterly.
Leak rate between 1% - 2%: monitor each valve quarterly.
Leak rate between 0.5 - 1%: monitor each valve semiannually.
Leak rate less than 0.5%: monitor each valve annually.

See 40 CFR 63.168(a)(1)(i) for definitions of Phase I, Phase II, and Phase III.

Leak Definition:

Phase I: 10,000 parts per million or greater
Phase II: 500 parts per million or greater
Phase III: 500 parts per million or greater

Method: Method 21 of 40 CFR Part 60, Appendix A. See 40 CFR 63.180, Test Methods and Procedures, for additional details.

[40 CFR 63.168]

**6.g** Monitoring Requirements for Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service; Instrumentation Systems and Pressure Relief Devices in Liquid Service.

The permittee shall comply with 40 CFR 63.169, Requirements for Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service; Instrumentation Systems and Pressure Relief Devices in Liquid Service. The following is a summary of the requirements for valves that do not qualify for an exemption under 40 CFR 63.162(b)(2). Refer to section II.A.6.n for additional information concerning this exemption.

Monitoring Frequency: Monitoring is only required when there is visual, audible, or olfactory evidence of a leak. Monitoring is required within 5 days of the date of detection.

Leak Definition:

10,000 parts per million or greater for agitators.
5,000 parts per million or greater for pumps handling polymerizing monomers.
2,000 parts per million or greater for pumps in food/medical service.
1,000 parts per million or greater for all other pumps.
500 parts per million or greater for valves, connectors, instrument systems, and pressure relief devices.

Method: Method 21of 40 CFR 60, Appendix A.
[40 CFR 63.169]

## A. State and Federally Enforceable Section (continued)

**6.h** Requirements for Surge Control Vessels and Bottoms Receivers.

The permittee shall comply with 40 CFR 63.170, Requirements for Surge Control Vessels and Bottoms Receivers in Organic HAP Service. The following is a summary of the requirements surge control vessels and bottoms receivers that do not qualify for an exemption under 40 CFR 63.162(b)(2). Refer to section II.A.6.n for additional information concerning this exemption.

Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in Table 2 or Table 3 of 40 CFR 63, Subpart H, shall be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c).

[40 CFR 63.170]

**6.i** Monitoring Requirements for Closed Vent Systems and Control Devices.

The permittee shall comply with 40 CFR 63.172, Requirements for Closed Vent Systems and Control Devices that are used to meet the provisions of 40 CFR 63.162 through 63.174 for equipment items in organic HAP service.

i. Control devices shall be capable of meeting one of the following:

(a) recovery or recapture devices shall be designed and operated to recover the organic hazardous air pollutant emissions or VOCs with an efficiency of 95%, or allow an exit concentration of less than 20 ppmv, whichever is less stringent;

(b) enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or VOCs by 95%, or allow an exit concentration of 20 ppmv, on a dry basis, corrected to 3% oxygen if supplemental combustion air is used, or minimum residence time of 0.5 seconds with a minimum temperature of 760 degrees centigrade; or

(c) vent to a flare that comply with the flare requirements found in 40 CFR 63.11(b).

ii. Inspection Requirements.

Each closed vent system shall be inspected according to the following:

(a) If constructed of hard-piping, an initial inspection using 40 CFR Part 60, Appendix A, Method 21 and annual visual inspections for visible, audible, or olfactory indication of leaks shall be conducted.

(b) If vapor collection system or closed-vent system is constructed of duct work, an initial inspection using 40 CFR Part 60, Appendix A, Method 21 and annual inspections using Method 21 shall be conducted.

(c) If inspecting personnel would be exposed to imminent or potential danger conducting these inspections, they are exempt provided the permittee has a written plan that requires inspections of the equipment as frequently as practicable during safe to inspect times, but not more frequently than annually.

(d) If parts are designated as unsafe-to-monitor they are exempt from the requirements if the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a supported surface, and has a written plan that requires inspection of the equipment at least once every 5 years.

## A. State and Federally Enforceable Section (continued)

iii. Bypass lines requirements for a closed vent system.

If there are bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee shall comply with one of the following options:

(a) Install, set or adjust, maintain, and operate a flow indicator or a valve position monitor that takes a reading at least once every 15 minutes. This indicator should be installed at the entrance to any bypass line. Records should be kept as indicated in 40 CFR 63.118(a)(3).

(b) Secure the bypass line valve in the non-diverting position with a car-seal or a lock and key type configuration. A visual inspection of the closure should be performed at least once every month to ensure the vent system has not been diverted.

(c) Low leg drains, high point bleeds, analyzer vents, open-ended valves, or lines, and pressure relief valves needed for safety purposes are not subject to this requirement.

iv. Leak provisions for a closed vent system.

(a) If any 500 ppm leaks (as measured using Method 21 of 40 CFR Part 60, Appendix A) or visual leaks occur, a first attempt of repair must be initiated within 5 calendar days of the date of its detection. Final repairs must be completed within 15 days unless the leak qualifies for a Delay of Repair.

(b) Delay of Repair is allowable if repair is technically infeasible without a process shutdown or the permittee determines that emissions resulting from immediate repair would result in greater emissions than fugitive emissions from the delayed repair. These leaks should be repaired during the next process shut down.

**6.j** Monitoring Requirements for Agitators in Gas/Vapor and Light Liquid Service.

The permittee shall comply with 40 CFR 63.173, Requirements for Agitators in gas/vapor and Light Liquid Organic HAP Service. The following is a summary of the requirements for agitators that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.173 (d) through (j). Refer to sections II.A.6.n and II.A.6.o for additional information concerning these exemptions.

Monitoring Frequency: Each agitator shall be monitored monthly

Leak Definition: 10,000 parts per million or greater

Method: Method 21 of 40 CFR Part 60 Appendix A. See 40 CFR 63.180, Test Methods and Procedures, for additional details.

In addition to the monthly monitoring above, the permittee shall check each agitator by visual inspection each calendar week for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the pump seal, a leak is detected.

## A. State and Federally Enforceable Section (continued)

**6.k** Monitoring Requirements for Connectors in Gas/Vapor and Light Liquid Service.

The permittee shall comply with 40 CFR 63.174, Requirements for Connectors in gas/vapor and Light Liquid Organic HAP Service. The following is a summary of the requirements for connectors that do not qualify for an exemption under 40 CFR 63.162(b)(2) or 40 CFR 63.174 (f) through (h). Refer to section II.A. 6.n and II.A.6.o for additional information concerning these exemptions.

Monitoring Frequency:

Annually during initial screening, after which the frequency is based upon leak rate as calculated per 40 CFR 63.174(i).
Annually if percent Leak Rate was greater than or equal to 0.5% during last required annual or biennial monitoring period.
Biennially if percent Leak Rate was less than 0.5% during last required monitoring period.
The permittee may elect to monitor once every four years if the percent Leak Rate during the last required biennial monitoring period was less than 0.5% provided that this rate is maintained during subsequent periods. Otherwise, the permittee must revert to biennial monitoring if a subsequent period yields a Leak Rate of less than 1% or annual monitoring if a subsequent period yields a Leak Rate of greater than or equal to 1%.

Leak Definition: 500 parts per million or greater

Method: Method 21 of 40 CFR Part 60, Appendix A. See 40 CFR 63.180, Test Methods and Procedures, for additional details.

**6.l** 40 CFR 63.175 Quality improvement program for valves.

In Phase III of 40 CFR 63.168, the permittee may elect to comply with one of the alternative quality improvement programs specified in 40 CFR 63.175(d) and (e). The decision to use one of these alternative provisions to comply with the requirements of 40 CFR 63.168(d)(1)(ii) must be made during the first year of Phase III for existing process units and for new process units.

Should the permittee chooses to implement a quality improvment plan for valves, the provisions of 40 CFR 63.175 shall be followed.

**6.m** 40 CFR 63.176 Quality improvement program for pumps.

In Phase III of 40 CFR 63.163, if, on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the permittee shall comply with the requirements of 40 CFR 63.176.

**6.n** Should the permittee choose to operate under an alternative means of emission limitation, the requirements specified in 40 CFR 63.177 through 40 CFR 63.179 shall be followed.

## A. State and Federally Enforceable Section (continued)

**6.o** The following components are exempt from the requirements of the sections indicated:

i. All components in less than 300 hours of HAP service (per calendar year) are exempt from the requirements of sections A.II.6.a through A.II.6.n.

ii All components in vacuum service are exempt from the requirements of sections A.II.6.a through A.II.6.n.

iii. The following are exempt from the Method 21 of 40 CFR Part 60, Appendix A monitoring required in section A.II.6.a:

(a) Pumps with a dual mechanical seal that include a barrier fluid system provided:

(i) each dual mechanical seal system is operated with the barrier fluid at a pressure greater than the pump stuffing box pressure; or

(ii) each dual mechanical seal system is equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the control requirements for closed vent systems; or

(iii) each dual mechanical seal system is equipped with a closed-loop system that purges the barrier fluid into a process stream.

(b) The barrier fluid is not in light liquid service.

(c) Each barrier fluid is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(d) Each pump is checked by visual inspection for indication of liquids dripping. If visual indications are found, monitor the pump within 5 days using Method 21 of 40 CFR Part 60, Appendix A.

(e) Each sensor is observed daily or equipped with an alarm.

iv. Pumps equipped with closed vent system capable of capturing and transporting any leakage from the seals to a process or fuel gas system or to a control device that complies with the control requirements for closed vent systems shall be exempt from the visual and Method 21 of 40 CFR Part 60, Appendix A monitoring required by section A.II.6.a.

v. Pumps located within the boundary of an unmanned plant site shall be exempt from weekly visual monitoring required by section A.II.6.a provided the pumps are visually inspected as often as practicable and at least monthly.

vi. If more than 90% of pumps in a process unit meet the exemptions of dual mechanical seal and/or no external actuated shaft, the process unit is exempt from the calculation of percent leaking pumps determination required by 40 CFR 63.163(d).

vii. Pumps designated as unsafe-to-monitor in accordance with 40 CFR 63.181(b)(7)(i), are exempted from the weekly visual and Method 21 of 40 CFR Part 60, Appendix A monitoring requirements of section A.II.6.a if:

(a) the permittee determines the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of the monitoring; and

(b) the permittee has a written plan that requires monitoring as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring.

## A. State and Federally Enforceable Section (continued)

viii. Pressure relief devices routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device that complies with the control requirements in section A.II.6.i, are exempt from the requirements, after a pressure release, of 500 ppm limit and the monitoring requirement in section A.II.6.c.

ix. Pressure relief devices equipped with a rupture disk upstream of the pressure relief device are exempt from 500 ppm limit and the monitoring requirements after pressure release in section A.II.6.c as long as after each pressure release a rupture disk is installed upstream of the pressure relief device as soon as practicable but no later than 5 calendar days after each pressure release.

x. A compressor with a designation to operate with an instrument reading less than 500 ppm above background, is exempt from the requirements of section A.II.6.b if this designation is initially demonstrated through the use of Method 21 of 40 CFR Part 60, Appendix A and is demonstrated annually and at other times as requested by Administrator.

xi. Compressors equipped with a closed vent system are exempt from monitoring and leak repair requirements in section A.II.6.b provided that the closed vent system transports leak from the compressor's drive shaft to a fuel gas system or control device that meets the requirements in 40 CFR 63.172.

xii. Valves designated as difficult-to-monitor, in accordance with 40 CFR 63.181.(b)(7)(i), are exempt from the requirements of section A.II.6.f. The permittee shall prepare and follow a written plan that calls for the difficult-to-monitor valve to be monitored at least once per calendar year.

xiii. Valves designated as unsafe-to-monitor, in accordance with 40 CFR 63.181(b)(7)(i), are exempt from the weekly visual and Method 21 of 40 CFR Part 60, Appendix A monitoring in section A.II.6.f if the permittee determines:

a) the valve is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of the monitoring; and

(b) the permittee has a written plan that requires monitoring as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring.

xiv. If the permittee's facility has less than 250 valves in organic HAP service, the permittee is exempt from the requirements of section A.II.6.f for monthly monitoring and a quality improvement program. Instead, the permittee shall monitor the valves on a quarterly basis or, if less than 1% leak rate, on a semiannual basis.

xv. Agitators equipped with a dual mechanical seal system that includes a barrier fluid system are exempt from the requirements of section A.II.6.j if the seal is operated with:

(a) the barrier fluid at a pressure greater than the compressor stuffing box pressure, or

(b) equipped with a degassing reservoir that is routed to a process or fuel gas system, or connected to a closed vent system to a control device that is in compliance with the closed vent system requirements; or

(c) equipped with a closed-loop system that purges the barrier fluid directly into a process stream. The barrier fluid cannot be light liquid service and should have a sensor that detects failure of the seal system, barrier fluid system, or both. The sensor shall be observed daily or shall be equipped with an alarm, unless the agitator is located within the boundary of an unmanned plant site. Must be visually checked weekly for indications of liquids dripping from the agitator seal, and if liquid seen monitored using Method 21 of 40 CFR Part 60, Appendix A to see if meets leak definition.

xvi. Agitators designed with no externally actuating shaft penetrating the agitator housing are exempt from the requirements of section A.II.6.f.

## A. State and Federally Enforceable Section (continued)

xvii. Agitators located within the boundary of an unmanned plant site are exempted from weekly visual inspection and daily inspections in section A.II.6.f for dual mechanical seals. These shall be visually inspected as often as practical and at least monthly.

xviii. Agitators designated as difficult-to-monitor in accordance with 40 CFR 63.181(b)(7)(i) are exempt from the requirements of section A.II.6.j if:

(a) agitator cannot be monitored without elevating the inspector more than two meters above a support surface or it is not accessible at anytime in a safe manner;

(b) the process unit within the agitator is located in an existing source or the permittee designates less than three percent of the total number of agitators in a new source as difficult to monitor, and

(c) the permittee follows a written plan that requires monitoring at least once per calendar year.

xix. Agitators obstructed by equipment or piping that prevents access to the agitator by a monitor probe are exempt from the monitoring requirements of section A.II.6.j.

xx. Agitators in gas, vapor, or light liquid service that are equipped with a closed vent system are exempt from monitoring and leak repair requirements provided that the closed vent system transports leak from the compressor's drive shaft to a fuel gas system or control device that meets the requirements in 40 CFR 63.172.

xxi. Agitators designated as unsafe-to-monitor in accordance with 40 CFR 63.181(b)(7)(i) are exempt from the requirements of section A.II.6.f, if:

(a) the permittee determines that the monitoring personnel would be exposed to an immediate danger as a consequence of complying; and

(b) the permittee has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently that the periodic monitoring schedule.

xxii. Connectors designated as unsafe-to-monitor in accordance with 40 CFR 63.181(b)(7)(i) are exempt from the Method 21 of 40 CFR Part 60, Appendix A monitoring requirement of section A.II.6.k if the permittee determines that the connector is unsafe-to-monitor because:

(a) monitoring personnel would be exposed to an immediate danger as a consequence of complying; and

(b) the permittee has a written plan that requires monitoring as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring.

## A. State and Federally Enforceable Section (continued)

xxiii. Connectors that are inaccessible or are ceramic or ceramic lined, are exempt from the monitoring, recordkeeping, and reporting requirements of section A.II.6.k. Inaccessible means:

(a) buried;
(b) insulated in a manner that prevents access to the connector by a monitor probe;
(c) obstructed by equipment or piping that prevents access to the connector by a monitoring probe;
(d) unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters above the ground;
(e) inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or
(f) not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man lift basket in areas where an ignition potentially exists, or access would require near proximity to hazards such as electrical lines or would risk damage to equipment.

xxiv. In-situ sampling systems and sampling systems without purges are exempt from closed-purge, closed-loop, and closed-vent system requirements listed in 63.166(a) and (b).

xxv. Open-end valves and lines in emergency shutdown systems are exempt from the control requirements in 40 CFR 63.167(a),(b), and (c) provided the item is designed to open automatically in the event of a process upset.

xxvi. Open-end valves and lines containing materials which would autocatalytically polymerize or present an explosion, serious over pressure hazard, or other safety hazard if equipped with a double block and bleed system are from the control requirements in 40 CFR 63.167(a),(b), and (c) provided the item is designed to open automatically in the event of a process upset.

**6.p** Leak Detection and Repair Requirements

i. When each leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, the following requirements apply:

(a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(b) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3), and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring.

(c) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.

## A. State and Federally Enforceable Section (continued)

ii. First attempts at repair of leaks shall be conducted within 5 calendar days from the date detected. The component shall be repaired within 15 calendar days from the date detected.

Repaired means that the equipment:

(a) is adjusted, or otherwise altered, to eliminate a leak as defined by the leak definition; (However, agitators considered leaking at greater than or equal to 1,000 ppm are not required to be repaired until leaking at greater than or equal to 2,000 ppm.)

(b) unless otherwise specified in applicable provisions, is monitored using Method 21 of 40 CFR Part 60, Appendix A, to verify that emissions from the equipment are below the applicable leak definition.

In all cases where the provisions of 40 CFR Part 63, Subpart H require the permittee to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR Part 63, Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of 40 CFR Part 63, Subpart H. However, if the repairs are unsuccessful and a leak is detected, the permittee shall take further action as required by 40 CFR Part 63, Subpart H.

[40 CFR 63.161]

**6.q** 40 CFR 63.171 Standards: Delay of repair.

Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.

i. Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.

ii. Delay of repair for valves, connectors, and agitators is also allowed if:

(a) the permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

(b) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172.

iii. Delay of repair for pumps is also allowed if:

(a) repair requires replacing the existing seal design with a new system that the permittee has determined under the provisions of 40 CFR 63.176(d) will provide better performance or:

(b) a dual mechanical seal system that meets the requirements of 40 CFR 63.163(e);

(c) a pump that meets the requirements of 40 CFR 63.163(f); or

(d) a closed-vent system and control device that meets the requirements of 40 CFR 63.163(g); and

(e) repair is completed as soon as practicable, but not later than six months after the leak was detected.

iv. Delay of repair beyond a process unit shut down is allowed for a valve if valve assembly replacement is necessary during the process unit shut down, a valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shut down occurs sooner than six months after the first process unit shut down.

## A. State and Federally Enforceable Section (continued)

**6.r** Recordkeeping requirements.

Except as provided in 40 CFR 63.181(e), the information pertaining to all equipment in each process unit subject to the requirements in 40 CFR 63.162 through 40 CFR 63.174 shall be recorded as specified in 40 CFR 63.181(b).

i. Recordkeeping requirements for visual inspections.

For visual inspections of equipment subject to the provisions of 40 CFR Part 63, Subpart H, the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in 40 CFR 63.181(d) for leaking equipment identified in this inspection, except as provided in 40 CFR 63.181(e). These records shall be retained for 2 years.

ii. Recordkeeping requirements when leaks are detected.

When each leak is detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174, the following information shall be recorded and kept for 2 years:

(a) the instrument and the equipment identification number and the operator name, initials, or identification number;

(b) the date the leak was detected and the date of first attempt to repair the leak;

(c) the date of successful repair of the leak;

(d) maximum instrument reading measured by Method 21 of 40 CFR Part 60, Appendix A, after it is successfully repaired or determined to be nonrepairable;

(e) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

(i) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(f) dates of process unit shutdowns that occur while the equipment is unrepaired;

(g) identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with the provisions of 40CFR 63.174(c)(1)(ii);

(h) the date and results of monitoring as required in 40 CFR 63.174(c); [If identification of connectors that have been opened or otherwise had the seal broken is made by location under 30 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.]

(i) the date and results of the monitoring required in 40 CFR 63.178(c)(3)(i) for equipment added to a batch process unit since the last monitoring period required in 40 CFR 63.178 (c)(3)(ii) and (c)(3)(iii). If no leaking equipment is found in this monitoring, the permittee shall record that the inspection was performed; [Records of the actual monitoring results are not required.]

(j) copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.

**A. State and Federally Enforceable Section (continued)**

iii. Recordkeeping requirements for compressor compliance test and followup monitoring for pressure device release.

The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165 (a) and (b). The results shall include:

(a) the background level measured during each compliance test; and

(b) the maximum instrument reading measured at each piece of equipment during each compliance test.

iv. Recordkeeping requirements for closed-vent systems and control devices.

The permittee shall maintain records of the information specified in 40 CFR 63.181(g)(1) through (g)(3) for closed-vent systems and control devices subject to the provisions of 40 CFR 63.172. The records specified in 40 CFR 63.181(g)(1) shall be retained for the life of the equipment. The records specified in 40 CFR 63.181(g)(2) and (g)(3) shall be retained for 2 years.

**6.s** Periodic Reporting Requirements.

The permittee shall submit Periodic Reports containting the following information for each process unit complying with the provisions of 40 CFR 63.163 through 40 CFR 63.174, the summary information listed in sections II.A.6.s.i through II.A.6.s.xv of this permit for each monitoring period during the 6-month period:

i. the number of valves for which leaks were detected as described in 40 CFR 63.168(b) the percent leakers, and the total number of valves monitored;

ii. the number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable;

iii. the number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leakers, and the total number of pumps monitored;

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c);

v. the number of compressors for which leaks were detected as described in 40 CFR 63.164(f);

vi. the number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g);

vii. the number of agitators for which leaks were detected as described in 40 CFR 63.173(a) and (b);

**A. State and Federally Enforceable Section (continued)**

viii. the number of agitators for which leaks were not repaired as required in 40 CFR 63.173(c);

ix. the number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;

x. the number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable;

xi. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

xii. the results of all monitoring to show compliance with 40 CFR 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period;

xiii. if applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 63.176;

xiv. if applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1);

xv. if applicable, the compliance option that has been selected under 40 CFR 63.172(n).

**7.** General recordkeeping and reporting provisions for 40 CFR Part 63, Subpart JJJ.

**7.a** Unless otherwise specified in 40 CFR Part 63, Subpart JJJ, the permittee shall keep copies of all applicable records and reports required by 40 CFR Part 63, Subpart JJJ for at least 5 years, as specified in 40 CFR 63.1335 (a)(1), with the exception listed in 40 CFR 63.1335 (a)(2).

[40 CFR 63.1335(a)]

**7.b** The permitee shall comply with the applicable recordkeeping and reporting requirements in 40 CFR Part 63, Subpart A, as specified in Table 1 of 40 CFR Part 63, Subpart JJJ. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (b)(2) of 40 CFR 63.1335.

[40 CFR 63.1335(b)]

**7.c** The permittee shall comply with the reporting and recordkeeping requirements in 40 CFR Part 63, Subpart H, except as specified in 40 CFR 63.1331.

[40 CFR 63.1335(c)

**7.d** The permittee shall keep records as specified in paragraphs (d)(1) through (d)(7) of 40 CFR 63.1335, unless an alternative recordkeeping system has been requested and approved as specified in paragraph (g) of 40 CFR 63.1335, and except as provided in paragraph (h) of 40 CFR 63.1335. If a monitoring plan for storage vessels pursuant to 40 CFR 63.1314(a)(9) requires continuous records, the monitoring plan shall specify which provisions, if any, of paragraphs (d)(1) through (d)(7) of 40 CFR 63.1335 apply. The permittee is not required to keep continuous records for certain storage vessels, as specified in 40 CFR 63.1314(a)(9). For such storage vessels, the permittee shall keep records as specified in the monitoring plan required by 40 CFR 63.1314(a)(9). Paragraphs (d)(8) and (d)(9) of 40 CFR 63.1335 specify documentation requirements.

[40 CFR 63.1335(d)]

**7.e** Periodic Reports Required.

The permittee shall submit Periodic Reports as specified in paragraphs (e)(6)(i) through (e)(6)(xi) of 40 CFR 63.1335. In addition, for equipment leaks subject to 40 CFR 63.1331, the permittee shall submit the information specified in 40 CFR 63.182(d) under the conditions listed in 40 CFR 63.182(d), and for heat exchange systems subject to 40 CFR 63.1328, the permittee shall submit the information specified in 40 CFR 63.104(f)(2) as part of the Periodic Report required by 40 CFR 63.1335(e)(6).

[40 CFR 63.1335(e)(6)]

**A. State and Federally Enforceable Section (continued)**

i. Except as specified in paragraphs (e)(6)(xi) and (e)(6)(xii) of 40 CFR 63.1335, a report containing the information in paragraph (e)(6)(ii) of 40 CFR 63.1335 or containing the information in paragraphs (e)(6)(iii) through (e)(6)(x) of 40 CFR 63.1335, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due.

[40 CFR 63.1335(e)(6)(i)]

ii. If none of the compliance exceptions specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of 40 CFR 63.1335 occurred during the 6-month period, the Periodic Report required by paragraph (6)(e)(i) of 40 CFR 63.1335 shall be a statement that there were no compliance exceptions, as described in paragraph (6)(e)(i) of 40 CFR 63.1335, for the 6-month period covered by that report and no activities specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of 40 CFR 63.1335 occurred during the 6-month period covered by that report.

[40 CFR 63.1335(e)(6)(ii)]

iii. For a permittee complying with the provisions of 40 CFR 63.1314 through 40 CFR 63.1330 for any emission point or process section, Periodic Reports shall include:

(a) all information specified in 40 CFR 63.122 for storage vessels; 40 CFR 63.117 and 40 CFR 63.118 and 40 CFR 63.1320 for continuous process vents, as applicable; 40 CFR 63.1327 for batch process vents and aggregate batch vent streams; 40 CFR 63.104 for heat exchange systems; and 40 CFR 63.146 for process wastewater;

(b) the daily average values or batch cycle daily average values of monitored parameters for both excused excursions, as defined in 40 CFR 63.1334(g), and unexcused excursions, as defined in 40 CFR 63.1334(f); [For excursions caused by lack of monitoring data, the start-time and duration of periods when monitoring data were not collected shall be specified.]

(c) the information in paragraphs (e)(6)(iii)(D)(1) through (e)(6)(iii)(D)(4) of 40 CFR 63.1335, as applicable:

(i) Any supplements to the Emissions Averaging Plan, as required in paragraph (e)(4)(iii) of 40 CFR 63.1335;

(ii) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The permittee is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the permittee notifies the Director that the group status of an emission point has changed from Group 1 to Group 2, the permittee is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time.

(iii) Notification if one or more emission points (other than equipment leaks) or one or more TPPU is added to an affected source. The permittee shall submit the information contained in paragraphs (e)(6)(iii)(D)(3)(i) through (e)(6)(iii)(D)(3)(ii) of 40 CFR 63.1335:

(A) a description of the addition to the affected source; and

(B) notification of the group status of the additional emission point or all emission points in the TPPU.

(iv) For process wastewater streams sent for treatment pursuant to 40 CFR 63.132(g), reports of changes in the identity of the treatment facility or transferee.

(d) The information in paragraph (b)(1)(ii) of 40 CFR 1335 for reports of start-up, shutdown, and malfunction.

[40 CFR 63.1335(e)(6)(iii)]

## A. State and Federally Enforceable Section (continued)

iv. For each batch process vent with a batch mass input limitation, every second Periodic Report shall include the mass of HAP or material input to the batch unit operation during the 12-month period covered by the preceding and current Periodic Reports, and a statement of whether the batch process vent was in or out of compliance with the batch mass input limitation.

[40 CFR 63.1335(e)(6)(iv)]

v. If any performance tests are reported in a Periodic Report, the following information shall be included:

(a) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of 40 CFR 63.1335.

(b) For additional tests performed for the same kind of emission point using the same method, results and any other information, pertaining to the performance test, that is requested on a case-by-case basis by the Director or Administrator shall be submitted, but a complete test report is not required.

[40 CFR 63.1335(e)(6)(v)]

vi. Notification of a change in the primary product of a TPPU, in accordance with the provisions in 40 CFR 63.1310(f). This includes a change in primary product from one thermoplastic product to either another thermoplastic product or to a non-thermoplastic product.

[40 CFR 63.1335(e)(6)(vi)]

vii. The results for each change made to a predominant use determination made under 40 CFR 63.1310(g) for a storage vessel that is assigned to an affected source subject to 40 CFR Part 63, Subpart JJJ after the change.

[40 CFR 63.1335(e)(6)(vii)]

viii. The Periodic Report shall include the results for each change made to a predominant use determination made under 40 CFR 63.1310(h) for recovery operations equipment assigned to an affected source subject to 40 CFR Part 63, Subpart JJJ after the change.

[40 CFR 63.1335(e)(6)(viii)]

ix. A permittee complying with paragraph (h)(1) of 40 CFR 63.1335 shall notify the Administrator and Director of the election to comply with paragraph (h)(1) of 40 CFR 63.1335 as part of the Periodic Report or as part of the Notification of Compliance Status as specified in paragraph (e)(5)(xi) of 40 CFR 63.1335.

[40 CFR 63.1335(e)(6)(ix)]

x. If the permittee elects not to retain daily average or batch cycle daily average values under paragraph (h)(2) of 40 CFR 63.1335, the permittee shall notify the Administrator and Director as specified in paragraph (h)(2)(i) of 40 CFR 63.1335.

[40 CFR 63.1335(e)(6)(x)]

**A. State and Federally Enforceable Section (continued)**

xi. The permittee shall submit quarterly reports for all emission points included in an emissions average as specified in paragraphs (e)(6)(xi)(A) through (e)(6)(xi)(C) of this section.

(a) The quarterly reports shall be submitted no later than 60 days after the end of each quarter. The first report shall be submitted with the Notification of Compliance Status no later than 150 days after the compliance date.

(b) The quarterly reports shall include the information specified in paragraphs (6)(e)(xi)(B)(1) through (6)(e)(xi)(B)(7) of 40 CFR 63.1335 for all emission points included in an emissions average.

(i) the credits and debits calculated each month during the quarter;

(ii) a demonstration that debits calculated for the quarter are not more than 1.30 times the credits calculated for the quarter, as required under 40 CFR 63.1332(e)(4);

(iii) the values of any inputs to the debit and credit equations in 40 CFR 63.1332(g) and (h) that change from month to month during the quarter or that have changed since the previous quarter;

(iv) results of any performance tests conducted during the reporting period including one complete report for each test method used for a particular kind of emission point as described in paragraph (6)(e)(v) of 40 CFR 63.1335;

(v) reports of daily average (or batch cycle daily average) values of monitored parameters for excursions as defined in 40 CFR 63.1334(f);

(vi) for excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified; and

(vii) any other information the affected source is required to report under the operating permit or Emissions Averaging Plan for the affected source.

(c) Every fourth quarterly report shall include the following:

(i) a demonstration that annual credits are greater than or equal to annual debits as required by 40 CFR 63.1332(e)(3); and

(ii) a certification of compliance with all the emissions averaging provisions in 40 CFR 63.1332.

[40 CFR 63.1335(e)(6)(xi)]

xii. The permittee shall submit quarterly reports for particular emission points and process sections not included in an emissions average as specified in paragraphs (6)(e)(xii)(A) through (6)(e)(xii)(D) of 40 CFR 63.1335.

(a) The permittee shall submit quarterly reports for a period of 1 year for an emission point or process section that is not included in an emissions average if:

(i) a control or recovery device for a particular emission point or process section has more excursions, as defined in 40 CFR 63.1334(f), than the number of excused excursions allowed under 40 CFR 63.1334(g) for a semiannual reporting period; or

(ii) the Administrator or Director requests that the permittee submit quarterly reports for the emission point or process section.

## A. State and Federally Enforceable Section (continued)

(b) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of 40 CFR 63.1335 applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(xii)(A) of 40 CFR 63.1335. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of 40 CFR 63.1335.

(c) Quarterly reports shall be submitted no later than 60 days after the end of each quarter.

(d) After quarterly reports have been submitted for an emission point for one year without more excursions occurring (during that year) than the number of excused excursions allowed under 40 CFR 63.1334(g), the permitte may return to semiannual reporting for the emission point or process section.

[40 CFR 63.1335(e)(6)(xii)]

**8.** When these rules are promulgated, the permittee shall be subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process, in accordance with 40 CFR Part 63, Subpart DDDDD (including the tables and appendices) referenced in Subpart DDDDD, which are included in the text of Attachment 4 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart DDDDD into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and equations into STARS format.

The following emissions units in this permit are subject to the aforementioned requirements: emissions units B002, B004, B005, B006, B007 and B008.

As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register).

**9.** The permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart FFFF, NESHAPS for Miscellaneous Organic Chemical Manufacturing, in accordance with 40 CFR Part 63, Subpart FFFF (including the tables and appendices) referenced in Subpart FFFF, which are included in the text of Attachment 2 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart FFFF into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and equations into STARS format.

As of the effective date of this permit, the following emissions units in this permit are subject to the aforementioned requirements: emissions units P029, P030 P031 P035, P048, T009 and T026.

## A. State and Federally Enforceable Section (continued)

**10.** Except as noted below, the permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart G, NESHAPS from SOCMI for Process Vents, Storage Vessels, Transfer Operations and Waste Water, in accordance with 40 CFR Part 63, Subpart G (including the tables and appendices) referenced in Subpart G, which are included in the text of Attachment 5 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart G into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and equations into STARS format.

The following emissions units in this permit are subject to the aforementioned Subpart G requirements pursuant to 40 CFR Part 63, Subpart JJJ, NESHAPS for Group IV Polymers and Resins, with the differences noted in 40 CFR 63.1314(a)(1) through (a)(17) for storage vessels; 40 CFR 63.1315(a)(1) through (a)(18) for continuous process vents and 40 CFR 63.1330(b)(1) through (b)(22) for wastewater: emissions units P001, P004, P010, P015, P021, P022, P036, P039, P040, P042, P047, T003, T004, T005, T006, T007, T011, T012, T013, T014, T016, T022, T024, T027, T031, and T054.

**11.** The permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart EEEE, NESHAPS for Organic Liquids Distribution (Non-Gasoline), in accordance with 40 CFR Part 63, Subpart EEEE (including the tables and appendices) referenced in Subpart EEEE, which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart EEEE into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and equations into STARS format.

Emissions unit J001is subject to the requirements of Subpart EEEE.

**12.** The permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines, in accordance with 40 CFR Part 63, Subpart ZZZZ (including the tables and appendices) referenced in Subpart ZZZZ, which are included in the text of Attachment 3 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart ZZZZ into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and equations into STARS format.

Emissions unit P049 is subject to the requirements of Subpart ZZZZ.

## A. State and Federally Enforceable Section (continued)

**13.** The following insignificant emissions units are located at this facility are subject to applicable requirements:

B008 - Building 9 therminol heater;
G001 - gasoline dispensing facility;
P050 - Building 8 bulk bag unloader;
Z004 - AF tank;
Z005 - 9 CAT MB tank;
Z006 - 9 AO CHG tank;
Z007 - 9 AO HOM tank;
Z008 - 9 CAT WH tank;
Z009 - 7 AO tank;
Z010 - D9 AO tank;
Z011 - D9 EG tank;
Z012 - D9 Therm tank; and
Z013 - B 30 Therm tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, and well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more of the applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

## B. State Only Enforceable Section

**1.** The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirement (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

B001 - Eclispse boiler;
F002 - plant roadways;
T032 - WWTP alum tank;
T033 - WWTP caustic tank;
T034 - WWTP sodium bisulfite tank;
T035 - B9 north bulk MgSO4 tank;
T038 - B9 caustic tank;
T039 - BLR caustic tank;
T040 - B9 south bulk MgSO4 tank;
T041 - BLR sulfuric acid tank;
T046 - TR70 tank;
T047 - diallyl maleate tank;
Z014 - B30 fuel oil tank;
Z015 - cold cleaner #1;
Z016 - cold cleaner #2;
Z017 - cold cleaner #3;
Z018 - B30 lab hood;
Z019 - B8 color lab equipment;
Z021 - B4 sample hood;
Z022 - B11 raw material lab;
Z023 - CFC recovery machine #1;
Z024 - CFC recovery machine #2;
Z025 - B9 salt MB tank;
Z026 - B9 salt weigh tank;
Z027 - B9 sodium bicarbonate tank;
Z028 - B9 Calfax tank;
Z029 - B9 MgSO4 tank #1;
Z030 - B9 MgSO4 tank #2;
Z031 - BD caustic tank;
Z032 - BD H2O hold tank;
Z033 - B7 MgSO4 tank;
Z034 - C9 SA MB tank;
Z035 - C9 salt MB tank;
Z036 - emergency fire pump #1;
Z037 - emergency fire pump #2;
Z038 - emergency fire pump #3;
Z039 - emergency fire pump #4;
Z040 - emergency fire pump #5;
Z042 - B9 AO mix tank;
Z048 - B8 pellet blending;
Z049 - E Cat. weigh tank;
Z050 - controlled pyrolysis furnace;
Z051 - B1 R&D lab;
Z052 - BLR deposit inh. tank;
Z053 - BLR spent acid tank;
Z054 - BLR acid neutr. tank;
Z055 - BLR corrosion inh. tank;
Z056 - B30 spent monomer truck loading; and
Z057 - B9 spent monomer truck loading.

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** BOILER #5 (B002)

**Activity Description:** BOILER

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 116 mmBtu/hr boiler fired by natural gas, No. 2 fuel oil, and organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031 | OAC rule 3745-31-05(A)(3) (PTI 14-00519) | See section A.II.1 below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-10(B)(1) | 0.020 pound of particulate emissions per mmBtu of actual heat input, when burning natural gas or No. 2 fuel oil |
| | OAC rule 3745-18-37(B)(2) | 5.5 lbs of SO2 per mmBtu of actual heat input<br><br>See section A.II.2 below. |
| | OAC rule 3745-18-37(B)(4) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart DDDDD | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall be subject to the requirements of 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process Heaters, when it is promulgated. As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register). See Part II section A.8 of this permit for these requirements.

### II. Operational Restrictions

**1.** Boiler numbers 4, 5, 7 and 8 (emissions units B002, B004, B006, and B007) shall not exceed a combined average operating rate of 275 mmBtu per hour for any calendar day from the boilers burning coal or fuel oil during that calendar day.

**2.** This emissions unit shall have a minimum stack height of 65 feet above ground level.

## II. Operational Restrictions (continued)

**3.** The quality of the No. 2 fuel oil burned shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO2 emission limitation in section A.I.1.

**4.** The permittee shall burn only natural gas, No.2 fuel oil, and/or organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031 in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of fuel oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." For each day that fuel oil is burned, the permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

**2.** The permittee shall collect and record the following information summarizing emissions unit B002's activities for each calendar day:

a. the calendar date;
b. the hours of operation;
c. the amount and type of fuel combusted;
d. the total daily heat input, in mmBtu, on days when this emissions unit has burned fuel oil (multiply the amount of fuel recorded in section A.III.2.c by the heat content of the fuel burned);
e. the average hourly heat input in mmBtu per hour (section A.III.2.d divided by section A.III.2.b); and
f. the average hourly heat input in mmBtu per hour for B002, B006, and B007 combined for all the emissions units burning either coal or fuel oil on that calendar day.

**3.** For each day during which the permittee burns a fuel other than natural gas, No. 2 fuel oil, and/or organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

**4.** 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 #14-00519, issued on May 1, 1985: sections A.III.1 through A.III.3. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 2 fuel oil 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 each exceedance of the total heat input limitation specified in section A.II.1.

The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services by May 30, August 29, November 29 and February 28 for the previous quarter.

**3.** 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 #14-00519, issued on May 1, 1985: sections A.IV.1 and A.IV.2. 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.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

0.020 pound of particulate emissions per mmBtu of actual heat input, when burning natural gas or No. 2 fuel oil

Applicable Compliance Method:

When burning natural gas, compliance may be demonstrated by multiplying the hourly gas burning capacity of the emissions unit (in million cubic feet/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (July, 1998) emission factor of 1.9 lbs filterable PE/million cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

When burning No. 2 fuel oil, compliance may be demonstrated by multiplying the maximum fuel oil capacity of the emissions unit (in gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (September, 1998) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and in OAC rule 3745-17-03(B)(9).

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

5.5 lbs of SO2 per mmBtu of actual heat input

Applicable Compliance Method:

When burning natural gas, compliance may be demonstrated by calculating the sulfur dioxide emission rate pursuant to OAC rule 3745-18-04(F)(4).

When burning No. 2 fuel oil, compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III.1.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6, Method 6A, Method 6B, or Method 6C.

**2.** Compliance with the operational restriction specified in section A.II.1 shall be determined using the information collected and recorded in section A.III.2 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** BOILER #4 (B004)

**Activity Description:** BOILER

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 48 mmBtu/hr natural gas and liquid waste-fired boiler | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-10(B)(1) | 0.020 pound of particulate emissions per mmBtu of actual heat input |
| | OAC rule 3745-18-37(B)(1) | 0.0 lb of SO2 per mmBtu of actual heat input |
| | OAC rule 3745-18-37(B)(4) | See section A.II.2 below. |
| | 40 CFR Part 63, Subpart DDDDD | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall be subject to the requirements of 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process Heaters, when it is promulgated. As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register). See Part II section A.8 of this permit for these requirements.

### II. Operational Restrictions

**1.** The permittee shall burn only natural gas and/or liquid waste in this emissions unit.

**2.** Boiler numbers 4, 5, 7 and 8 (emissions units B002, B004, B006, and B007) shall not exceed a combined average operating rate of 275 mmBtu per hour for any calendar day from the boilers burning coal or fuel oil during that calendar day.

**3.** The quality of the liquid waste burned shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO2 emission limitation in section A.I.1.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall collect and record the following information summarizing emissions unit B004's activities for each calendar day:

a. the calendar date;
b. the hours of operation;
c. the amount and type of fuel combusted;
d. the heat content of the liquid waste combusted;
e. the sulfur content of the liquid waste combusted; and
f. the density of the liquid waste combusted, in pounds per gallon.

**2.** For each day during which the permittee burns liquid waste in this emissions unit, the permittee shall maintain a record of the quantity of liquid waste burned in this emissions unit.

The permittee shall perform daily checks when the emissions unit is in operation and burning liquid waste and when the weather conditions allow, for visible particulate emission from the stack serving this emissions unit. The presence or absence of visible emissions shall be noted in an operation log. If visible emissions are observed, the permitteee 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 the visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

**3.** Liquid wastes burned in this emissions unit consist of spent monomer streams from continuous process polymerization reactors in Building 9 and Building 30, emissions units P004, P015, P042 and P047. These waste streams contain unreacted styrene and organic solvents and contain no sulfur compounds. To confirm these waste streams contain no sulfur compounds, the permittee shall semiannually collect a representative grab sample of liquid waste that is burned in this emissions unit. The permittee shall analyze each semiannual sample for sulfur content and heat content and maintain a record of the results of these analyses.

The permittee shall perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a fuel other than natural gas or liquid waste being burned in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify each exceedance of the total heat input limitation specified in section A.II.2.

The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services by May 30, August 29, November 29 and February 28 for the previous quarter.

**3.** 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 while the emissions unit was burning liquid waste and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

**4.** The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a deviation of the allowable suflur dioxide emission limitation based upon the calculated sulfur dioxide emission rate from section A.III.3. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and in OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

0.020 pound of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

For the use of natural gas, compliance may be demonstrated by multiplying the hourly gas burning capacity of the emissions unit (million cubic feet/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (July, 1998) emission factor of 1.9 lbs filterable PE/million cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

If required, while burning natural gas, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and in OAC rule 3745-17-03(B)(9).

While burning the maximum allowable amount of liquid waste (in accordance with the permittee's Part 266 permit), compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and in OAC rule 3745-17-03(B)(9).

**1.c** Emission Limitation:

0.0 lb of SO2 per mmBtu of actual heat input

Applicable Compliance Method:

While combusting natural gas, compliance may be demonstrated pursuant to OAC rule 3745-18-04(F)(4).

While combusting liquid waste, compliance may be demonstrated pursuant to OAC rule 3745-18-04(F)(2).

If required, while combusting natural gas, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6, Method 6A, Method 6B or Method 6C.

While burning the maximum allowable amount of liquid waste, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6, Method 6A, Method 6B or Method 6C.

**2.** Compliance with the operational restriction specified in section A.II.2 shall be determined by the monitoring and record keeping requirements in section A.III.1 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** THERMINOL HEATER (B005)

**Activity Description:** HEATER

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 18.9 mmBtu/hr natural gas, No. 2 fuel oil-fired boiler | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-10(B)(1) | 0.020 lb of particulate emissions per mmBtu of actual heat input when burning natural gas or No. 2 fuel oil |
| | OAC rule 3745-18-06(D) | 1.6 lbs of SO2 per mmBtu of actual heat input when firing No. 2 fuel oil |
| | 40 CFR Part 63, Subpart DDDDD | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall be subject to the requirements of 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process Heaters, when it is promulgated. As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register). See Part II section A.8 of this permit for these requirements.

### II. Operational Restrictions

**1.** The quality of the No. 2 fuel oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 lbs/mmBtu actual heat input.

**2.** The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

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

**1.** The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance either Alternative 1 or Alternative 2 described below.

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

a. Alternative 1:

For each shipment of fuel oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." For each day that fuel oil is burned, the permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

**2.** For each day during which the permittee burns a fuel other than natural gas and/or No. 2 fuel oil, 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 notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation specified in section A.I.1 based upon the calculated sulfur dioxide emission rates from section A.III.1. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

**2.** The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a fuel other than natural gas or No. 2 fuel oil being burned in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

## 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:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

0.020 lb of particulate emissions per mmBtu of actual heat input when firing natural gas or No. 2 fuel oil

Applicable Compliance Method:

When burning natural gas, compliance may be demonstrated by multiplying the hourly gas burning capacity of the emissions unit (in million cubic feet/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (July, 1998) emission factor of 1.9 lbs filterable PE/MM cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

When burning No. 2 fuel oil, compliance may be demonstrated by multiplying the maximum fuel oil capacity of the emissions unit (in gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (September, 1998) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and in OAC rule 3745-17-03(B)(9).

**1.c** Emission Limitation:

1.6 lbs of SO2 per mmBtu of actual heat input when firing No. 2 fuel oil

Applicable Compliance Method:

When firing No. 2 fuel oil, compliance shall be demonstrated based upon the monitoring and record keeping requirements in section A.III.1 of these terms and conditions.

If required, compliance shall be determined based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6, Method 6A, Method 6B or Method 6C.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** BOILER #7 (B006)

**Activity Description:** BOILER

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 116 mmBtu/hr boiler fired with natural gas, No. 2 fuel oil, and organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031 | OAC rule 3745-31-05(A)(3) (PTI 14-00519) | See section A.II.1 below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-10(B)(1) | 0.020 pound of particulate emissions per mmBtu of actual heat input, when burning natural gas or No. 2 fuel oil |
| | OAC rule 3745-18-37(B)(2) | 5.5 lbs of SO2 per mmBtu of actual heat input<br><br>See section A.II.2 below. |
| | OAC rule 3745-18-37(B)(4) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart DDDDD | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall be subject to the requirements of 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process Heaters, when it is promulgated. As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register). See Part II section A.8 of this permit for these requirements.

### II. Operational Restrictions

**1.** Boiler numbers 4, 5, 7 and 8 (emissions units B002, B004, B006, and B007) shall not exceed a combined average operating rate of 275 mmBtu per hour for any calendar day from the boilers burning coal or fuel oil during that calendar day.

**2.** This emissions unit shall have a minimum stack height of 65 feet above ground level.

## II. Operational Restrictions (continued)

**3.** The quality of the No. 2 fuel oil burned shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO2 emission limitation in section A.I.1.

**4.** The permittee shall burn only natural gas, No.2 fuel oil, and/or and organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031 in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of fuel oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." For each day that fuel oil is burned, the permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, or equivalent methods as approved by the Director.

**2.** The permittee shall collect and record the following information summarizing emissions unit B002's activities for each calendar day:

a. the calendar date;
b. the hours of operation;
c. the amount and type of fuel combusted;
d. the total daily heat input, in mmBtu, on days when this emissions unit has burned fuel oil (multiply the amount of fuel recorded in section A.III.2.c by the heat content of the fuel burned);
e. the average hourly heat input in mmBtu per hour (section A.III.2.d divided by section A.III.2.b); and
f. the average hourly heat input in mmBtu per hour for B002, B006, and B007 combined for all the emissions units burning either coal or fuel oil on that calendar day.

**3.** For each day during which the permittee burns a fuel other than natural gas, No. 2 fuel oil, and/or and organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020, and T031 the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

**4.** 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 #14-00519, issued on May 1, 1985: sections A.III.1 through A.III.3. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 2 fuel oil 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 each exceedance of the total heat input limitation specified in section A.II.1.

The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services by May 30, August 29, November 29 and February 28 for the previous quarter.

**3.** 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 #14-00519, issued on May 1, 1985: sections A.IV.1 and A.IV.2. 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.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

0.020 pound of particulate emissions per mmBtu of actual heat input, when burning natural gas or No. 2 fuel oil

Applicable Compliance Method:

When burning natural gas, compliance may be demonstrated by multiplying the hourly gas burning capacity of the emissions unit (in million cubic feet/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (July, 1998) emission factor of 1.9 lbs filterable PE/million cubic feet, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

When burning No. 2 fuel oil, compliance may be demonstrated by multiplying the maximum fuel oil capacity of the emissions unit (in gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (September, 1998) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (in mmBtu/hr).

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and in OAC rule 3745-17-03(B)(9).

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

5.5 lbs of SO2 per mmBtu of actual heat input

Applicable Compliance Method:

When burning natural gas, compliance may be demonstrated by calculating the sulfur dioxide emission rate pursuant to OAC rule 3745-18-04(F)(4).

When burning No. 2 fuel oil, compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III.1.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6, Method 6A, Method 6B, or Method 6c.

**2.** Compliance with the operational restriction specified in section A.II.1 shall be determined using the information collected and recorded in section A.III.2 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** BOILER #8 (B007)

**Activity Description:** BOILER

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 155 mmBtu/hr coal-fired boiler and organic compound emissions from P001, P004, P010, P015, P021, P022, P036, P042, P047, T016, T020 and T031, controlled with a baghouse | OAC rule 3745-31-05(C) (PTI 14-00519) (40 CFR Part 52.21, Prevention of Significant Deterioration (BACT) for NOx and SO2) | 1.14 lbs of SO2 per mmBtu of actual heat input<br>773.9 tpy of SO2<br><br>0.60 lb of NOx per mmBtu of actual heat input<br>407.3 tpy of NOx<br><br>See sections A.II.1, A.II.2, A.II.5 and A.II.6 below. |
| | OAC rule 3745-31-05(A)(3) (PTI 14-0519) | 0.03 lb of particulate emissions per mmBtu of actual heat input<br>20.4 tpy of particulate emissions<br><br>0.13 lb of CO per mmBtu of actual heat input<br>88.3 tpy of CO<br><br>The requirements of this rule also includes compliance with the requirements of OAC rule 3745-18-37(B)(3) and the visible particulate emission limitation specified in 40 CFR Part 60, Subpart Db. |
| | 40 CFR Part 60, Subpart Db | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity. |
| | OAC rule 3745-17-07(A) | The visible particulate emission limitation established in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-17-10(C)(1) | The emission limitation established in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-18-37(B)(3) | 1.14 lbs of SO2 per mmBtu of acutal heat input [The emission limitation established in this rule is the same as the emission limitation established pursuant to OAC rule 3745-31-05(C).] |
| | OAC rule 3745-18-37(B)(4) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart DDDDD | See section A.I.2.a below. |
| | OAC rule 3745-21-08(B) | See section A.I.2.b below. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall be subject to the requirements of 40 CFR Part 63, Subpart DDDDD, NESHAPS for Industrial, Commercial, and Institutional Boilers and Process Heaters, when it is promulgated. As of the effective date of this permit, this rule was finalized by USEPA but had not yet been promulgated (i.e., published in the Federal Register). See Part II section A.8 of this permit for these requirements.

**2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-00519.

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

**2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-00519.

## II. Operational Restrictions

**1.** Boilers number 4, 5, 7 and 8 (OEPA emissions units B002, B004, B006, and B007) shall not exceed a combined average operating rate of 275 MMBtu per hour for any calendar day from the boilers burning coal or fuel oil during that calendar day.

**2.** Pursuant to OAC rule 3745-17-10, the total heat input for B007 is derated from 190 mmBtu/hr to 155 mmBtu/hr. The derated total heat input of 155 mmBtu/hr corresponds to a steam load of 120,000 pounds per hour. At no time shall the steam flow rate from B007 exceed 120,000 pounds per hour (as an average over any one-hour period), except if, due to an increase in boiler efficiency, a higher steam flow rate can be demonstrated to be equivalent to 155 mmBtu/hr.

**3.** The particulate emissions shall be vented to a baghouse capable of achieving the particulate emission limitation specified in section A.I.1 of these terms and conditions.

## II. Operational Restrictions (continued)

**4.** The pressure drop across the baghouse shall be maintained within the range of 2 to 5 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 Hamilton County Department of Environmental Services, compliance with the mass emission limitation and visible emission limitation shall be determined by performing concurrent mass emission tests and visible emission 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 limitation.

**5.** The quality of the coal burned in this emissions unit shall have a combination of sulfur content and heat content which is sufficient to comply with the allowable emission limitation of 1.14 lbs of sulfur dioxide per mmBtu of actual heat input.

**6.** The total quantity of coal burned shall not exceed 54,312 tons per year.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall collect and record the following information summarizing emissions unit B007's activities for each calendar day:

a. the calendar date;
b. the hours of operation;
c. the amount and type of fuel combusted;
d. the total daily heat input on days when this emissions unit has burned coal (multiply the amount of fuel recorded in section A.III.1.c by the specific heat content of the fuel burned)
e. the average hourly input in mmBtu per hour (section A.III.1.d divided by section A.III.1.b); and
f. the average hourly heat input in mmBtu per hour for B002, B006, and B007 combined for the emissions units burning either coal or fuel oil on that calendar day.

**2.** The permittee shall continuously monitor and record the steam flow rate from B007 in lbs steam/hour.

**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 manuals. The permittee shall record the pressure drop across the baghouse on a daily basis.

**4.** The permittee shall collect and record the following information for each calendar month:

a. the tons of coal burned during the calendar month; and
b. the year-to-date totals for the amount of coal burned during the calendar year.

**5.** The permittee shall operate and maintain existing equipment to continuously monitor and record NOx emissions from this emissions unit in lbs of NOx per mmBtu of actual heat input. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13, 40 CFR 60.48b and 40 CFR 60.49b.

The permittee shall maintain records of the specified data obtained by the continuous NOx emissions monitoring system including, but not limited to, the lbs/hour and the lbs/mmBtu emission rates (as 3-hour rolling averages), the rolling, 30-day average emission rates of NOx in lbs/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx emissions monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a recording medium dedicated to the continuous NOx emissions monitoring system must be kept on site and available for inspection during regular office hours.

A statement of certification of the existing continuous NOx emissions monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. Proof of certification shall be made available to the Director upon request.

**6.** The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13, 40 CFR 60.48b and 40 CFR 60.49b.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

**7.** The permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in lbs of SO2 per mmBtu of actual heat input. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13, 40 CFR 60.47(b) and 40 CFR 60.49(b).

The permittee shall maintain records of the following data obtained by the continuous SO2 emissions monitoring system: the average daily and rolling, 30-day average emission rates of SO2 in lbs/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain a written quality assurance/quality control plan for the continuous SO2 emissions monitoring system designed to ensure continuous valid and representative readings of SO2 emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a recording medium dedicated to the continuous SO2 emissions monitoring system must be kept on site and available for inspection during regular office hours.

A statement of certification of the existing continuous SO2 emissions monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. Proof of certification shall be made available to the Director upon request.

**8.** Prior to undertaking a change or modification to the main duct system which could affect the oxygen content of the combustion air for emissions unit B007, the permittee shall install and operate a temporary oxygen CEMS at emissions unit B007's combustion air inlet to monitor the oxygen content and document any changes. This oxygen monitoring shall consist of two months of continuous oxygen monitoring data prior to and two months after (four-months total) a change or modification to the main duct system.

A change or modification to the main duct system that could trigger the continuous oxygen monitoring specified above would be the addition or removal of a vent line to the main duct system or a process modification that would be reasonably expected to result in a increase or decrease in the oxygen content of a vent line to the main duct system. Routine maintenance and like kind replacements do not require the continuous oxygen monitoring specified above.

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

**9.** 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 #14-00519, issued on May 1, 1985: sections A.III.1 through A.III.8. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify each exceedance of the total heat input limitation specified in section A.II.1.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** If for any reason the steam flow rate from B007 exceeds 120,000 pounds per hour (as an average over any 1-hour period), the following information shall be reported within 5 business days after the exceedance, unless, due to an increase in boiler efficiency, a higher steam flow rate can be demonstrated to be equivalent to 155 mmBtu/hr:

a. the date of the exceedance;
b. the time interval over which the exceedance occurred;
c. the value of the exceedance;
d. the cause(s) of the exceedance;
e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and
f. a copy of the steam chart which shows the exceedance.

**3.** By February 28 of each year, the permittee shall submit annual deviation (excursion) reports that identify each exceedance of the coal usage limitation of 54,312 tons per year.

**4.** The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.4.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

## IV. Reporting Requirements (continued)

**5.** Pursuant to 40 CFR 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective actions taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective actions taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective actions taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

**6.** Pursuant to OAC rules 3745-15-04 and ORC sections 3704.03(I) and 3704.031 and 40 CFR 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances in which the rolling, 30 day average SO2 emissions exceeds the lbs/mmBtu actual heat input emission limitation specified in section A.I.1.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting any continuous SO2 emissions monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective actions taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective actions taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess SO2 emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective actions taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

**7.** Pursuant to OAC rules 3745-15-04 and ORC sections 3704.03(I) and 3704.031 and 40 CFR 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances in which the rolling, 30 day average NOx emissions exceeds the lbs/mmBtu actual heat input emission limitation specified in section A.I.1.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting any continuous NOx emissions monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective actions taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective actions taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

## IV. Reporting Requirements (continued)

If there are no excess NOx emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective actions taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

**8.** The quarterly deviation reports required by section A.IV.1 and A.IV.4 of this permit shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**9.** The permittee shall submit a report to the Hamilton County Department of Environmental Services within 30 days following the end of the four-month period required in section A.III.8 above.

**10.** 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 #14-00519, issued on May 1, 1985: sections A.IV.1 through A.IV.9. 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.

## 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:

1.14 lbs of SO2 per mmBtu of actual heat input

Applicable Compliance Method:

Compliance with the sulfur dioxide emission limitation may be demonstrated based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the USEPA's policy entitled "Enforcement Policy for Sulfur Dioxide Emission Limitations in Ohio" and dated February 11, 1980 (45 FR 9101). The daily and rolling 30-day sulfur dioxide emission rates shall be determined and reported in accordance with the applicable requirements of sections A.III.7 and A.IV.6 of these terms and conditions.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

**1.b** Emission Limitation:

773.9 tpy of SO2

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the short-term lbs/mmBtu emission limitation in section A.I.1 by the emissions unit's maximum heat input of 155 mmBtu/hr and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual tpy emission limitation can be assumed provided that the permittee demonstrates compliance with the short term lbs/mmBtu emission limitation.

## V. Testing Requirements (continued)

**1.c** Emissions Limitation:

0.60 lb of NOx per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by the continuous emission monitoring data collected and recorded in section A.III.5.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

**1.d** Emission Limitation:

407.3 tpy of NOx

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the short-term lbs/mmBtu emission limitation in section A.I.1 by the emissions unit's maximum heat input of 155 mmBtu/hr and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual tpy emission limitation can be assumed provided that the permittee demonstrates compliance with the short term lbs/mmBtu emission limitation.

**1.e** Emission Limitation:

0.03 lb of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9). See testing specified in section A.V.2.

**1.f** Emission Limitation:

20.4 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the short-term lbs/mmBtu emission limitation in section A.I.1 by the emissions unit's maximum heat input of 155 mmBtu/hr and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual tpy emission limitation can be assumed provided that the permittee demonstrates compliance with the short term lbs/mmBtu emission limitation.

**1.g** Emission Limitation:

0.13 lb of CO per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10. See testing specified in section A.V.2.

## V. Testing Requirements (continued)

**1.h** Emission Limitation:

88.3 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the short-term lbs/mmBtu emission limitation in section A.I.1 by the emissions unit's maximum heat input of 155 mmBtu/hr and by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Compliance with the annual tpy emission limitation can be assumed provided that the permittee demonstrates compliance with the short term lbs/mmBtu emission limitation.

**1.i** Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and in OAC rule 3745-17-03(B)(1).

**2.** The permittee shall conduct, or have conducted, emission testing for CO and particulate emissions. Emission testing shall be conducted within 6 months after permit issuance, unless emission testing has been previously conducted that calendar year. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide #16 based on the results of the initial emissions testing.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests.

**3.** If the 30-day rolling average oxygen concentration, during the four-month period required in section A.III.8, is 19% or lower, the permittee shall establish, and get Ohio EPA's approval of, an equation, an f-factor or some other method for correctly computing emissions unit B007's SO2 emission rate in lbs/mmBtu from the CEMS analyzers' outputs in a manner that reflects the new or changed oxygen concentration.

## V. Testing Requirements (continued)

**4.** If a change is made in computing the SO2 emission rate from emissions unit B007, as required in section A.V.1.e, the permittee shall recertify the CEMS (utilizing the approved correction methodology required in section A.V.1.e), within three-months, in accordance with procedures found in Performance Specification 2, Appendix B, 40 CFR Part 60. Personnel from the Hamilton County Department of Environmental Services shall be notified 30 days prior to the initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the test is completed. Certification of the CEM shall be granted upon determination by the Ohio EPA and the Hamilton County Department of Environmental Services that the system meets all requirements of ORC Section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification Test 2.

**5.** Compliance with the total heat input restriction specified in section A.II.1 shall be determined by the monitoring and record keeping requirements of section A.III.1.

**6.** Compliance with the lbs steam/hr restriction specified in section A.II.2 shall be determined by the monitoring and record keeping requirements in section A.III.2.

**7.** Compliance with the coal usage restriction specified in section A.II.6 shall be determined by the monitoring and record keeping requirements in section A.III.4.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** COAL/ASH HANDLING (F001)

**Activity Description:** FUGITIVE DUST

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| coal handling system with baghouse | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-07(B)(1) | Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as provided by rule. |
| | OAC rule 3745-17-08(B)(3) | See section A.I.2.a below. |
| | OAC rule 3745-17-11(B) | 44.6 lbs/hr of particulate emissions from all stacks associated with this emissions unit.<br><br>See section A.I.2.c below. |
| ash handling system with baghouse and spray bar | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |
| | OAC rule 3745-17-07(B)(1) | Visible emissions of dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule. |
| | OAC rule 3745-17-08(B)(3) | See section A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; without taking or installing reasonably available control measures (RACM) to prevent fugitive dust from becoming airborne. The following control requirements satisfy RACM:

i. Coal trucks shall be unloaded in a totally enclosed shed. The shed and the dump pit shall be vented to the fabric filter.

ii. The coal conveying system including the screw conveyor, bucket elevator, coal silo and day bunker shall be enclosed and vented to the coal silo baghouse.

iii. The particulate emissions from the coal unloading shall be vented to the fabric filter.

**2.b** No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; without taking or installing reasonably available control measures (RACM) to prevent fugitive dust from becoming airborne. The following control requirements satisfy RACM:

i. Bottom ash and fly ash shall be conveyed in a totally enclosed system, and the particulate emissions shall be vented to the ash silo baghouse.

ii. Water shall be sprayed on the ash as it is loaded on the trucks, in order to minimize or eliminate visible emissions of fugitive dust.

iii. Ash shall be loaded into trucks in an enclosed shed and particulate emissions shall be vented to the fabric filter.

**2.c** This emission limitation is based on Table 1 of OAC rule 3745-17-11. If the emission testing required by section A.V.2.a demonstrates that the allowable emissions rate from Figure II is more stringent than the allowable emission limitation from Table 1, the permittee shall comply with the more stringent emission limitation.

**II. Operational Restrictions**

**1.** The pressure drop across the coal silo baghouse shall be continuously maintained between 2 to 5 inches of water while the emissions unit is in operation, except for a short period of time following the replacement of bags within the baghouse.

The pressure drop across the baghouse may be modified should the permittee provide additional information (e.g., testing, engineering studies, etc.) demonstrating that an alternative pressure drop ensures ongoing compliance with the applicable mass emission limitation. Written notification of such a modification is required to be submitted to the Hamilton County Department of Environmental Services for approval prior to a change occurring.

**2.** The pressure drop across the ash silo baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation, except for a short period of time following the replacement of bags within the baghouse.

The pressure drop across the baghouse may be modified should the permittee provide additional information (e.g., testing, engineering studies, etc.) demonstrating that an alternative pressure drop ensures ongoing compliance with the applicable mass emission limitation. Written notification of such a modification is required to be submitted to the Hamilton County Department of Environmental Services for approval prior to a change occurring.

**3.** The pressure drop across the fabric filter shall be maintained within the range of 0.2 to 5 inches of water while the emissions unit is in operation, except for a short period of time following the replacement of bags within the baghouse.

**4.** The spray bars (wet suppression) shall be utilized at all times when ash unloading is occurring.

## II. Operational Restrictions (continued)

**5.** The operation of the control equipment outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Hamilton County Department of Environmental Services, 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 measure the pressure drop across the ash silo baghouse, the coal silo handling baghouse, and the fabric filter while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The permittee shall record the pressure drops on a daily basis while the emissions unit is operating.

**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 stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**3.** When the emissions unit is in operation, the permittee shall record in an operating log when the spray bars (wet suppression) are utilized.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the coal silo baghouse, ash silo baghouse, and fabric filter did not comply with the allowable range specified in section A.I.II above.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

**1.c** Emission Limitation:

44.6 lbs/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**2.** Within 180 days after the effective date of this permit, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

**2.a** A particulate emissions test shall be conducted at the inlet and outlet of the control devices to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11, and to demonstrate compliance with the emission limitation in section A.I.1. Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

**2.b** Not later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA's refusal to accept the results of the emission test.

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** STYRENE LOADING (J001)

**Activity Description:** RAW MATERIAL LOADING

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| styrene loading rack with packed bed scrubber | OAC rule 3745-21-07(E) | See section A.I.2.a below. |
| | 40 CFR Part 63, Subpart EEEE | See section A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** The permittee shall not load in any one day more than forty thousand gallons of any volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C), into any tank truck, trailer, or railroad tank car from any loading facility unless the loading facility is equipped with a vapor collection and disposal system properly installed, in good working order, in operation, and consisting of one of the following:

i. an adsorber system or condensation system which processes and recovers at least ninety percent by weight of all vapors and gases from the equipment being controlled; or

ii. a vapor handling system which directs all vapors to a fuel gas system; or

iii. other equipment or means for purposes of air pollution control as may be acceptable to and approved by the Director.

All loading from facilities subject to the provisions of sections A.I.2.a.i through A.I.2.a.iii of these terms and conditions shall be accomplished in such a manner that all displaced vapors and gases shall be vented only to the vapor collection system. A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

**2.b** The permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart EEEE in accordance with 40 CFR Part 63, Subpart EEEE (including the tables and appendices) referenced in Subpart EEEE, which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit. However, incorporating Subpart EEEE into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and past the Subpart's tables and equations into STARS format.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall monitor and record the amount of volatile photochemically reactive material loaded through this emissions unit for each day of its operation.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services in writing of each record that documents an exceedance of the 40,000 gallon per day throughput limitation for volatile photochemically reactive materials. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

**2.** Should the permittee wish to comply with the control device requirements specified in section A.I.2.a and exceed 40,000 gallons per day of volatile photochemically reactive material throughput, the Hamilton County Department of Environmental Services shall be notified 15 days prior to such a change. The purpose of this notification is to establish appropriate parametric monitoring and testing requirements to ensure the requirements of OAC rule 3745-21-07(E) are being met.

## V. Testing Requirements

**1.** Compliance with the material throughput limitation specified in section A.I.2.a shall be demonstrated by the monitoring and record keeping requirements in section A.III.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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** ABS #1 POLY (P001)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| batch emulsion polymerization process for ABS (predominant product), SAN, and ASA with boilers and flare used as control device<br><br>[Process vents for this emissions unit are comprised of the following: Group 1 Batch Process Vents - C KT and D KT; and Group 2 batch process vents - C PMX, C CLR C930 HT, D PMX, D CLR, D930 HT, E PMX, E KT and E HTs.] | OAC rule 3745-31-05(A)(3) (PTI 14-04577) | 23.6 lbs/day of organic compounds<br>4.31 tpy of organic compounds<br><br>See section A.I.2.a below.<br><br>There shall be no visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07 and 40 CFR Part 63, Subpart JJJ. |
| | 40 CFR Part 63, Subpart JJJ | This emissions unit is subject to the control measures specified in 40 CFR Part 63, Subpart JJJ for Group 1 and Group 2 batch process vents.<br><br>See section A.I.2.b below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 12.0 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11). |
| | OAC rule 3745-21-07(G)(2) | The control efficiency specified by this rule (i.e., not less than 85% destruction of organic material) is less stringent than control efficiency established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** All process emissions from P001 shall be vented to a flare having a control efficiency of at least 99%, or to a boiler for incineration, with a control efficiency of at least 99.99%.

**2.b** Halogenated batch process vents, as defined in 40 CFR 63.1312, shall not be vented to a flare.

[40 CFR 63.1322(a)(1)(ii)]

**2.c** When a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of 40 CFR 63.1322, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

[40 CFR 63.1322(d)]

## II. Operational Restrictions

**1.** The flare shall be steam-assisted, air-assisted, or non-assisted.

[40 CFR 63.11(b)(2)]

**2.** The flare shall be operated at all times when emissions may be vented to it.

[40 CFR 63.11(b)(3)]

**3.** The flare shall be operated with a flame present at all times when Group 1 emissions are being vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

[40 CFR 63.11(b)(5)]

**4.** The permittee shall adhere to the heat content specifications in 40 CFR 63.11(b)(6)(ii), and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8), or adhere to the requirements in 40 CFR 63.11(b)(6)(i).

[40 CFR 63.11(b)(6)]

**5.** B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P001 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P001 emissions was 790 degrees Fahrenheit.

[40 CFR 63.1334]

**6.** B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P001 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P001 emissions was 1238 degrees Fahrenheit.

[40 CFR 63.1334]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall comply with the monitoring provisions for batch process vents specifed in 40 CFR 63.1324(a).

**2.a** When the flare is used to comply with the control requirements specified in section A.I.1, a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame is required.

**2.b** Hourly records for all periods during which there was no pilot flame for the flare and emissions from P001 were being vented to the flare shall be maintained.

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

**2.c** A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

**2.d** This monitoring equipment shall be in operation at all times when batch emission episodes, or portions thereof, that the owner or operator has selected to control are vented to the control device, or at all times when an aggregate batch vent stream is vented to the control device.

[40 CFR 63.1324(c)(2)]

**3.** The permittee shall record the following information each day:

a. all periods during which the flare was not operating and emissions were vented to it;

b. all periods during which there was no pilot flame;

c. the operating times for the flare and the continuous monitoring equipment for flame presence; and

d. all periods during which there were visible emissions from the flare, except for periods not to exceed a total of 5 minutes in any consecutive 2-hour period.

**4.** The permittee shall maintain records of the following:

a. the flare design (i.e., steam-assisted, air-assisted or non-assisted); and

b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.1333(e).

[40 CFR 63.11]

**5.** If a boiler is used to incinerate organic compound emissions from emissions unit P001, and the emissions are not used as primary fuel or introduced with the primary fuel, then the permittee shall operate and maintain a continuous firebox temperature monitor and recorder for each boiler whose design heat input capacity is less than 44 MW. The continuous firebox temperature and recorder system must compute and store daily average firebox temperature values for every date in which a less than 44 MW boiler treats P001 emissions. For computation of the daily average, the operating day shall commence at 0000 hours and conclude at 2400 hours. As of the issuance date of this permit, B002 and B006 were the permittee's only boilers subject to this continuous firebox temperature monitoring and recording requirement. Boiler B007 has a design heat input capacity greater than 44 MW and is exempt from these monitoring requirements.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

This monitoring equipment shall be in operation at all times when batch emission episodes, or portions thereof, that the owner or operator has selected to control are vented to the control device, or at all times when an aggregate batch vent stream is vented to the control device

[40 CFR 63.1324(c)(3)]

**6.** Group 1 batch process vents or aggregate batch vent streams using a vent system that contains bypass lines that could divert emissions away from a control device used to comply with 40 CFR 63.1322(a) or 40 CFR 63.1322(b) shall comply with either section A.III.6.a or A.III.6.b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to 40 CFR 63.1324(e).

[40 CFR 63.1324(e)]

**6.a** The permittee shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes, or monitor valve position which would allow gas flow to be present. Records shall be generated as specified in 40 CFR 63.1326(e)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert emissions away from the control device and to the atmosphere.

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

**6.b** The permittee shall secure the bypass line damper or valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the damper or valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records shall be generated as specified in 40 CFR 63.1326(e)(4).

**7.** The permittee, except as provided in paragraphs (a)(7) and (a)(8) 40 CFR 63.1326, shall maintain the records specified in paragraphs (a)(1) through (a)(6) of 40 CFR 63.1326 for each batch process vent subject to the group determination procedures of 40 CFR 63.1323. Except for paragraph (a)(1) of 40 CFR 63.1326, the records required by 40 CFR 63.1326(a) are restricted to the information developed and used to make the group determination under 40 CFR 63.1323(b) through 63.1323(g), as appropriate. If the permittee did not need to develop certain information (e.g., annual average batch vent flow rate) to determine the group status, 40 CFR 63.1326(a) does not require that additional information be developed. 40 CFR 63.1326(a)(9) specifies the recordkeeping requirements for Group 2 batch process vents that are exempt from the batch mass input limitation provisions, as allowed under 40 CFR 63.1322(h).

[40 CFR 63.1326(a)]

**8.** Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping requirements contained in Permit to Install #14-04577, issued on May 12, 1999: sections A.III.1 through A.III.7. The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, section A.7.e of this permit and in sections A.IV.1.a and A.IV.1.b below.

**1.a** Periodic flare reporting requirements:

i. all dates and times in which the pilot flame was absent or its monitoring device was not operational while emissions from P001 were being vented to the flare;

ii. all dates and times in which emissions from P001 were diverted from the flare to the atmosphere;

iii. all dates and times in which flare bypass line monitoring systems required by section A.III.6 of this permit were not operational while treating P001 emissions;

iv. all times the emissions or a seal/closure mechanisms required by section A.III.6 were found unlocked during a monthly inspection: and

v. all periods during which the flare had visible emissions exceeding a total of 5 minutes in any consecutive 2-hour period.

The reports shall include the date, time, and duration of each such period, as well as reasons for each such deviation.

## IV. Reporting Requirements (continued)

**1.b** Periodic main duct boiler reporting requirements:

i. all dates in which boilers B002 and B006 were used to treat main duct emissions and their daily average firebox temperatures were less than the temperatures required by sections A.II.6 and A.II.7;

ii. all dates and times in which a boiler's temperature monitoring device was not operational while treating P001 emissions;

iii. all dates and times in which P001 emissions were diverted from the boilers to the atmosphere; and

iv. all dates and times in which main duct boiler bypass line monitoring systems required by section A.III.6 were not operational while treating P001 emissions or seal/closure mechanisms required by section A.III.6 were found unlocked during a monthly inspection.

**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 #14-04577, issued on May 12, 1999: sections A.IV.1, A.IV.1a and A.IV.1b. 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.

## 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:

23.6 lbs/day of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit's calculated potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified in section A.I.1, compliance with this emission limitation may be demonstrated.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.b** Emission Limitation:

4.31 tpy of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit's calculated potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified in section A.I.2.a, compliance with this emission limitation may be demonstrated.

**1.c** Emission Limitation:

No visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

If requested, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

## V. Testing Requirements (continued)

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.e** Emission Limitation:

12.0 lbs/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

The potential to emit particulate emissions, based on engineering calculations and production information, was determined to be 0.01 lb/hr. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.f** Emission Limitation:

The permittee shall adhere to the heat content specifications in 40 CFR 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or (b)(8).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60.11(b). Alternative USEPA-approved test methods may be used with prior approval from the Director.

**2.** The permittee shall conduct, or have conducted, emission testing for emissions unit B007 to demonstrate compliance with the control efficiency specified in section A.I.2.a.

This emission testing shall be conducted during the third year of the permit.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

The test shall be conducted while the emissions unit is operating at or near their maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

## V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** D#1 POLY (P004)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| polymerization operation vented to boilers used for incineration of organic compounds<br><br>[Process vents for this emissions unit consist of the following: Group 2 continuous process vents with a TRE index greater than 4 - VJ, DH and FUG.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 11.6 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |
| | OAC rule 3745-21-07(G)(2) | The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.<br><br>See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

**2. Additional Terms and Conditions (continued)**

**2.b** Emissions from the Building 9 Organic Trap shall be vented to the main duct boilers per 40 CFR 63.137 oil/water separator requirements, except during the main duct outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

**2.c** The permittee has submitted calculations indicating that the uncontrolled potential-to-emit for organic material from this emissions unit is less than eight pounds per hour and forty pounds per day. Therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with the pounds per hour and the pounds per day emission limitations.

The permittee has determined that the maximum organic material emission rates from this emissions unit are 1.2 lbs/hr and 28.8 lbs/day.

**2.d** When a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of 40 CFR 63.1322, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

[40 CFR 63.1322(d)]

**II. Operational Restrictions**

**1.** B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P004 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P004 emissions was 790 degrees Fahrenheit.

[40 CFR 63.1334]

**2.** B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P004 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P004 emissions was 1238 degrees Fahrenheit.

[40 CFR 63.1334]

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

**1.** The permittee shall maintain records of the measurements, engineering assessments, and calculations performed to determine the TRE (as defined in 40 CFR 63.115) index value of the vent stream emitted from this emissions unit. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified on 40 CFR 63.115(d)(1), with the differences noted in 40 CFR 63.1315(a)(1) through (18).

{40 CFR 63.117(b)]

**2.** The permittee shall keep up-to-date, readily accessible records of the following:

a. any process changes as defined in 40 CFR 63.115(e), with the differences noted in 40 CFR 63.1315(a)(1) through (18); and

b. any recalculation of the TRE index value pursuant to 40 CFR 63.115(e), with the differences noted in 40 CFR 63.1315(a)(1) through (18).

[40 CFR 63.118(c)]

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

11.6 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential hourly emission rate (controlled), based on engineering calculations and production information, was determined to be 0.01 lb/hr. The production information used to generate the emission rate calculation is confidential.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.c** Emission Limitation:

The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.

Applicable Compliance Method:

To demonstrate compliance with the pounds per hour and the pounds per day emission limitations, the permittee has determined that the maximum organic material emission rates from this emissions unit are 1.2 lbs/hr and 28.8 lbs/day.

The permittee shall demonstrate compliance with the minimum of
eighty-five percent reduction requirement in accordance with the requirements of section A.V.2.

**2.** The permittee may use the compliance demonstration for control efficiency of organic material for emissions unit P001, using boiler B007 to capture and destroy organic material, to demonstrate compliance with this requirement for emissions unit P004.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** ABS #1 DRYING (P010)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous polymer drying operation for ABS (predominant product) and ASA with boilers used as control device for organic compound emissions and a wet venturi scrubber for particulate emissions<br><br>[Process vents for this emissions unit consist of a Group 1 continuous process vent - combined vent.] | 40 CFR Part 63, Subpart JJJ | See sections A.I.2.a through A.I.2.d below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 12.8 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |
| | OAC rule 3745-21-07(G)(2) | The control efficiency specified by this rule (i.e., not less than 85% destruction of organic material) is less stringent than control efficiency established pursuant to 40 CFR Part 63, Subpart JJJ. |

**2. Additional Terms and Conditions**

**2.a** The permittee shall reduce emissions of total organic hazardous air pollutants from Group 1 continuous process vents by 98 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, corrected to 3 percent oxygen, and compliance can be determined by measuring either organic hazardous air pollutants or total organic carbon using the procedures in 40 CFR 63.116.

[40 CFR 63.113(a)(2)]

**2. Additional Terms and Conditions (continued)**

**2.b** The vent stream shall be introduced into the flame zone of the boilers used to comply with the emission reductions required by section A.I.2.a.

[40 CFR 63.113(b)]

**2.c** The permittee shall not introduce halogenated vent streams from this emissions unit into the boilers.

**2.d** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

## II. Operational Restrictions

**1.** Boiler B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P010 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P010 emissions was 790 degrees Fahrenheit.

**2.** Boiler B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P010 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P010 emissions was 1238 degrees Fahrenheit.

**3.** The pressure drop across P010 FBD scrubber shall be continuously maintained at a value of not less than 40 inches of water at all times while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

**1.** If a boiler is used to incinerate organic compound emissions from emissions unit P010, and the emissions are not used as primary fuel or introduced with the primary fuel, then the permittee shall operate and maintain a continuous firebox temperature monitor and recorder for each boiler whose design heat input capacity is less than 44 MW. The continuous firebox temperature and recorder system must compute and store daily average firebox temperature values for every date in which a less than 44 MW boiler treats P010 emissions. For computation of the daily average, the operating day shall commence at 0000 hours and conclude at 2400 hours. As of the issuance date of this permit, B002 and B006 were the permittee's only boilers subject to this continuous firebox temperature monitoring and recording requirement. Boiler B007 has a design heat input capacity greater than 44 MW and is exempt from these monitoring requirements.

[40 CFR 63.114(a)(3)]

**2.** The permittee shall comply with either section A.III.2.a or A.III.2.b for any bypass line that could divert a Group 1 vent stream away from a control device used to comply with the emission limits of 63.113(a)(1) or (a)(2) that could divert the gas stream directly to the atmosphere. [Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to section A.III.2.a or A.III.2.b.]

**2.a** The permittee shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes, or monitor valve position which would allow gas flow to be present. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

**2.b** The permittee shall secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

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

**3.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across P010 FBD Scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day when this emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water, on a daily basis; and

b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit. This report shall include the following main duct boiler reporting requirements:

a. all dates and times in which a main duct boiler's daily average firebox temperature was less than the temperature required in sections A.II.1 and A.II.2;

b. all dates and times in which a boiler's temperature monitoring device was not operational while treating P010 emissions;

c. all dates and times in which P010 emissions were diverted from the boilers to the atmosphere; and

d. all dates and times in which main duct boiler bypass line monitoring systems required by section A.III.2 were not operational while treating P010 emissions or seal/closure mechanisms required by section A.III.2 were found unlocked during a monthly inspection.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

## 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:

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

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

12.8 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential particulate emission rate, based on engineering calculations and production information, was determined to be 1.8 lbs/hr. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**2.** The permittee shall conduct, or have conducted, emission testing for emissions units B002 and B006 to demonstrate compliance with the control efficiency or the stack outlet concentration specified in section A.I.2.a.

The emission testing shall be conducted for emissions units B002 and B006, while these units are operating simultaneously. This emission testing shall be conducted during the third year of the permit.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) or the stack outlet concentration shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** D#2 POLY (P015)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| polymerization operation for SAN (predominant product), SMA, and SMMA vented to boilers used for incineration of organic compounds<br><br>[Process vents for this emissions unit consist of the following: Group 2 continuous process vents with a TRE index greater than 4 - VJ, DH and FUG.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 11.6 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11(B) |
| | OAC rule 3745-21-07(G)(2) | The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.<br><br>See section A.I.2.c below. |

### 2. Additional Terms and Conditions

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in 40 CFR 63.1315(a)(1) through (18). See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

**2. Additional Terms and Conditions (continued)**

**2.b** Emissions from the Building 9 Organic Trap shall be vented to the main duct boilers per 40 CFR 63.137 oil/water separator requirements, except during the main duct outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

**2.c** The permittee has submitted calculations indicating that the uncontrolled potential-to-emit for organic material from this emissions unit is less than eight pounds per hour and forty pounds per day. Therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with the pounds per hour and the pounds per day emission limitations.

The permittee has determined that the maximum organic material emission rates from this emissions unit are 1.2 lbs/hr and 28.8 lbs/day.

**2.d** When a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of 40 CFR 63.1322, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

[40 CFR 63.1322(d)]

**II. Operational Restrictions**

**1.** B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P015 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P015 emissions was 790 degrees Fahrenheit.

[40 CFR 63.1334]

**2.** B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P015 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P015 emissions was 1238 degrees Fahrenheit.

[40 CFR 63.1334]

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

**1.** The permittee shall maintain records of the measurements, engineering assessments, and calculations performed to determine the TRE (as defined in 40 CFR 63.115) index value of the vent stream emitted from this emissions unit. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified on 40 CFR 63.115(d)(1) with the differences noted in 40 CFR 63.1315(a)(1) through (18).

{40 CFR 63.117(b)]

**2.** The permittee shall keep up-to-date, readily accessible records of the following:

a. Any process changes as defined in 40 CFR 63.115(e) with the differences noted in 40 CFR 63.1315(a)(1) through (18); and

b. Any recalculation of the TRE index value pursuant to 40 CFR 63.115(e) with the differences noted in 40 CFR 63.1315(a)(1) through (18).

[40 CFR 63.118(c)]

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

11.6 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential emission rate (controlled), based on engineering calculations and production information, was determined to be 0.3 lb/hr. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculations are provided.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.c** Emission Limitation:

The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.

Applicable Compliance Method:

To demonstrate compliance with the pounds per hour and the pounds per day emission limitations, the permittee has determined that the maximum organic material emission rates from this emissions unit are 1.2 lbs/hr and 28.8 lbs/day.

The permittee shall demonstrate compliance with the minimum of eighty-five percent reduction requirement in accordance with the requirements of section A.V.2.

**2.** The permittee may use the compliance demonstration for control efficiency of organic material for emissions unit P001, using boiler B007 to capture and destroy organic material, to demonstrate compliance with this requirement for emissions unit P015.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** SAN #1A POLY (P021)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| batch polymerization (SAN) operation vented to boilers used for incineration of organic compounds<br><br>[Process vents for this emissions unit consist of the following: Group 2 Batch Process Vents - PMIX TK, DRCVR, KT and HTs.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(G)(2) | The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.<br><br>See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** The batch vent group determination for this emissions unit was based on the single highest HAP recipe at 12 months/year maximum design capacity in accordance with 40 CFR 63.1322(h). Therefore, the permittee is not required to establish batch mass input limitations for this Group 2 batch process vent. The permittee has opted to report the maximum mass of HAP that can be charged annually to each vent's respective unit operations at the maximum design capacity per 40 CFR 63.1327(A)(5). Additionally, since this Group 2 vent has annual emissions less than 11,800 kg/yr (the level specified in 63.1326(d)), the permittee is not required to submit the batch vent/cutoff flow rate data specified in 63.1326(a)(4) through (6).

**2.b** Emissions from the Building 9 Organic Trap shall be vented to the main duct boilers per 40 CFR 63.137 oil/water separator requirements, except during the main duct outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

**2. Additional Terms and Conditions (continued)**

**2.c** The permittee has submitted calculations indicating that the uncontrolled potential-to-emit for organic material from this emissions unit is less than eight pounds per hour and forty pounds per day. Therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with the pounds per hour and the pounds per day emission limitation.

The permittee has determined that the maximum organic material emission rates from this emissions unit are 1.1 lbs/hr and 26.4 lbs/day.

**2.d** When a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of 40 CFR 63.1322, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

[40 CFR 63.1322(d)]

**II. Operational Restrictions**

**1.** B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P021 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P001 emissions was 790 degrees Fahrenheit.

[40 CFR 63.1334]

**2.** B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P021 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P021 emissions was 1238 degrees Fahrenheit.

[40 CFR 63.1334]

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

**1.** For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.1322(h), the records specified in sections A.III.1.a and A.III.1.b below shall be maintained:

a. documentation of the maximum design capacity of the TPPU; and

b. the mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity.

[40 CFR 63.1326(a)(9)]

**IV. Reporting Requirements**

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

**V. Testing Requirements**

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.

Applicable Compliance Method:

To demonstrate compliance with the pound per hour and the pound per day emission limitations, the permittee has determined that the maximum organic material emission rates from this emissions unit are 1.1 lbs/hr and 26.4 lbs/day.

The permittee shall demonstrate compliance with the minimum of eighty -five percent reduction requirement in accordance with the requirements of section A.V.2.

**2.** The permittee may use the compliance demonstration for control efficiency of organic material for emissions unit P001, using boiler B007 to capture and destroy organic material, to demonstrate compliance with this requirement for emissions unit P021.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** SAN #1B POLY (P022)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| batch polymerization (SAN) operation vented to boilers used for incineration of organic compounds<br><br>[Process vents for this emissions unit consist of the following: Group 2 Batch Process Vents - PMIX TK, DRCVR, KT and HTs.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(G)(2) | The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.<br><br>See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** The batch vent group determination for this emissions unit was based on the single highest HAP recipe at 12 months/year maximum design capacity in accordance with 40 CFR 63.1322(h). Therefore, the permittee is not required to establish batch mass input limitations for this Group 2 batch process vent. The permittee has opted to report the maximum mass of HAP that can be charged annually to each vent's respective unit operations at the maximum design capacity per 40 CFR 63.1327(A)(5). Additionally, since this Group 2 vent has annual emissions less than 11,800 kg/yr (the level specified in 63.1326(d)), the permittee is not required to submit the batch vent/cutoff flow rate data specified in 63.1326(a)(4) through (6).

**2.b** Emissions from the Building 9 Organic Trap shall be vented to the main duct boilers per 40 CFR 63.137 oil/water separator requirements, except during the main duct outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

**2. Additional Terms and Conditions (continued)**

**2.c** The permittee has submitted calculations indicating that the uncontrolled potential-to-emit for organic material from this emissions unit is less than eight pounds per hour and forty pounds per day. Therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with the pounds per hour and the pounds per day emission limitation.

The permittee has determined that the maximum organic material emission rates from this emissions unit are 1.1 lbs/hr and 26.4 lbs/day.

**2.d** When a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of 40 CFR 63.1322, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

[40 CFR 63.1322(d)]

**II. Operational Restrictions**

**1.** B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P022 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P001 emissions was 790 degrees Fahrenheit.

[40 CFR 63.1334]

**2.** B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P022 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P001 emissions was 1238 degrees Fahrenheit.

[40 CFR 63.1334]

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

**1.** For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.1322(h), the records specified in sections A.III.1.a and A.III.1.b below shall be maintained:

a. documentation of the maximum design capacity of the TPPU; and

b. the mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity.

[40 CFR 63.1326(a)(9)]

**IV. Reporting Requirements**

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

**V. Testing Requirements**

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.

Applicable Compliance Method:

To demonstrate compliance with the pound per hour and the pound per day emission limitations, the permittee has determined that the maximum organic material emission rates from this emissions unit are 1.1 lbs/hr and 26.4 lbs/day.

The permittee shall demonstrate compliance with the minimum of eighty -five percent reduction requirement in accordance with the requirements of section A.V.2.

**2.** The permittee may use the compliance demonstration for control efficiency of organic material for emissions unit P001, using boiler B007 to capture and destroy organic material, to demonstrate compliance with this requirement for emissions unit P022.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** CMPD #8 (P029)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and wet venturi scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | OAC rule 3745-31-05(A)(3) (PTI 14-04709) | 20.38 lbs/hr of organic compounds<br><br>11.43 tpy of organic compounds<br><br>4.67 lbs/hour of particulate emission (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>20.46 tpy of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>The particulate emission limitations are based on the total combined particulate emissions from emissions units P029 through P034.<br><br>The requirements of this rule also include compliance with the requirments of OAC rules 3745-17-07(A) and 3745-17-07(B).<br><br>See sections A.I.2.a through A.I.2.e below. |
| | 40 CFR Part 63, Subpart FFFF | See section A.I.2.g below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | OAC rule 3745-17-11(B) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-07(B) | Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as provided by rule. |

**2. Additional Terms and Conditions**

**2.a** Particulate emissions from the color weigh area, color charge station, pigment feeders, polymer feeders, and overhead hoppers shall be vented to either the color weigh dust collector, main dust collectors, or the overhead hopper dust collectors and filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.b** Particulate emissions from the extruder shall be vented to the B8 scrubber (wet venturi scrubber). The B8 scrubber shall have a minimum control efficiency of 95% for particulate emissions.

**2.c** Except for a time period not to exceed 720 hours per year, the organic compound emissions from the extruder shall be vented to the thermal oxidizer.

**2.d** The thermal oxidizer shall have a minimum control efficiency of 95% for organic compound emissions.

**2.e** Particulate emissions from P029, P030, P031, and P035 intermediate silos that process crumb and bead materials shall be vented to the dust collectors or filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.f** Only pellet materials may be processed through P029, P030, P031, and P035 intermediate silos that are not equipped with dust collectors or filters.

**2.g** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

**II. Operational Restrictions**

**1.** The average daily firebox temperature of the thermal oxidizer shall not be below 1450 degrees Fahrenheit while emissions unit P029 is vented to the thermal oxidizer. This daily average was established during the most recent stack test that demonstrated this emissions unit to be in compliance.

**2.** The pressure drop across the B8 scrubber shall be continuously maintained at a value of not less than 20 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate for the B8 scrubber shall be continuously maintained at a value of not less than 110 gallons per minute at all times while the emissions unit is in operation.

The operation of the control equipment outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Hamilton County Department of Environmental Services, 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.a** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate for the B8 scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**1.b** The permittee shall collect and record the following information each day when the emissions unit is in operation:

i. the pressure drop across the scrubber, in inches of water, on a daily basis;

ii. the scrubber water flow rate, in gallons per minute, on a daily basis; and

iii. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**2.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal oxidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

**3.** The permittee shall collect and record the following information on a monthly basis:

a. the total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer); and

b. the year-to-date total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer).

**4.** 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 stacks 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 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.

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

**5.** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**6.** 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 #14-04709, issued on July 8, 1999: sections A.III.1 through A.III.5. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate for the B8 scrubber and/or the pressure drop across the B8 scrubber was not maintained at or above the levels specified in section A.II.2 of these terms and conditions.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** By February 28 of each year, the permittee shall submit a report that identifies the total number of hours the thermal oxidizer was bypassed, while the emissions unit was in operation, during the previous calendar year.

**3.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit or any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions from the stack or minimize or eliminate the visible fugitive particulate emissions from the egress points. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

**4.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the thermal oxidizer termperature restriction identified in section A.II.1 was not met.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

## IV. Reporting Requirements (continued)

**5.** 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 #14-04709, issued on July 8, 1999: sections A.IV.1 through A.IV.4. 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.

## 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:

20.38 lbs/hr of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit's uncontrolled potential to emit.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.b** Emission Limitation:

11.43 tpy of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit operating at its uncontrolled potential to emit for a maximum of 720 hours per year and operating the remainder of the year (i.e., 8040 hours) with the thermal oxidizer operating at a minimal control efficiency of 95% for organic compounds. Compliance with sections A.I.2.c, A.I.2.d, and A.V.1.a demonstrates compliance this emission limitation.

**1.c** Emission Limitation:

4.67 lbs/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.d** Emission Limitation:

20.46 tpy of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

The particulate emission limitations were established based on engineering calculations and production information contained in the PTI 14-04709 application. Demonstration of compliance with the emission limitation in section A.V.1.c demonstrates compliance with this emission limitation.

## V. Testing Requirements (continued)

**1.e** Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**2.** The permittee shall conduct, or have conducted, emission testing for the thermal oxidizer in accordance with the following requirements:

**2.a** i. The emission testing shall be conducted within 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the control efficiency for organic compounds specified in section A.I.2.d of these terms and conditions.

iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

**2.b** The permittee shall conduct, or have conducted, emission testing for one representative hopper/silo (to determine an appropriate emission factor for all 60 silos and hoppers) and all other stacks associated with emissions units P029 through P031 in accordance with the following requirements:

i. the emission testing shall be conducted for particulate emissions within 2.5 years after the effective date of this permit; and

ii. emission testing shall be conducted at the inlet and outlet of the color weigh dust collector, main dust collectors, and Bldg.8 Scrubber to demonstrate compliance with control efficiencies specified in sections A.I.2.a, A.I.2.b, and A.I.2.e and the emission limitation specified in A.I.1;

iii. emission testing shall be conducted on one representative hopper/silo to demonstrate the accuracy of the permittee's 0.3 lb/ton product conveyed emission factor that is used for all 60 silos and hoppers.

**2.c** The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | | |

**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 (P029) was evaluated based on the actual 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 ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Styrene
TLV (ug/m3): 85,000
Maximum Hourly Emission Rate (lbs/hr): 14.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 202
MAGLC (ug/m3): 2024

Pollutant: Acrylonitrile
TLV (ug/m3): 4,300
Maximum Hourly Emission Rate (lbs/hr): 0.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30
MAGLC (ug/m3): 102

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 "TLV/BEI Handbook" published by the 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.).

**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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the 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:** CMPD #9 (P030)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and wet venturi scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | OAC rule 3745-31-05(A)(3) (PTI 14-05102) | 4.67 lbs/hour of particulate emission (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>20.46 tpy of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>8.15 lbs/hr of organic compounds from the the B8 scrubber exhaust<br><br>0.41 lb/hr of organic compounds from thermal oxidizer exhaust<br><br>4.57 tpy of organic compounds from the thermal oxidizer exhaust<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B).<br><br>See sections A.I.2.a through A.I.2.e below. |
| | 40 CFR Part 63, Subpart FFFF | See section A.I.2.g below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | 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** Particulate emissions from the color weigh area, color charge station, pigment feeders, polymer feeders, and overhead hoppers shall be vented to either the color weigh dust collector, main dust collectors, or the overhead hopper dust collectors and filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.b** Particulate emissions from the extruder shall be vented to the B8 scrubber. The B8 scrubber (wet venturi) shall have a minimum control efficiency of 95% for particulate emissions.

**2.c** Except for a time period not to exceed 720 hours per year, the organic compound emissions from the extruder shall be vented to the thermal oxidizer.

**2.d** The thermal oxidizer shall have a minimum control efficiency of 95% for organic compound emissions.

**2.e** Particulate emissions from the emissions units P029, P030, P031, and P035 intermediate silos that process crumb and bead materials shall be vented to the dust collectors or filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.f** Only pellet materials may be processed through emissions units P029, P030, P031, and P035 intermediate silos that are not equipped with dust collectors or filters.

**2.g** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

**II. Operational Restrictions**

**1.** The average daily firebox temperature of the thermal oxidizer shall not be below 1450 degrees Fahrenheit while emissions unit P030 is vented to the thermal oxidizer. This daily average was established during the most recent stack test that demonstrated this emissions unit to be in compliance.

**2.** The pressure drop across the B8 scrubber shall be continuously maintained at a value between 20 and 35 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate for the B8 scrubber shall be continuously maintained at a value of not less than 110 gallons per minute at all times while the emissions unit is in operation.

The operation of the control equipment outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Hamilton County Department of Environmental Services, 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.a** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate for the B8 scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

**1.b** The permittee shall collect and record the following information each day when the emissions unit is in operation:

i. the pressure drop across the scrubber, in inches of water, on a daily basis;

ii. the scrubber water flow rate, in gallons per minute, on a daily basis; and

iii. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**2.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal ozidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

**3.** The permittee shall collect and record the following information on a monthly basis:

a. the total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer); and

b. the year-to-date total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer).

**4.** 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 each stacks 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. whether the emissions are representative of normal operations;
b. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
c. the total duration of any visible emission incident; and
d. any corrective actions taken to eliminate the visible emissions.

**5.** 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 #14-05102, issued on July 31, 2001: sections A.III.1 through A.III.4. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate for the B8 scrubber and/or the pressure drop across the B8 scrubber was not maintained at levels required by section A.II.2 of these terms and conditions.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** By February 28 of each year, the permittee shall submit an annual report that identifies the total number of hours that the thermal oxidizer was bypassed, while the emissions unit was in operation, during the previous calendar year.

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit semiannual written reports that:

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 Hamilton County Department of Environmental Services, and shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively.

**4.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the thermal oxidizer termperature restriction identified in section A.II.1 was not met.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**5.** 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 #14-05102, issued on July 31, 2001: sections A.IV.1 through A.IV.4. 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.

## 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:

4.67 lbs/hour of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.b** Emission Limitation:

20.46 tpy of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by compliance with the emission limitation in section A.V.1.a above.

**1.c** Emission Limitation:

8.15 lbs/hr of organic compounds from the the B8 scrubber exhaust

Applicable Compliance Method:

This emission limitation was based on the emissions unit's uncontrolled potential to emit.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

## V. Testing Requirements (continued)

**1.d** Emission Limitations:

0.41 lb/hr of organic compounds from the thermal oxidizer exhaust

Applicable Compliance Method:

This emission limitation was based on the emissions unit's controlled potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified A.I.2.d, compliance with the emission limitation is demonstrated.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.e** Emission Limitations:

4.57 tpy of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit operating at its uncontrolled potential to emit for a maximum of 720 hours per year and operating the remainder of the year (i.e., 8040 hours) with the thermal oxidizer operating at a minimal control efficiency of 95% for organic compounds. Compliance with sections A.I.2.c, A.I.2.d, and A.V.1.c demonstrates compliance this emission limitation.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-07(A)(1)(b).

**2.** The permittee shall conduct, or have conducted, emission testing for the thermal oxidizer in accordance with the following requirements:

**2.a** i. The emission testing shall be conducted within 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the control efficiency specified in section A.I.2.d of these terms and conditions.

iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

## V. Testing Requirements (continued)

**2.b** The permittee shall conduct, or have conducted, emission testing for one representative hopper/silo (to determine an appropriate emission factor for all 60 silos and hoppers) and all other stacks associated with emissions units P029 through P031 in accordance with the following requirements:

i. the emission testing shall be conducted for particulate emissions within 2.5 years after the effective date of this permit; and

ii. emission testing shall be conducted at the inlet and outlet of the color weigh dust collector, main dust collectors, and Bldg.8 Scrubber to demonstrate compliance with control efficiencies specified in sections A.I.2.a, A.I.2.b, and A.I.2.e and the emission limitation specified in A.I.1;

iii. emission testing shall be conducted on one representative hopper/silo to demonstrate the accuracy of the permittee's 0.3 lb/ton product conveyed emission factor that is used for all 60 silos and hoppers.

**2.c** The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 45 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | | |

**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 (P030) was evaluated based on the actual 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 ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Acrylonitrile
TLV (ug/m3): 4,300
Maximum Hourly Emission Rate (lbs/hr): 0.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12
MAGLC (ug/m3): 102

Pollutant: Styrene
TLV (ug/m3): 85,000
Maximum Hourly Emission Rate (lbs/hr): 5.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 171.6
MAGLC (ug/m3): 2024

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 "TLV/BEI Handbook" published by the 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.).

**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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the 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:** CMPD #10 (P031)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and wet venturi scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | OAC rule 3745-31-05(A)(3) (PTI 14-05102) | 4.67 lbs/hour of particulate emission (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>20.46 tpy of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)<br><br>8.15 lbs/hr of organic compounds from the the B8 scrubber exhaust<br><br>0.41 lb/hr of organic compounds from thermal oxidizer exhaust<br><br>4.57 tpy of organic compounds from the thermal oxidizer exhaust<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B).<br><br>See sections A.I.2.a through A.I.2.e below. |
| | 40 CFR Part 63, Subpart FFFF | See section A.I.2.g below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | 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** Particulate emissions from the color weigh area, color charge station, pigment feeders, polymer feeders, and overhead hoppers shall be vented to either the color weigh dust collector, main dust collectors, or the overhead hopper dust collectors and filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.b** Particulate emissions from the extruder shall be vented to the B8 scrubber. The B8 scrubber (wet venturi) shall have a minimum control efficiency of 95% for particulate emissions.

**2.c** Except for a time period not to exceed 720 hours per year, the organic compound emissions from the extruder shall be vented to the thermal oxidizer.

**2.d** The thermal oxidizer shall have a minimum control efficiency of 95% for organic compound emissions.

**2.e** Particulate emissions from the emissions units P029, P030, P031, and P035 intermediate silos that process crumb and bead materials shall be vented to the dust collectors or filters. These control devices shall have a minimum control efficiency of 99% for particulate emissions.

**2.f** Only pellet materials may be processed through emissions units P029, P030, P031, and P035 intermediate silos that are not equipped with dust collectors or filters.

**2.g** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

**II. Operational Restrictions**

**1.** The average daily firebox temperature of the thermal oxidizer shall not be below 1450 degrees Fahrenheit while emissions unit P031 is vented to the thermal oxidizer. This daily average was established during the most recent stack test that demonstrated this emissions unit to be in compliance.

**2.** The pressure drop across the B8 scrubber shall be continuously maintained at a value between 20 and 35 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate for the B8 scrubber shall be continuously maintained at a value of not less than 110 gallons per minute at all times while the emissions unit is in operation.

The operation of the control equipment outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Hamilton County Department of Environmental Services, 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.a** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate for the B8 scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

**1.b** The permittee shall collect and record the following information each day when the emissions unit is in operation:

i. the pressure drop across the scrubber, in inches of water, on a daily basis;

ii. the scrubber water flow rate, in gallons per minute, on a daily basis; and

iii. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**2.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal ozidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

**3.** The permittee shall collect and record the following information on a monthly basis:

a. the total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer); and

b. the year-to-date total number of hours the emissions from the B8 scrubber were vented directly to the atmosphere (bypassing the thermal oxidizer).

**4.** 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 each stacks 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. whether the emissions are representative of normal operations;
b. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
c. the total duration of any visible emission incident; and
d. any corrective actions taken to eliminate the visible emissions.

**5.** 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 #14-05102, issued on July 31, 2001: sections A.III.1 through A.III.4. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate for the B8 scrubber and/or the pressure drop across the B8 scrubber was not maintained at levels required by section A.II.2 of these terms and conditions.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** By February 28 of each year, the permittee shall submit an annual report that identifies the total number of hours that the thermal oxidizer was bypassed, while the emissions unit was in operation, during the previous calendar year.

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit semiannual written reports that:

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 Hamilton County Department of Environmental Services, and shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively.

**4.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the thermal oxidizer termperature restriction identified in section A.II.1 was not met.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**5.** 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 #14-05102, issued on July 31, 2001: sections A.IV.1 through A.IV.4. 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.

## 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:

4.67 lbs/hour of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.b** Emission Limitation:

20.46 tpy of particulate emissions (combined total from emissions units P029, P030, P031, and the shared P029, P030 P031 and P035 intermediate silos and overhead hoppers)

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by compliance with the emission limitation in section A.V.1.a above.

**1.c** Emission Limitation:

8.15 lbs/hr of organic compounds from the the B8 scrubber exhaust

Applicable Compliance Method:

This emission limitation was based on the emissions unit's uncontrolled potential to emit.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

## V. Testing Requirements (continued)

**1.d** Emission Limitations:

0.41 lb/hr of organic compounds from the thermal oxidizer exhaust

Applicable Compliance Method:

This emission limitation was based on the emissions unit's controlled potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified A.I.2.d, compliance with the emission limitation is demonstrated.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.e** Emission Limitations:

4.57 tpy of organic compounds

Applicable Compliance Method:

This emission limitation is based on the emissions unit operating at its uncontrolled potential to emit for a maximum of 720 hours per year and operating the remainder of the year (i.e., 8040 hours) with the thermal oxidizer operating at a minimal control efficiency of 95% for organic compounds. Compliance with sections A.I.2.c, A.I.2.d, and A.V.1.c demonstrates compliance this emission limitation.

**1.f** Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-07(A)(1)(b).

**2.** The permittee shall conduct, or have conducted, emission testing for the thermal oxidizer in accordance with the following requirements:

**2.a** i. The emission testing shall be conducted within 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the control efficiency specified in section A.I.2.d of these terms and conditions.

iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

## V. Testing Requirements (continued)

**2.b** The permittee shall conduct, or have conducted, emission testing for one representative hopper/silo (to determine an appropriate emission factor for all 60 silos and hoppers) and all other stacks associated with emissions units P029 through P031 in accordance with the following requirements:

i. the emission testing shall be conducted for particulate emissions within 2.5 years after the effective date of this permit; and

ii. emission testing shall be conducted at the inlet and outlet of the color weigh dust collector, main dust collectors, and Bldg.8 Scrubber to demonstrate compliance with control efficiencies specified in sections A.I.2.a, A.I.2.b, and A.I.2.e and the emission limitation specified in A.I.1;

iii. emission testing shall be conducted on one representative hopper/silo to demonstrate the accuracy of the permittee's 0.3 lb/ton product conveyed emission factor that is used for all 60 silos and hoppers.

**2.c** The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 45 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and scrubber to control particulate emissions and thermal oxidizer to control organic compound emissions | | |

**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 (P030) was evaluated based on the actual 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 ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Acrylonitrile
TLV (ug/m3): 4,300
Maximum Hourly Emission Rate (lbs/hr): 0.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12
MAGLC (ug/m3): 102

Pollutant: Styrene
TLV (ug/m3): 85,000
Maximum Hourly Emission Rate (lbs/hr): 5.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 171.6
MAGLC (ug/m3): 2024

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 "TLV/BEI Handbook" published by the 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.).

**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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the 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:** CMPD #14 (P035)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| plastic polymer compounding and extrusion process with baghouses and wet scrubber to control particulate emissions | 40 CFR Part 63, Subpart FFFF | See section A.I.2.a below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 13.9 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

### II. Operational Restrictions

**1.** The scrubber water flow rate for the P035 scrubber shall be continuously maintained at a value of not less than 15 gallons per minute at all times while this emissions unit is in operation.

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

**1.** The permittee shall properly operate and maintain equipment to continuously measure the P035 scrubber water flow rate and pressure drop while this emissions unit is in operation. The measuring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. the scrubber water flow rate, in gallons per minute, on a once per shift basis: and

b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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

**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 stack 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the P035 scrubber water flow rate was not maintained at or above the levels indicated in section A.II.1.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** The permittee shall submit semiannual written reports that (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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by August 29 and February 28 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60 Appendix A, Method 9 and OAC rule 3745-17-07(A)(1)(b).

**1.b** Emission Limitation:

13.9 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5. See section A.V.2.

## V. Testing Requirements (continued)

**2.** The permittee shall conduct or have conducted emission testing on the Pigment Area dust collector, TIO2 dust collector, Fines dust collector, the Source #P035 Scrubber, and one representative shared Source # P029, P035 silo/hopper to demonstrate compliance with the emission limitation specified in A.I.1. Emission testing shall be conducted within 2.5 years after permit issuance.

The emission factor determined from the emission test shall be used to determine the hourly particulate emission rate for the entire emissions unit (all silos, hoppers, dust collectors, and scrubbers) taking into account materials being processed, process rate, temperature and any other variables determined to affect the emission rate.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** ABS #3 DRYING (P036)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous polymer drying operation for ABS (predominant product) and ASA with boilers and/or thermal oxidizer used to control organic compound emissions and a wet scrubber and a baghouse used to control particulate emissions<br><br>[Process vents for this emissions unit consist of the following: existing Group 1 continuous process vents - SYN tanks and FB dryer; existing Group 2 continuous process vents - hold tanks, BW tanks and VAC pumps.] | OAC rule 3745-31-05(A)(3) (PTI 14-05462) | 3.65 lbs/hr of organic compounds<br><br>16.0 tpy of organic compounds<br><br>0.68 lb/hr of particulate emissions from all stacks associated with this emissions unit<br><br>3.0 tpy of particulate emissions from all stacks associated with this emissions unit<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-21-07(G) and 40 CFR Part 63, Subpart JJJ.<br><br>See sections A.I.2.c. through A.I.2.f below. |
| | 40 CFR Part 63, Subpart JJJ | See sections A.I.2.a, A.I.2.b and A.I.2.g below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | 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). |
| | OAC rule 3745-21-07(G)(2) | The control requirement specified in this rule is less stringent than the control requirement established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** The permittee shall reduce emissions of total organic hazardous air pollutants by 98 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, corrected to 3 percent oxygen, and compliance can be determined by measuring either organic hazardous air pollutants or total organic carbon using the procedures in 40 CFR 63.116.

[40 CFR 63.113(a)(2) for Group 1 vents, OAC rule 3745-31-05(A)(3) for non-Group 1 vents]

**2.b** The vent stream shall be introduced into the flame zone of the boilers (B002 and B006) used to comply with the emission reductions listed in section A.I.2.a.

[OAC rule 3745-31-05(A)(3), based on parametric monitoring established in 40 CFR 63.113(b)]

**2.c** The permittee shall vent the organic compound emissions to a thermal oxidizer with at least a 98% control efficiency or to a boiler having a 98% control efficiency and vent particulate emissions from Dryer #1 outlet to a baghouse and wet scrubber.

**2.d** Only pellet materials may be processed through emissions units P029, P030, P031, and P035 intermediate silos that are not equipped with dust collectors or filters.

**2.e** The particulate emissions from Dryer #1 shall be vented to the Dryer #1 dust collector and the Dryer #1 wet scrubber.

**2.f** The permittee shall not vent halogenated compounds to the boiler or thermal oxidizer.

**2.g** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

## II. Operational Restrictions

**1.** Emissions unit B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P036 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P036 emissions was 790 degrees Fahrenheit.

**2.** Boiler B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P036 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P036 emissions was 1238 degrees Fahrenheit.

**3.** The thermal oxidizer's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when it treats P036 emissions. As of the issuance date of this permit, the thermal oxidizer's daily average operating temperature limit while treating P036 emissions was 1450 degrees Fahrenheit.

**4.** The pressure drop across scrubber P36SCB shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate for scrubber P36SCB shall be continuously maintained at a value of not less than 390 gallons per minute at all times while the emissions unit is in operation.

## II. Operational Restrictions (continued)

**5.** The pressure drop across baghouse P36FBD shall be maintained between 0.3 and 9 inches of water while the emissions unit is in operation.

The operation of the control equipment outside the pressure drop and water flow rate ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Hamilton County Department of Environmental Services, 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 limitations and/or visible emission limitations.

## III. Monitoring and/or Record Keeping Requirements

**1.** If a boiler is used to incinerate organic compound emissions from emissions unit P036, and the emissions are not used as primary fuel or introduced with the primary fuel, then the permittee shall operate and maintain a continuous firebox temperature monitor and recorder for each boiler whose design heat input capacity is less than 44 MW. The continuous firebox temperature and recorder system must compute and store daily average firebox temperature values for every date in which a less than 44 MW boiler treats P036 emissions. For computation of the daily average, the operating day shall commence at 0000 hours and conclude at 2400 hours. As of the issuance date of this permit, B002 and B006 were the permittee's only boilers subject to this continuous firebox temperature monitoring and recording requirement.

[40 CFR 63.114(a)(3)]

**2.** The permittee shall comply with either section A.III.2.a or A.III.2.b for any bypass line that could divert a Group 1 vent stream away from a control device used to comply with the emission limitations of 63.113(a)(1) or (a)(2) that could divert the gas stream directly to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to sections A.III.2.a or A.III.2.b.

[40 CFR 63.114(d)]

**2.a** The permittee shall properly maintain, and operate a flow indicator that takes a reading at least once every 15 minutes, or monitor valve position which would allow gas flow to be present. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

**2.b** The permittee shall secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

**3.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber P36SCRB and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information for each day that this emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water;

b. the scrubber water flow rate, in gallons per minute; and

c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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

**4.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse P36FBD 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 manuals. The permittee shall record the pressure drop across the baghouse on a daily basis.

**5.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal oxidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[40 CFR 63.114(a)(1)]

**6.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each stack 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. whether the emissions are representative of normal operations;
b. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
c. the total duration of any visible emission incident; and
d. any corrective actions taken to eliminate the visible emissions.

**7.** 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 #14-05462, issued on December 23, 2003: sections A.III.1 through A.III.6. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit. This report shall include the following main duct boiler and thermal oxidizer reporting requirements:

a. all dates in which boilers B002 and B006 and/or the thermal oxidizer were used to treat P036 emissions and their daily average firebox temperatures were less than the temperatures required by the section A.II terms and conditions;

b. all dates and times in which boilers B002 and B006 and/or the thermal oxidizer were used to treat P036 emissions and their firebox temperature monitoring devices were not operational; and

c. all dates and times in which a main duct boiler or the thermal oxidizer bypass line monitoring systems required by sections A.III.2 of were not operational while treating P036 emissions or seal/closure mechanisms required by section A.III.2 were found unlocked during a monthly inspection.

## IV. Reporting Requirements (continued)

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop and/or scrubber water flow rate for the scrubber were not maintained at or above the levels required by section A.II.4.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**3.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop for the baghouse was not maintained within the levels required by section A.II.5.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**4.** The permittee shall submit semiannual written reports that:

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 Hamilton County Department of Environmental Services, and shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively.

**5.** 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 #14-05462, issued on December 23, 2003: sections A.IV.1 through A.IV.4. 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.

## 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:

3.65 lbs/hr of organic compounds

Applicable Compliance Method:

If required, compliance shall be determined using the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18.

**1.b** Emission Limitation:

0.68 lb/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

3.0 tpy particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

This emission limitation is based on the emissions unit's calculated controlled potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified in section A.I.2.a, compliance with this emission limitation shall be demonstrated.

**1.d** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**2.** The initial compliance test required under 40 CFR 63.116(3) for the thermal oxidizer was conducted on September 12, 2001. The results of this test showed a control efficiency of 99.1%. This test indicated compliance with 98% control efficiency requirement specified in section A.I.2.a.

**3.a** The permittee shall conduct, or have conducted, emission testing for emissions units B002 and B006 to demonstrate compliance with the control efficiency or stack outlet concentration specified in section A.I.2.a.

The emission testing shall be conducted for emissions units B002 and B006, while these units are operating simultaneously. This emission testing shall be conducted during the third year of the permit.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) or the stack outlet concentration shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Director.

**3.b** The permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the mass emission limitation for organic compounds specified in section A.I.1.

i. The emission testing shall be conducted within 2.5 years after the effective date of this permit.

ii. USEPA Methods 1 - 4, and 18 or 25, or other USEPA-approved test methods, shall be used to determine the mass emission rate of organic compounds. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

**3.c** The permittee shall conduct, or have conducted, emission testing for all stacks associated with this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted for particulate emissions within 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the emission limitation specified in section A.I.1.

## V. Testing Requirements (continued)

**3.d** The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** SAN #1A DRYING (P039)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous SAN dewatering operation<br><br>[Process vents for this emissions unit are comprised of the following: Group 2 continuous process vent with a TRE index greater than 4: dryer vent.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 9.67 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

### II. Operational Restrictions

**None**

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

**1.** The permittee shall maintain records of the measurements, engineering assessments, and calculations performed to determine the TRE (as defined in 40 CFR 63.115) index value of the vent stream emitted from this emissions unit. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified on 40 CFR 63.115(d)(1).

{40 CFR 63.117(b)]

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

**2.** The permittee shall keep up-to-date, readily accessible records of the following:

a. any process changes as defined in 40 CFR 63.115(e); and

b. any recalculation of the TRE index value pursuant to 40 CFR 63.115(e).

[40 CFR 63.118(c)]

**3.** 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 stack 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

**2.** The permittee shall submit semiannual written reports that (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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

9.67 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** SAN #1B DRYING (P040)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous SAN dewatering operation<br><br>[Process vents for this emissions unit are comprised of the following: Group 2 continuous process vent with a TRE index greater than 4: dryer vent.] | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 9.67 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

### II. Operational Restrictions

**None**

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

**1.** The permittee shall maintain records of the measurements, engineering assessments, and calculations performed to determine the TRE (as defined in 40 CFR 63.115) index value of the vent stream emitted from this emissions unit. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified on 40 CFR 63.115(d)(1).

{40 CFR 63.117(b)]

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

**2.** The permittee shall keep up-to-date, readily accessible records of the following:

a. any process changes as defined in 40 CFR 63.115(e); and

b. any recalculation of the TRE index value pursuant to 40 CFR 63.115(e).

[40 CFR 63.118(c)]

**3.** 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 stack 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit.

**2.** The permittee shall submit semiannual written reports that (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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

9.67 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** D #3 POLY (P042)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous polymerization operation for ABS (predominant product) and SAN with boilers and/or thermal oxidizer used to control organic compound emissions and wet scrubbers used to control particulate emissions<br><br>[Process vents for this emissions unit are comprised of the following: Group 1 continuous process vent - VS outlet; and Group 2 continuous process vents - DFS inlet, OTS inlet and R tank.] | 40 CFR Part 63, Subpart JJJ | See sections A.I.2.a through A.I.2.d below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 13.6 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |
| | OAC rule 3745-21-07(G)(2) | The permittee shall not discharge from this emissions unit more than forty pounds of organic material in any one day, nor more than eight pounds of organic material in any one hour unless said discharge has been reduced by at least eighty-five percent.<br><br>See section A.I.2.g below. |

**2. Additional Terms and Conditions**

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

**2.b** The vent stream shall be introduced into the thermal oxidizer or into the flame zone of the boilers used to comply with the emission reductions listed in section A.I.2.d.

[40 CFR 63.113(b)]

**2.c** The permittee currently does not have halogenated Group 1 process vents. Therefore, they are exempt from 40 CFR 63.113(c).

**2.d** Emissions from the Bldg. 30 organic trap shall be reduced by 95 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent.

[40 CFR 63.139(c)(1)]

**2.e** Organic compound emissions from the organic trap shall be vented to scrubber B30OTSCBR. The minimum organic compound control efficiency for scrubber B30OTSCBR shall be 96%.

**2.f** The permittee shall not vent halogenated emissions to the boiler or thermal oxidizer.

**2.g** The permittee has chosen to comply with this rule by achieving a greater than eighty-five percent overall control efficiency.

**2.h** Emissions from the Building 30 Organic Trap shall be vented to the thermal oxidizer per 40 CFR 63.137 oil/water separator requirements, except during the thermal oxidizer outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

**II. Operational Restrictions**

**1.** Emissions unit B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P042 and/or P047 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P042 and/or P047 emissions was 790 degrees Fahrenheit.

**2.** Emissions unit B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P042 and/or P047 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P042 and/or P047emissions was 1238 degrees Fahrenheit.

**3.** The thermal oxidizer's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when it treats the Building 30 organic trap's emissions. As of the issuance date of this permit, the thermal oxidizer's daily average operating temperature limit while treating the Building 30 organic trap's was 1450 degrees Fahrenheit.

**4.** The scrubber water flow rate for vent scrubber B30VENTSCBR shall be continuously maintained at a value of not less than 1 gallon per minute at all times while the emissions unit is in operation.

**5.** The scrubber water flow rate for die fume scrubber B30DFSCBR shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation.

**6.** The scrubber water flow rate for organic trap scrubber B30OTSCBR shall be continuously maintained at a value of not less than 1 gallon per minute at all times while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

**1.** If a boiler is used to incinerate organic compound emissions from emissions units P042 and/or P047, and the emissions are not used as primary fuel or introduced with the primary fuel, then the permittee shall operate and maintain a continuous firebox temperature monitor and recorder for each boiler whose design heat input capacity is less than 44 MW. The continuous firebox temperature and recorder system must compute and store daily average firebox temperature values for every date in which a less than 44 MW boiler treats P042 and/or P047 emissions. For computation of the daily average, the operating day shall commence at 0000 hours and conclude at 2400 hours. As of the issuance date of this permit, B002 and B006's were the permittee's only boilers subject to this continuous firebox temperature monitoring and recording requirement. Boiler B007 has a design heat input capacity greater than 44 MW and is exempt from these monitoring requirements.

[40 CFR 63.114(a)(3)]

**2.** The permittee shall comply with either section A.III.2.a or A.III.2.b for any bypass line that could divert a Group 1 vent stream away from a control device used to comply with the emission limitations of 63.113(a)(1) or (a)(2) that could divert the gas stream directly to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to sections A.III.2.a or A.III.2.b.

[40 CFR 63.114(d)]

**2.a** The permittee shall properly maintain and operate a flow indicator that takes a reading at least once every 15 minutes, or monitor valve position which would allow gas flow to be present. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

**2.b** Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

**3.** The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate for scrubbers B30DFSCBR, B30OTSCBR, and B30VENTSCBR while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

a. the scrubber water flow rate, in gallons per minute, on a daily basis; and

b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**4.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal oxidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[40 CFR 63.114(a)(1)]

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

**5.** 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 stack 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit. This report shall include the following main duct boiler and thermal oxidizer reporting requirements:

a. all dates and times in which boilers B002, B006 or the thermal oxidizer daily average firebox temperature was less than the temperature required in sections A.II.1 through A.II.3;

b. all dates and times in which a boiler or the thermal oxidizer temperature monitoring device was not operational while treating P042 emissions;

c. all dates and times in which P042 emissions were diverted from the boilers or thermal oxidizer to the atmosphere; and

d. all dates and times in which a main duct boiler or the thermal oxidizer bypass line monitoring systems required by section A.III.2 of this permit were not operational while treating P042 emissions or seal/closure mechanisms required by section A.III.2 were found unlocked during a monthly inspection.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate for scrubbers B30DFSCBR, B30OTSCBR, and B30VENTSCBR were not maintained at or above the required levels.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**3.** The permittee shall submit semiannual written reports that (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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

13.6 lbs/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

The potential emission rate, based on engineering calculations and production information was determined to be 0.36 lb/hr. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined in accordance with methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**1.c** Emission Limitation:

organic material discharge shall be reduced by at least 85%

Applicable Compliance Method

The test methods which must be employed to demonstrate compliance with this emission limitation are specified in section A.V.3.

**2.** The initial compliance test required under 40 CFR 63.116(3) for the boilers was conducted on September 13, 2001. The results of this test showed outlet concentrations of 3.7 ppm organic compound for B002 and 2.5 ppm organic compound for B006. This test indicated compliance with the 20 ppm organic compound limit specified in section A.I.2.d.

The initial compliance test required under 40 CFR 63.116(3) for the thermal oxidizer was conducted on September 12, 2001. The results of this test showed a control efficiency of 99.1%. This test indicated compliance with the 95% control efficiency requirement specified in section A.I.2.d.

**3.** The permittee shall conduct, or have conducted, emission testing for emissions units B002 and B006 to demonstrate compliance with the control efficiency or the stack outlet concentration specified in section A.I.2.a.

This emission testing shall be conducted during the third year of the permit.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) or stack outlet concentration shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

The tests shall be conducted while the emissions units are operating at or near their maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

## V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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

a. The emission testing shall be conducted for the thermal oxidizer during the third year of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency or emission limitation specified in section A.I.2.d.

c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved on October 25, 1995"). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

(Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA)

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** D#6 POLY (P047)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| continuous polymerization operation for ABS (predominant product) and SAN, with boilers and/or thermal oxidizer used to control organic compound emissions and wet scrubbers used to control particulate emissions<br><br>[Process vents for this emissions unit are comprised of the following: Group 1 continuous process vent - VS outlet; Group 2 continuous process vents - DFS inlet, OTS inlet, R tank, HHR tank and RFGR tank.] | OAC rule 3745-31-05(A)(3) (PTI 14-02367) | 5.02 lbs/hr of organic compounds<br><br>21.97 tpy of organic compounds<br><br>See sections A.I.2.d and A.I.2.f below. |
| | 40 CFR Part 63, Subpart JJJ | See sections A.I.2.a through A.I.2.d below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 13.6 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |
| | OAC rule 3745-21-07(G)(2) | The emission limitations specified in this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** As specified in 40 CFR 63.1315(a) the permittee shall comply with the requirements of 40 CFR 63.113 through 40 CFR 63.118 of Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry, with the differences noted in paragraphs (a)(1) through (a)(18) of 40 CFR 63.1315. See Part II, Section A.10 of this permit for the requirements of 40 CFR Part 63, Subpart G.

**2. Additional Terms and Conditions (continued)**

**2.b** The vent stream shall be introduced into the thermal oxidizer or the flame zone of the boilers used to comply with the emission reductions listed in section A.I.2.d.

[40 CFR 63.113(b)]

**2.c** The permittee currently does not have halogenated Group 1 process vents. Therefore, they are exempt from 40 CFR 63.113(c).

**2.d** Emissions from the Bldg. 30 organic trap shall be reduced by 95 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent.

[40 CFR 63.139(c)(1)]

**2.e** Organic compound emissions from the organic trap shall be vented to scrubber B30OTSCBR. The minimum organic compound control efficiency for scrubber B30OTSCBR shall be 96%.

**2.f** The permittee shall not vent halogenated emissions to a boiler or the thermal oxidizer.

**2.g** Emissions from the Building 30 Organic Trap shall be vented to the thermal oxidizer per 40 CFR 63.137 oil/water separator requirements, except during the thermal oxidizer outage periods described in the permittee's Startup, Shutdown, and Malfunction Plan.

## II. Operational Restrictions

**1.** Emissions unit B002's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P042 and/or P047 emissions. As of the issuance date of this permit, B002's daily average operating temperature limit while treating P042 and/or P047 emissions was 790 degrees Fahrenheit.

**2.** Emissions unit B006's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when the boiler treats P042 and/or P047 emissions. As of the issuance date of this permit, B006's daily average operating temperature limit while treating P042 and/or P047emissions was 1238 degrees Fahrenheit.

**3.** The thermal oxidizer's daily average firebox temperature shall not be below its most recently established daily average operating limit (pursuant to 40 CFR 63.1334) during times when it treats the Building 30 organic trap's emissions. As of the issuance date of this permit, the thermal oxidizer's daily average operating temperature limit while treating the Building 30 organic trap's was 1450 degrees Fahrenheit.

**4.** The scrubber water flow rate for vent scrubber B30VENTSCBR shall be continuously maintained at a value of not less than 1 gallon per minute at all times while the emissions unit is in operation.

**5.** The scrubber water flow rate for die fume scrubber B30DFSCBR shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation.

**6.** The scrubber water flow rate for organic trap scrubber B30OTSCBR shall be continuously maintained at a value of not less than 1 gallon per minute at all times while the emissions unit is in operation.

**7.** 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 Hamilton County Department of Environmental Services, 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.** If a boiler is used to incinerate organic compound emissions from emissions units P042 and/or P047, and the emissions are not used as primary fuel or introduced with the primary fuel, then the permittee shall operate and maintain a continuous firebox temperature monitor and recorder for each boiler whose design heat input capacity is less than 44 MW. The continuous firebox temperature and recorder system must compute and store daily average firebox temperature values for every date in which a less than 44 MW boiler treats P042 and/or P047 emissions. For computation of the daily average, the operating day shall commence at 0000 hours and conclude at 2400 hours. As of the issuance date of this permit, B002 and B006 were the permittee's only boilers subject to this continuous firebox temperature monitoring and recording requirement. Boiler B007 has a design heat input capacity greater than 44 MW and is exempt from these monitoring requirements.

[40 CFR 63.114(a)(3)]

**2.** The permittee shall comply with either section A.III.2.a or A.III.2.b for any bypass line that could divert a Group 1 vent stream away from a control device used to comply with the emission limitations of 63.113(a)(1) or (a)(2), that could divert the gas stream directly to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to section A.III.2.a or A.III.2.b.

[40 CFR 63.114(d)]

**2.a** The permittee shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes, or monitor valve position which would allow gas flow to be present. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

**2.b** Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

**3.** The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate for scrubbers B30DFSCBR, B30OTSCBR, and B30VENTSCBR while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

a. the scrubber water flow rate, in gallons per minute, on a daily basis; and

b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**4.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal oxidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[40 CFR 63.114(a)(1)]

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

**5.** 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 stack 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**6.** 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 #14-02367, issued on November 6, 1991: sections A.III.1 through A.III.5. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit Subpart JJJ Periodic reports to the Hamilton County Department of Environmental Services in accordance with 40 CFR 63.1335(e)(6). These reports shall cover the semiannual periods from January 1 to June 30 and July 1 to December 31 of each year and be submitted by August 29 and February 28, respectively. The periodic reports shall contain the information specified in Part II, Section A.7.e of this permit. This report shall include the following main duct boiler and thermal oxidizer reporting requirements:

a. all dates and times in which boilers B002 and B006 or the thermal oxidizer daily average firebox temperature was less than the temperature required in section A.II.1 through A.II.3;

b. all dates and times in which a boiler or the thermal oxidizer temperature monitoring device was not operational while treating P047 emissions;

c. all dates and times in which P047 emissions were diverted from the boilers or thermal oxidizer to the atmosphere; and

d. all dates and times in which a main duct boiler or the thermal oxidizer bypass line monitoring systems required by section A.III.2 of this permit were not operational while treating P047 emissions or seal/closure mechanisms required by section A.III.2 were found unlocked during a monthly inspection.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate for scrubbers B30DFSCBR, B30OTSCBR, and B30VENTSCBR were not maintained at or above the required levels.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit semiannual written reports that (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 minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

**4.** 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 #14-02367, issued on November 6, 1991: sections A.IV.1, A.IV.2 and A.IV.3. 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.

## 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:

5.02 lbs/hr of organic compound

Applicable Compliance Method:

The emission limitation was based on the emissions unit's controlled potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified A.I.2.d, compliance with this emission limitation is demonstrated.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.b** Emission Limitation:

21.97 tpy of organic compound

Applicable Compliance Method:

Compliance shall be demonstrated based upon compliance with the emission limitation in section A.V.1.a.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-07(A)(1)(b).

## V. Testing Requirements (continued)

**1.d** Emission Limitation:

13.6 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential emission rate, based on engineering calculations and production information, was determined to be 0.36 lb/hr. The production information used to generate the lb/hr and tons/yr emission calculations is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**2.** The initial compliance test required under 40 CFR 63.116(3) for the boilers was conducted on September 13, 2001. The results of this test showed outlet concentrations of 3.7 parts per million organic compound for B002 and 2.5 parts per million organic compound for B006. This test indicated compliance with the 20 parts per million of organic compound limit specified in section A.I.2.d.

The initial compliance test required under 40 CFR 63.116(3) for the thermal oxidizer was conducted on September 12, 2001. The results of this test showed a control efficiency of 99.1%. This test indicated compliance with 95% control efficiency requirement specified in section A.I.2.d.

**3.** The permittee shall conduct, or have conducted, emission testing for emissions units B002 and B006 to demonstrate compliance with the control efficiency or stack outlet concentration specified in section A.I.2.a.

This emission testing shall be conducted during the third year of the permit.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) or stack outlet concentration shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Director.

The tests shall be conducted while the emissions units are operating at or near their maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted for the thermal oxidizer during the third year of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency or emission limitation specified in section A.I.2.d.

c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and 40 CFR 63.116. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** COPOLY PROCESS (P048)

**Activity Description:** PROCESS UNIT

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| batch polymerization operation with thermal oxidizer to control particulate emissions and organic compounds | OAC rule 3745-31-05(A)(3) (PTI 14-02539) | 31.66 lbs/day of organic compounds<br><br>5.78 tpy of organic compounds<br><br>See section A.I.2.a below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B) | 2.58 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |
| | OAC rule 3745-21-07(G)(2) | The control efficiency specified in this rule is less stringent than the control efficiency established pursuant to OAC rule 3745-31-05(A)(3). |
| | 40 CFR Part 63, Subpart FFFF | See section A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** All emissions from P048 shall be vented to a thermal oxidizer which has a control efficiency of at least 95%. During thermal oxidizer outages, any batch in progress for P048 shall be completed, and no new batches initiated until the thermal oxidizer is placed back into service.

**2.b** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

### II. Operational Restrictions

**1.** The permittee shall produce no more than two batches per day in this emissions unit.

**2.** The permittee shall use no more than 700 pounds of acetone per batch in this emissions unit.

**3.** The average daily firebox temperature of the thermal oxidizer shall not be below 1450 degrees Fahrenheit. This daily average was established during the most recent stack test that demonstrated this emissions unit to be in compliance.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall properly operate a temperature monitoring device equipped with a continuous recorder for the thermal oxidizer. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. For computation of the daily average, the beginning of the operating day shall commence at 0000 hours and conclude at 2400 hours.

The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

**2.** The permittee shall maintain daily records of the following information:

a. the number of batches produced per day; and

b. the number of gallons of acetone employed per day.

**3.** 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 #14-02539, issued on April 1, 1991: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the thermal oxidizer temperature restriction identified in section A.II.3 was not met.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the number of batches per day or the acetone usage limitation was exceeded.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**3.** 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 #14-02539, issued on April 1, 1991: sections A.IV.1 and A.IV.2. 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.

## 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:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

31.66 lbs/day of organic compound

Applicable Compliance Method:

This emission limitation was based on the emissions unit's controlled potential to emit. As long as the permittee is in compliance with the control efficiency requirements specified in section A.I.2.a, compliance with this emission limitation is ensured.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 18 or 25.

**1.b** Emission Limitation:

5.78 tpy of organic compounds

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable daily emission limitation by the actual annual days of operation and dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.d** Emission Limitation:

2.58 lbs/hr of particulate emissions from all stacks associated with this emissions unit

Applicable Compliance Method:

The potential particulate emission rate, based on engineering calculations and production information, was determined to be 0.01 lb/hr. The production information used to generate the emission rate calculation is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined through emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

**2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit to determine the control efficiency of the thermal oxidizer in accordance with the following requirements:

a. The emission testing shall be conducted during the third year of the permit.

b. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

## V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| batch polymerization process with thermal oxidizer to control particulate and organic compound emissions | | |

**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 (P048) was evaluated based on the actual 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 ISCST3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Toluene
TLV (ug/m3): 188,000
Maximum Hourly Emission Rate (lbs/hr): 0.13
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 132
MAGLC (ug/m3): 2685

Pollutant: Styrene
TLV (ug/m3): 85,000
Maximum Hourly Emission Rate (lbs/hr): 0.57
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 176
MAGLC (ug/m3): 1214

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

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 "TLV/BEI Handbook" published by the 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.).

**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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where the 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:** WWTP GENERATOR (P049)

**Activity Description:** BACKUP ELECTRICITY GENERATOR

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 12.42 mmBtu/hr backup electrical generator | OAC rule 3745-31-05(C) (PTI 14-04033) | 1.65 lbs/hr of PE/PM-10<br>1.23 tpy of PE/PM-10<br>0.13 lb of particulate emission per mmBtu of actual heat input<br>5.64 lbs/hr of SO2<br>4.23 tpy of SO2<br>39.86 lbs/hr of NOx<br>29.9 tpy of NOx<br>11.14 lbs/hr of CO<br>8.36 tpy of CO<br>1.1 lbs/hr of VOC<br>0.83 tpy of VOC<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).<br><br>See section A.I.2.a below.<br><br>See section A.II.1 below. |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-18-06(G) | The emission limitation specified in this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(C). |
| | OAC rule 3745-17-11(B)(5) | The emission limitation specified in this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(C).<br><br>See section A.I.2.b below. |

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | 40 CFR Part 63, Subpart ZZZZ | See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** The sulfur content of No. 2 fuel oil burned in this emissions unit shall not exceed 0.45% by weight.

**2.b** The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.

**2.c** The permittee is subject to the applicable emission limitations and or control measures, operation restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart ZZZZ, NESHAPS for Stationary Reciprocating Internal Combustion Engines, in accordance with 40 CFR Part 63, Subpart ZZZZ (including the tables and appendices) referenced in Subpart ZZZZ, which are included in the text of Attachment 3 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart ZZZZ into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and past the Subpart's tables and equations into STARS format.

**II. Operational Restrictions**

**1.** The hours of operation shall not exceed 1500 hours, based upon a rolling, 12-month summation.

**2.** The permittee shall burn only No. 2 fuel oil in this emissions unit.

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

**1.** The permittee shall maintain the following information on a monthly basis:

a. the total hours of operation; and

b. the rolling, 12-month summation of the hours of operation (the summation of the monthly hours of operation recorded in section A.III.1.a added to the previous 11-months hours of operation recorded in accordance with section A.III.1.a).

**2.** The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with Alternative 1 or Alternative 2 below:

a. Alternative 1:

For each shipment of fuel oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, D6010 or equivalent methods as approved by the Director.

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

b. Alternative 2:

The permittee shall collect a representative grab sample of fuel oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods such as ASTM methods D240, D4294, D6010 or equivalent methods as approved by the Director.

**3.** For each day during which the permittee burns a fuel other than No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

**4.** 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 #14-04033, issued on May 30, 1996: sections A.III.1and A.III.3. 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.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (excursion) reports that identify any deviation of the allowable hours of operation restriction specified in section A.II.1 based upon the information maintained in section A.III.1 above.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify any deviation of the allowable sulfur content specified in section A.I.2.a based upon the information maintained in section A.III.2 above.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**3.** 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 #14-04033, issued on May 30, 1996: sections A.IV.1 and A.IV.2. 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.

**4.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than No. 2 fuel oil 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.1 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

1.65 lbs/hr of particulate matter (PE/PM-10)

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the total heat input of 12.42 mmBtu/hr by the emission factor of 0.13 lb PE/mmBtu, supplied by vendor, or by source specific sampling data.

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

**1.b** Emission Limitation:

1.23 tpy of particulate emissions (PE/PM-10)

Applicable Compliance Method:

Compliance shall be demonstrated by maintaining compliance with the requirement of section A.II.1 and multiplying the maximum 1500 hours of operation per year by the total heat input of 12.42 mmBtu/hr times the emission factor of 0.13 lb particulate emission per mmBtu, supplied by vendor, or by source specific sampling data, and dividing by 2000 lbs/ton.

**1.c** Emission Limitation:

0.13 lb of particulate emissions per mmBtu actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by using the emission factor of 0.13 lb/mmBtu, supplied by vendor.

The Ohio EPA revised the emission limitation specified in OAC rule 3745-17-11(B)(5) and the rule was adopted by the Director of Ohio EPA in December of 1997. It will be submitted to the U.S. EPA as a proposed revision to the Ohio SIP for particulate matter. When the SIP revision is approved by the U.S. EPA, the new federally enforceable emission limitation will be 0.062 lb/mmBtu actual heat input emission.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and rule 3745-17-03(B)(10).

**1.d** Emission Limitation:

5.64 lbs/hr of SO2

Applicable Compliance Method:

If required, compliance shall be determined through emission testing conducted in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

**1.e** Emission Limitation:

4.23 tpy of SO2

Applicable Compliance Method:

Compliance shall be demonstrated by maintaining compliance with the hourly SO2 emission limitation of section A.I.1 and multiplying the allowable hourly emission rate by the total annual hours of operation and dividing by 2000 lbs/ton.

## V. Testing Requirements (continued)

**1.f** Emission Limitation:

39.86 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the total heat input capacity of 12.42 mmBtu/hr by the emission factor of 3.2 lbs NOx/mmBtu. This emission factor is based upon vendor or source specific sampling data.

If required, compliance shall be determined through emission testing conducted in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A. Method 7.

**1.g** Emission Limitation:

29.9 tpy of NOx

Applicable Compliance Method:

Compliance may be demonstrated by vendor-supplied or source-specific sampling data.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

**1.h** Emission Limitation:

11.14 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the total heat input of 12.42 mmBtu/hr by the emission factor of 0.85 lb CO/mmBtu. This emission factor is based upon vendor or source specific sampling data.

If required, compliance shall be determined through emission testing conducted in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10.

**1.i** Emission Limitation:

8.36 tpy of CO

Applicable Compliance Method:

Compliance may be demonstrated by maintaining compliance with the requirement of section A.II.1 and by multiplying the maximum 1500 hours of operation per year by the total heat input of 12.42 mmBtu/hr times the emission factor of 0.85 lb CO/mmBtu and dividing by 2000 lbs/ton. This emission factor is based upon vendor or source specific sampling data.

**1.j** Emission Limitation:

1.1 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the total heat input of 12.42 mmBtu/hr by the emission factor of 0.09 lb VOC/mmBtu. This emission factor is based upon vendor or source specific sampling data.

If required, compliance shall be determined through emission testing conducted in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25.

## V. Testing Requirements (continued)

**1.k** Emission Limitation:

0.83 tpy of VOC

Applicable Compliance Method:

Compliance may be demonstrated by maintaining compliance with the requirement of section A.II.1 and by multiplying the maximum 1500 hours of operation per year by the total heat input of 12.42 mmBtu/hr times the emission factor of 0.09 lb VOC/mmBtu and dividing by 2000 lbs/ton. This emission factor is based upon vendor or source specific sampling data.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25.

**1.l** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Mehtod 9 and 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B8 PELLET HANDLING (P901)

**Activity Description:** PELLET HANDLING

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Building 8 pellet handling system controlled with cyclones, multicyclones and fabric filters | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-07(B) | Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule. |
| | OAC rule 3745-17-08(B) | See sections A.I.2.a and A.I.2.b below. |
| | OAC rule 3745-17-11(B) | 29.0 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** The permitte shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

**2.b** The permittee shall ensure that the cyclones, multicyclones and fabric filters are operated with sufficient air volume to minimize or eliminate visible particulate emissions of fugitive dust at the points of capture, to the extent possible with good engineering design.

### II. Operational Restrictions

**None**

## 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 stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## 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 stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

29.0 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential uncontrolled emission rate, based on engineering calculations and production information, was determined to be 4.35 lbs/hr. The production information used to calculate the emission rate is confidential. Therefore, no detailed emission calculations can be provided.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**2.** The permittee shall conduct, or have conducted, emission testing for one representative stack, to determine an appropriate emission factor for all transfer operations associated with this emissions unit and emissions units P902 and P903. Emission testing shall be conducted within 6 months after permit issuance.

Test methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable particulate emission rate.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission tests.

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B9 PELLET HANDLING (P902)

**Activity Description:** PELLET HANDLING

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Building 9 pellet handling system (no controls) | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-07(B) | Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule. |
| | OAC rule 3745-17-08(B) | See section A.I.2.a. |
| | OAC rule 3745-17-11(B) | 12.97 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** The permitte shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

### II. Operational Restrictions

**None**

## 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 stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## 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 stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

12.97 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential uncontrolled emission rate, based on engineering calculations and production information, was determined to be 1.67 lbs/hr. The production information used to calculate the emission rate is confidential. Therefore, no detailed emission calculations can be provided.

The representative emission factor determined for emissions unit P901 may be used to demonstrate compliance with this emission limitation.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B30 PELLET HANDLING (P903)

**Activity Description:** PELLET HANDLING

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Building 30 pellet handling system controlled with cyclones | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-07(B) | Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule. |
| | OAC rule 3745-17-08(B) | See sections A.I.2.a and A.I.2.b below. |
| | OAC rule 3745-17-11(B) | 26.20 lbs/hr of particulate emissions (based on Table I of OAC rule 3745-17-11) |

**2. Additional Terms and Conditions**

**2.a** The permitte shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

**2.b** The permittee shall ensure that the cyclones are operated with sufficient air volume to minimize or eliminate visible particulate emissions of fugitive dust at the points of capture, to the extent possible with good engineering design.

### II. Operational Restrictions

**None**

## 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 stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

## 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 stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by February 28 and August 29 of each year and shall cover the previous 6-month period.

## 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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

**1.b** Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**1.c** Emission Limitation:

26.20 lbs/hr of particulate emissions

Applicable Compliance Method:

The potential uncontrolled emission rate, based on engineering calculations and production information, was determined to be 4.35 lbs/hr. The production information used to calculate the emission rate is confidential. Therefore, no detailed emission calculations can be provided.

The representative emission factor determined for emissions unit P901 may be used to demonstrate compliance with this emission limitation.

If required, compliance shall be determined in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-8 TANK (T003)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 300,000-gallon, fixed roof storage tank, storing styrene | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of Subpart JJJ. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the record keeping requirements of 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

**1.** Compliance with the operational restriction specified section A.II.1 shall be demonstrated by the monitoring and record keeping requirements of section A.III.2 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-9 TANK (T004)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 250,000-gallon, fixed roof storage tank, storing styrene | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of Subpart JJJ. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the record keeping requirements of 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined on OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

**1.** Compliance with the operational restriction specified section A.II.1 shall be demonstrated by the monitoring and record keeping requirements of section A.III.2 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-13 TANK (T005)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 1 storage tank, internal floating roof, 100,000 gallon capacity, storing acrylonitrile<br><br>[existing Group 1 storage tank with maximum true vapor pressure less than 11.11 psi] | 40 CFR Part 63, Subpart JJJ | The permittee shall reduce hazardous air pollutants emissions to the atmosphere by operating and maintaining a fixed roof and internal floating roof as defined in 40 CFR 63.111.<br><br>See sections A.I.2.a through A.I.2.h below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** The permittee shall comply with the requirements of sections A.I.2.b through A.I.2.h of these terms and conditions.

Note: The intent of sections A.I.2.b and A.I.2.c is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.

[40 CFR 63.119(b)]

**2.b** The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in sections A.I.2.b.i through A.I.2.b.iii below.

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

[40 CFR 63.119(b)(1)]

## 2. Additional Terms and Conditions (continued)

**2.c** When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

[40 CFR 63.119(b)(2)]

**2.d** Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in section A.I.2.d.iv below, the closure device shall consist of one of the devices listed in sections A.I.2.d.i through A.I.2.d.iii below.

i. a liquid-mounted seal, as defined in 40 CFR 63.111;

ii. a metallic shoe seal, as defined in 40 CFR 63.111; or

iii. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of March 29, 1995, the requirement for one of the seal options specified in section A.I.2.d.i through A.I.2.d.iii of this section does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed;

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(3)]

**2.e** Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

[40 CFR 63.119(b)(4)]

**2. Additional Terms and Conditions (continued)**

**2.f** Except as provided in section A.I.2.f.viii below, each internal floating roof shall meet the specifications listed in sections A.I.2.f.i through A.I.2.f.vii below.

i. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.

ii. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.

iii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iv. Each automatic bleeder vent shall be gasketed.

v. Each rim space vent shall be gasketed.

vi. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

viii. If the internal floating roof does not meet any one of the specifications listed in sections A.I.2.f.i through A.I.2.f.vii above as of March 29, 1995, the requirement for meeting those specifications does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed;

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(5)]

**2.g** Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

[40 CFR 63.119(b)(6)]

**2.h** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. 40 CFR 63.119(a)(1) establishes the reference control technology for this emissions unit. [See Part II of this permit.]

## II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control equipment:

**1.a** A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

## II. Operational Restrictions (continued)

**1.b** A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety per cent by weight; [All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place.

**1.c** Other equipment or means of air pollution control as may be approved by the Director.

**2.** If during the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP, as defined in 40 CFR 63.1312(b).

[40 CFR 63.120(a)(7)]

**3.** If during the inspections required by sections A.III.1.b.i or A.III.1.c.ii, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by section A.III.1.b.i or A.III.1.c.ii cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

[40 CFR 63.120(a)(4)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall conduct the inspections required in sections A.III.1.a through A.III.1.c and keep a written record of when the inspections were conducted and what was found during the inspections.

[40 CFR 63.120(a)]

**1.a** The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in sections A.III.1.b and A.III.1.c.

[40 CFR 63.120(a)(1)]

**1.b** For vessels equipped with a single-seal system, the permittee shall perform the inspections specified below:

i. visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311; and

ii. visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(2)]

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

**1.c** For vessels equipped with a double-seal system, the permittee shall perform either the inspection required in section A.III.1.c.i or the inspections required in both sections A.III.1.c.ii and A.III.1.c.iii below.

i. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date specified in 40 CFR 63.1311.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311.

iii. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(3)]

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

[40 CFR 63.123(a)]

## IV. Reporting Requirements

**1.** Except as provided in section A.IV.2, for all the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the permittee shall notify the Hamilton County Department of Environmental Services in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Hamilton County Department of Environmental Services the opportunity to have an observer present.

[40 CFR 63.120(a)(5)]

**2.** If the inspection required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Hamilton County Department of Environmental Services at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Hamilton County Department of Environmental Services at least 7 calendar days prior to refilling.

[40 CFR 63.120(a)(6)]

**3.** The permittee shall submit, as part of the Periodic Report required under 40 CFR 63.1335(e)(6), the results of each inspection conducted in accordance with sections A.III.1.a through A.III.1.c in which a failure is detected in the control equipment.

[40 CFR 63.122(d)]

## IV. Reporting Requirements (continued)

**3.a** For vessels for which annual inspections specified in section A.III.1.b.i or A.III.1.c.ii , the specifications and requirements listed in sections A.IV.3.a.i through A.IV.3.a.iii below apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage vessel.

ii. Except as provided in section A.IV.3.a.iii below, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with section A.II.3, the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in section A.II.3; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

[40 CFR 63.122(d)(1)]

**3.b** For vessels for which inspections are specified in sections A.III.1.b.ii, A.III.1.c.i, or A.III.1.c.iii, the specifications and requirements listed in sections A.IV.3.b.i and A.IV.3.b.ii of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report required under 40 CFR 63.1335(e)(6) of this subpart shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

[40 CFR 63.122(d)(2)]

## V. Testing Requirements

**1.** Compliance with the control requirements specified in section A.II shall be demonstrated by the monitoring and record keeping requirements in section A.III of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-15 TANK (T006)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 1 storage tank, controlled with a flare, storing butadiene, 60,000-gallon capacity | 40 CFR Part 63, Subpart JJJ | The permittee shall operate and maintain a closed vent system and control device as defined in 40 CFR 63.1312(b). |
| [existing Group 1 storage tank with maximum true vapor pressure greater than 11.11 psi] | | See sections A.I.2.a through A.I.2.g below. |
| | 40 CFR 63.11(b) | The permittee is required to comply with the requirements specified in 40 CFR 63.11(b).<br><br>The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.<br><br>See sections A.II.1 through A.II.4 below. |
| | OAC rule 3745-21-07(D) | See section A.I.2.h below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. 40 CFR 63.119(a)(2) establishes the reference control technology for this emissions unit.

**2.b** The permittee has elected to use a closed vent system and control device, as defined in 40 CFR 63.1312(b), to comply with the requirements of paragraph 40 CFR 119(a)(2). Therefore the permittee shall comply with the requirements in sections A.I.2.c through A.I.2.g below.

[40 CFR 63.119(e)]

**2. Additional Terms and Conditions (continued)**

**2.c** Except as provided in section A.I.2.d, the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b).

[40 CFR 63.119(e)(1)]

**2.d** If the permittee can demonstrate that a control device installed on a storage vessel on or before March 29, 1995 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater.

[40 CFR 63.119(e)(2)]

**2.e** Periods of planned routine maintenance of the flare when it does not meet the specifications of section A.I.2.c or A.I.2.d, while emissions are being vented to it, as applicable, shall not exceed 240 hours per year.

[40 CFR 63.119(e)(3)]

**2.f** The specifications and requirements in sections A.I.2.c and A.I.2.d for control devices do not apply during periods of planned routine maintenance.

[40 CFR 63.119(e)(4)]

**2.g** The specifications and requirements in sections A.I.2.c and A.I.2.d of this section for control devices do not apply during a control system malfunction.

[40 CFR 63.119(e)(5)]

**2.h** The permittee shall not place, store, or hold in any stationary storage vessel of more than five hundred gallons capacity any volatile photochemically reactive material unless such vessel is equipped with a permanent submerged fill pipe, is loaded through the use of a portable loading tube which can be inserted below the liquid level line during loading operations, or is a pressure tank as described in OAC rule 3745-21-07(D)(1) or is fitted with a vapor recovery system as described in OAC rule 3745-21-07(D)(1)(b).

## II. Operational Restrictions

**1.** The flare shall be steam-assisted, air-assisted, or non-assisted.

[40 CFR 63.11(b)(2)]

**2.** The flare shall be operated at all times when emissions are being vented to it.

[40 CFR 63.11(b)(3)]

**3.** The flare shall be operated with a flame present at all times when emissions are being vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

[40 CFR 63.11(b)(5)]

**4.** The permittee shall adhere to the heat content specifications in 40 CFR 63.11(b)(6)(ii), and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or 40 CFR63.11(b)(8), or adhere to the requirements in 40 CFR 63.11(b)(6)(i).

[40 CFR 63.11(b)(6)]

## III. Monitoring and/or Record Keeping Requirements

**1.** When applicable, the permittee shall demonstrate compliance with the requirements of section A.I.2.e by collecting and recording the information specified in sections A.III.1.a and A.III.1.b during said events. This information shall be included in the Periodic Report required by 40 CFR 63.1335(e)(6).

[40 CFR 63.120(e)(3)]

**1.a** When applicable, a description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months shall be included. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

[40 CFR 63.122(g)(1)(i)]

**1.b** When applicable, a description of the planned routine maintenance that was performed for the control device during the previous 6 months shall be included. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of section A.I.2.c or A.I.2.d, as applicable, due to planned routine maintenance.

[40 CFR 63.122(g)(1)(ii)]

**2.** The closed vent system shall be inspected as specified in 40 CFR 63.148, Leak Inspection Provisions. The inspections required are to be performed in accordance with 40 CFR 63.148(c), the inspection shall be done during filling of the storage vessel. The results of this inspection shall be collected and recorded as specified in 40 CFR 63.148.

[40 CFR 63.120(e)(5)]

**3.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

[40 CFR 63.123(a)]

**4.** Whenever the permittee uses a flare as a control device, the permittee shall operate and maintain a device (including, but not limited to, a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of the flare pilot flame. All monitoring equipment shall be calibrated, maintained, and operated according to the manufacturer's specifications.

**5.** The permittee shall maintain records of the following:

a. the flare design (i.e., steam-assisted, air-assisted or non-assisted); and

b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.119(e).

[40 CFR 63.120(e)(1)&(2)] and [40 CFR 63.11(b)(1)]

**6.** The permittee shall collect the following information on a daily basis:

a. hourly records for all periods during which there was no pilot flame for the flare and emissions from T006 were being vented to the flare; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

[40 CFR 63.119(e)(1) or 40 CFR 63.119(e)(2)]

**7.** The permittee shall monitor the flare to assure that it is being operated and maintained in conformance with the flare's design.

## IV. Reporting Requirements

**1.** The permittee, as part of the Periodic Report required by 40 CFR 63.1335(e)(6), shall submit the information specified in sections A.IV.1.a through A.IV.1.c below:

[40 CFR 63.122(g)]

**1.a** If applicable, a description of the planned routine maintenance events for the flare for the next 6 months that are expected to result in it not meeting the specifications of section A.I.2.c or A.I.2.d while emissions are being vented to it.

[40 CFR 63.122(g)(1)(i)]

**1.b** If applicable, a description of the planned routine maintenance events that were performed on the flare during the previous 6 months that resulted in it not meeting the specifications of section A.I.2.c or A.I.2.d while emissions were being vented to it.

[40 CFR 63.122(g)(1)(ii)]

**1.c** Each occurrence when the flare does not meet the general control device requirements specified in 40 CFR 63.11(b). The report shall include the following information:

i. identification of the flare which does not meet the general requirements specified in 40 CFR 63.11(b): and

ii. the reason the flare did not meet the general requirements specified in 40 CFR 63.11(b).

[40 CFR 63.122(g)(3)]

**2.** The permittee shall comply with the leak identification reporting provisions specified in 40 CFR 63.148.

[40 CFR 63.120(e)(5)]

**3.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period, as well as the cause of each deviation.

These reports shall be submitted to the Hamilton County Department of Environmental Services, and shall cover the calendar quarters from January 1 to March 31, April 1 to June 30, July 1 to September 30 and October 1 to December 31 of each year. These reports shall be submitted by May 30, August 29, November 29 and February 28, respectively.

**4.** Periodic flare reporting requirements:

i. all dates and times in which the pilot flame was absent or its monitoring device was not operational while emissions from T006 were being vented to the flare;

ii. all dates and times in which emissions from T006 were diverted from the flare to the atmosphere; and

iii. all periods during which the flare had visible emissions exceeding a total of 5 minutes in any consecutive 2-hour period.

The reports shall include the date, time, and duration of each such period, as well as reasons for each such deviation.

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. These summaries shall be submitted on the same time schedule as the deviation reports.

## V. Testing Requirements

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

The flare used to control this emissions unit is a common control device with emissions unit P001. Visible emission readings using Test Method 22 of 40 CFR Part 60, Appendix A, for an observation period of 2 hours, is required under Section A.V.1, for emissions unit P001. These visible emission readings may be used to demonstrate compliance with the emission limitations.

**2.** The flare shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater and meet the specifications described in the general control device requirements of 40 CFR 63.11(b).

If the permittee can demonstrate that a control device installed on a storage vessel on or before March 29, 1995, is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater and meet the specifications described in the general control device requirements of 40 CFR 63.11(b).

The permittee shall demonstrate compliance with this requirement by the record keeping requirements in section A.III.5 that demonstrates the flare meets the operational requirements outlined in 40 CFR 63.120(e).

## VI. Miscellaneous Requirements

**1.** The permittee has complied with the reporting requirements specified in 40 CFR Part 63.120(e)(2).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-1 TANK (T007)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 1 storage tank, internal floating roof, 600,000-gallon capacity, storing acrylonitrile<br><br>[existing Group 1 storage tank with maximum true vapor pressure less than 11.11 psi] | 40 CFR Part 63, Subpart JJJ | The permittee shall reduce hazardous air pollutants emissions to the atmosphere by operating and maintaining a fixed roof and internal floating roof as defined in 40 CFR 63.111.<br><br>See sections A.I.2.a through A.I.2.h below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. 40 CFR 63.119(a)(1) establishes the reference control technology for this emissions unit. [See Part II of this permit.]

**2.b** The permittee shall comply with the requirements of sections A.I.2.c through A.I.2.h.

Note: The intent of sections A.I.2.c and A.I.2.h is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.

[40 CFR 63.119(b)]

## 2. Additional Terms and Conditions (continued)

**2.c** The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in sections A.I.2.c.i through A.I.2.c.iii below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

[40 CFR 63.119(b)(1)]

**2.d** When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

[40 CFR 63.119(b)(2)]

**2.e** Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in section A.I.2.e.iv below, the closure device shall consist of one of the devices listed in sections A.I.2.e.i, A.I.2.e.ii, or A.I.2.e.iii below:

i. a liquid-mounted seal as defined in 40 CFR 63.111;

ii. a metallic shoe seal as defined in 40 CFR 63.111;

iii. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof; [The lower seal may be vapor-mounted, but both must be continuous seals.]

iv. If the internal floating roof is equipped with a vapor-mounted seal as of March 29, 1995, the requirement for one of the seal options specified in sections A.I.2.e.i, A.I.2.e.ii, and A.I.2.e.iii does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(3)]

**2.f** Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

[40 CFR 63.119(b)(4)]

**2. Additional Terms and Conditions (continued)**

**2.g** Except as provided in section A.I.2.g.viii. below, each internal floating roof shall meet the specifications listed in sections A.I.2.g.i through A.I.2.g.vii below:

i. each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface;

ii. each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket;

iii. each penetration of the internal floating roof for the purposes of sampling shall be a sample well; [Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.]

iv. each automatic bleeder vent shall be gasketed;

v. each rim space vent shall be gasketed;

vi. each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover; and

vii. each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

viii. If the internal floating roof does not meet any one of the specifications listed in sections A.I.2.g.i through A.I.2.g.vii above as of March 29, 1995, the requirement for meeting those specifications does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed;

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(5)]

**2.h** Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
[40 CFR 63.119(b)(6)]

**3.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the vapor loss control equipment listed below.

**3.a** A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

**3.b** A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety percent by weight. All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place.

**3.c** Other equipment or means of air pollution control as may be approved by the Director.

## II. Operational Restrictions

**1.** If during the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP, as defined in 40 CFR 63.1312(b).

[40 CFR 63.120(a)(7)]

**2.** If during the inspections required by section A.III.1.b.i or A.III.1.c.ii, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by section A.III.1.b.i or A.III.1.c.ii cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

[40 CFR 63.120(a)(4)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall comply with the requirements in sections A.III.1.a through A.III.1.c.

[40 CFR 63.120(a)]

**1.a** The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in sections A.III.1.b and A.III.1.c.

[40 CFR 63.120(a)(1)]

**1.b** For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in below.

i. visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311; and

ii. visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(2)]

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

**1.c** For vessels equipped with a double-seal system, the permittee shall perform either the inspection required in section A.III.1.c.i below or the inspections required in both sections A.III.1.c.ii and A.III.1.c.iii below:

i. the permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date specified in 40 CFR 63.1311; or

ii. the permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311, and

iii. visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(3)]

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

[40 CFR 63.123(a)]

## IV. Reporting Requirements

**1.** Except as provided in section A.IV.2, for all the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the permittee shall notify the Hamilton County Department of Environmental Services in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Hamilton County Department of Environmental Services the opportunity to have an observer present.

[40 CFR 63.120(a)(5)]

**2.** If the inspection required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Hamilton County Department of Environmental Services at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Hamilton County Department of Environmental Services at least 7 calendar days prior to refilling.

[40 CFR 63.120(a)(6)]

**3.** The permittee shall submit, as part of the Periodic Report required under 40 CFR 63.1335(e)(6), the results of each inspection conducted in accordance with sections A.III.1.a through A.III.1.c in which a failure is detected in the control equipment.

[40 CFR 63.122(d)]

## IV. Reporting Requirements (continued)

**3.a** For vessels for which annual inspections specified in section A.III.1.b.i or A.III.1.c.ii , the specifications and requirements listed in sections A.IV.3.a.i through A.IV.3.a.iii below apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage vessel.

ii. Except as provided in section A.IV.3.a.iii below, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with section A.II.3, the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in section A.II.3.; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

[40 CFR 63.122(d)(1)]

**3.b** For vessels for which inspections are specified in sections A.III.1.b.ii, A.III.1.c.i, or A.III.1.c.iii the specifications and requirements listed in sections A.IV.3.b.i and A.IV.3.b.ii of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report required under 40 CFR 63.1335(e)(6) of this subpart shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

[40 CFR 63.122(d)(2)]

## V. Testing Requirements

**1.** Compliance with the operational restrictions specified in section A.II shall be demonstrated by the monitoring and record keeping requirements in section A.III of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-2 TANK (T008)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 600,000-gallon internal floating roof storage tank for alpha-methylstyrene | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** The permittee currently does not store volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit. Prior to storing volatile photochemically reactive materials in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined on OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-3 TANK (T009)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 600,000-gallon internal floating roof storage tank, storing methanol | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart FFFF | See Part II, Section A.9. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined on OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-5 TANK (T011)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 1 storage tank, internal floating roof, 900,000-gallon capacity, storing acrylonitrile<br><br>[existing Group 1 storage tank with maximum true vapor pressure less than 11.11 psi] | 40 CFR Part 63, Subpart JJJ | The permittee shall reduce hazardous air pollutants emissions to the atmosphere by operating and maintaining a fixed roof and internal floating roof as defined in 40 CFR 63.111.<br><br>See sections A.I.2.a through A.I.2.h below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** The permittee shall comply with the requirements of sections A.I.2.b through A.I.2.h of these terms and conditions.

Note: The intent of sections A.I.2.b and A.I.2.c is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.

[40 CFR 63.119(b)]

**2.b** The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in sections A.I.2.b.i through A.I.2.b.iii below.

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

[40 CFR 63.119(b)(1)]

## 2. Additional Terms and Conditions (continued)

**2.c** When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

[40 CFR 63.119(b)(2)]

**2.d** Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in section A.I.2.d.iv below, the closure device shall consist of one of the devices listed in sections A.I.2.d.i through A.I.2.d.iii below.

i. a liquid-mounted seal, as defined in 40 CFR 63.111;

ii. a metallic shoe seal, as defined in 40 CFR 63.111; or

iii. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of March 29, 1995, the requirement for one of the seal options specified in section A.I.2.d.i through A.I.2.d.iii of this section does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed;

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(3)]

**2.e** Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

[40 CFR 63.119(b)(4)]

**2.f** Except as provided in section A.I.2.f.viii below, each internal floating roof shall meet the specifications listed in sections A.I.2.f.i through A.I.2.f.vii below.

i. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.

ii. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.

iii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iv. Each automatic bleeder vent shall be gasketed.

**2. Additional Terms and Conditions (continued)**

v. Each rim space vent shall be gasketed.

vi. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

viii. If the internal floating roof does not meet any one of the specifications listed in sections A.I.2.f.i through A.I.2.f.vii above as of March 29, 1995, the requirement for meeting those specifications does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed;

(b) no later than 10 years after June 19, 2000.

[40 CFR 63.119(b)(5)]

**2.g** Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

[40 CFR 63.119(b)(6)]

**2.h** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. 40 CFR 63.119(a)(1) establishes the reference control technology for this emissions unit. [See Part II of this permit.]

**II. Operational Restrictions**

**1.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control equipment:

**1.a** A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

**1.b** A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety per cent by weight; [All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place.

**1.c** Other equipment or means of air pollution control as may be approved by the Director.

**2.** If during the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP, as defined in 40 CFR 63.1312(b).

[40 CFR 63.120(a)(7)]

## II. Operational Restrictions (continued)

**3.** If during the inspections required by sections A.III.1.b.i or A.III.1.c.ii, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by section A.III.1.b.i or A.III.1.c.ii cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

[40 CFR 63.120(a)(4)]

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall conduct the inspections required in sections A.III.1.a through A.III.1.c and keep a written record of when the inspections were conducted and what was found during the inspections.

[40 CFR 63.120(a)]

**1.a** The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in sections A.III.1.b and A.III.1.c.

[40 CFR 63.120(a)(1)]

**1.b** For vessels equipped with a single-seal system, the permittee shall perform the inspections specified below:

i. visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311; and

ii. visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(2)]

**1.c** For vessels equipped with a double-seal system, the permittee shall perform either the inspection required in section A.III.1.c.i or the inspections required in both sections A.III.1.c.ii and A.III.1.c.iii below.

i. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date specified in 40 CFR 63.1311.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.1311.

iii. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.1311.

[40 CFR 63.120(a)(3)]

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

[40 CFR 63.123(a)]

## IV. Reporting Requirements

**1.** Except as provided in section A.IV.2, for all the inspections required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii, the permittee shall notify the Hamilton County Department of Environmental Services in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Hamilton County Department of Environmental Services the opportunity to have an observer present.

[40 CFR 63.120(a)(5)]

**2.** If the inspection required by sections A.III.1.b.ii, A.III.1.c.i, and A.III.1.c.iii is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Hamilton County Department of Environmental Services at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Hamilton County Department of Environmental Services at least 7 calendar days prior to refilling.

[40 CFR 63.120(a)(6)]

**3.** The permittee shall submit, as part of the Periodic Report required under 40 CFR 63.1335(e)(6), the results of each inspection conducted in accordance with sections A.III.1.a through A.III.1.c in which a failure is detected in the control equipment.

[40 CFR 63.122(d)]

**3.a** For vessels for which annual inspections specified in section A.III.1.b.i or A.III.1.c.ii , the specifications and requirements listed in sections A.IV.3.a.i through A.IV.3.a.iii below apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage vessel.

ii. Except as provided in section A.IV.3.a.iii below, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with section A.II.3, the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in section A.II.3; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

[40 CFR 63.122(d)(1)]

**3.b** For vessels for which inspections are specified in sections A.III.1.b.ii, A.III.1.c.i, or A.III.1.c.iii, the specifications and requirements listed in sections A.IV.3.b.i and A.IV.3.b.ii of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report required under 40 CFR 63.1335(e)(6) of this subpart shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

[40 CFR 63.122(d)(2)]

## V. Testing Requirements

**1.** Compliance with the control requirements specified in section A.II shall be demonstrated by the monitoring and record keeping requirements in section A.III of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-6 TANK (T012)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 1,300,000-gallon, fixed roof storage tank, storing styrene | OAC rule 3745-31-05(A)(3) (PTI 14-05570) | 2.68 tpy of organic compounds<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** Compliance with OAC rule 3745-31-05(A) shall be demonstrated by the use of submerged fill, compliance with the specified emission limitation and compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ.

**2.b** The annual emission limitation is based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with this emission limitation.

**2.c** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the recordkeeping requirements of 40 CFR 63.123(a).

## II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control equipment:

a. A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place; or

b. A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety percent by weight. All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place; or

c. Other equipment or means of air pollution control as may be approved by the Director.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

2.68 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (September 1997).

**2.** Compliance with the operational restriction specified section A.II.1 shall be demonstrated by the monitoring and record keeping requirements of section A.III.1 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-7 TANK (T013)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 1,300,000-gallon, fixed roof storage tank, storing styrene | OAC rule 3745-31-05(A)(3) (PTI 14-05570) | 2.68 tpy of organic compounds<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** Compliance with OAC rule 3745-31-05(A) shall be demonstrated by the use of submerged fill, compliance with the specified emission limitation and compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ.

**2.b** The annual emission limitation is based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with this emission limitation.

**2.c** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the recordkeeping requirements of 40 CFR 63.123(a).

## II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control equipment:

a. A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place; or

b. A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety percent by weight. All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place; or

c. Other equipment or means of air pollution control as may be approved by the Director.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

2.68 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (September 1997).

**2.** Compliance with the operational restriction specified section A.II.1 shall be demonstrated by the monitoring and record keeping requirements of section A.III.1 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** C-8 TANK (T014)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 1,300,000-gallon, fixed roof storage tank, storing styrene | OAC rule 3745-31-05(A)(3) (PTI 14-05570) | 2.68 tpy of organic compounds<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** Compliance with OAC rule 3745-31-05(A) shall be demonstrated by the use of submerged fill, compliance with the specified emission limitation and compliance with the requirements of OAC rule 3745-21-07(D) and 40 CFR Part 63, Subpart JJJ.

**2.b** The annual emission limitation is based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with this emission limitation.

**2.c** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of this subpart. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the recordkeeping requirements of 40 CFR 63.123(a).

## II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary tank, reservoir or other container of more than sixty-five thousand gallons capacity any volatile photochemically reactive material unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control equipment:

a. A floating pontoon or double-deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall. This control equipment shall not be permitted if the volatile photochemically reactive material has a vapor pressure of 12.5 pounds per square inch absolute or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place; or

b. A vapor recovery system which reduces the emission of organic materials into the atmosphere by at least ninety percent by weight. All tank gauging or sampling devices shall be gas tight except when tank gauging or sampling is taking place; or

c. Other equipment or means of air pollution control as may be approved by the Director.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**2.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

2.68 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (September 1997).

**2.** Compliance with the operational restriction specified section A.II.1 shall be demonstrated by the monitoring and record keeping requirements of section A.III.1 of these terms and conditions.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B9 SPENT MON (T016)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2 storage tank, 6,900-gallon, fixed roof storage tank, storing spent monomer | OAC rule 3745-31-05(A)(3) (PTI 14-1941) | 0.15 tpy of organic compounds |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is required to comply with 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary storage vessel of more than five hundred gallons capacity any volatile photochemically reactive material unless such vessel is equipped with a permanent submerged fill pipe, is loaded through the use of a portable loading tube which can be inserted below the liquid level line during loading operations, or is a pressure tank as described in OAC rule 3745-21-07(D)(1) or is fitted with a vapor recovery system as described in OAC rule 3745-21-07(D)(1)(b).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

0.15 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (September 1997).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-14 TANK (T020)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 30,000-gallon pressure tank for storage of butyl acrylate with vapor recovery system vented to boilers | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary storage vessel of more than five hundred gallons capacity any volatile photochemically reactive material unless such vessel is equipped with a permanent submerged fill pipe, is loaded through the use of a portable loading tube which can be inserted below the liquid level line during loading operations, or is a pressure tank as described in OAC rule 3745-21-07(D)(1) or is fitted with a vapor recovery system as described in OAC rule 3745-21-07(D)(1)(b).

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-21 TANK (T021)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 20,000-gallon fixed roof storage tank, storing fatty acids | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-24 TANK (T022)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2 storage tank, 20,000-gallon capacity, storing maleic anhydride | OAC rule 3745-31-05(A)(3) (PTI 14-02058) | 0.46 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is required to comply with 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02058, issued on December 12, 1990: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.46 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-25 TANK (T023)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 10,500-gallon, fixed roof storage tank, storing tertiary dodecyl mercaptan | OAC rule 3745-31-05(A)(3) (PTI 14-2058) | 1.23 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7) in this emissions unit, the permitteee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored: and

b. whether or not the material stored is a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

1.23 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (September 1997).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B9 MEK (T024)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 10,500-gallon storage tank, storing methyl ethyl ketone | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is required to comply with 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** The permittee shall not place, store, or hold in any stationary storage vessel of more than five hundred gallons capacity any volatile photochemically reactive material unless such vessel is equipped with a permanent submerged fill pipe, is loaded through the use of a portable loading tube which can be inserted below the liquid level line during loading operations, or is a pressure tank as described in OAC rule 3745-21-07(D)(1) or is fitted with a vapor recovery system as described in OAC rule 3745-21-07(D)(1)(b).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

**None**

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-28 TANK (T025)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 11,000-gallon fixed roof storage tank, storing dibutyl fumarate | OAC rule 3745-31-05(A)(3) (PTI 14-02058) | 0.89 tpy of organic compounds |
| | 40 CFR Part 60, Subpart Kb | None |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

[40 CFR 60.116b(a) and (b)]

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02058, issued on December 12, 1990: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.89 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B4 MA TANK (T026)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 25,000-gallon fixed roof storage tank, storing maleic anhydride | OAC rule 3745-31-05(A)(3) (PTI 14-02058) | 0.22 tpy of organic compounds |
| | 40 CFR Part 60, Subpart Kb | none |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart FFFF | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** See Part II, Section A.9 of this permit for the requirements of 40 CFR Part 63, Subpart FFFF.

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

[40 CFR 60.116b(a) and (b)]

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02058, issued on December 12, 1990: section A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.22 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B30 MEK TANK (T027)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2, 12,000-gallon storage tank storing methyl ethyl ketone | OAC rule 3745-31-05(A)(3) (PTI 14-02058) | 0.32 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is required to comply with 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**2.** 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 #14-02058, issued on December 12, 1990: section A.III.1. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.30 tpy of organic compounds

Applicable Compliance Method:

The permittee shall demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** MIN OIL TANK (T028)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 25,000-gallon fixed roof storage tank, storing mineral oil | OAC rule 3745-31-05(A)(3) (PTI 14-02058) | 0.30 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**2.** 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 #14-02058, issued on December 12, 1990: section A.III.1. 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.

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

**1.a** Emission Limitation:

0.30 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B30 SM TANK (T031)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2 storage tank, 30,000-gallon capacity, storing spent monomer | OAC rule 3745-31-05(A)(3) (PTI 14-02347) | 0.072 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a. below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is required to comply with 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit;

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02347, issued on December 4, 1991: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.072 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-17 TANK (T036)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 10,000-gallon fixed roof storage tank, storing terpinolene | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** A-16 TANK (T037)

**Activity Description:** TANK -INORGANIC LIQUID

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 10,000-gallon fixed roof storage tank, storing tris-nonyl phenol phosphite | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D).

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

**1.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

### V. Testing Requirements

**None**

### 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** SEC BUOH TANK (T044)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 10,000-gallon fixed roof storage tank, storing secondary butanol | OAC rule 3745-31-05(A)(3) (PTI 14-02486) | 0.13 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02486, issued on November 27, 1991: sections A.III.1 and A.III.2. 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.

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.13 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** IBA TANK (T045)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 10,000-gallon fixed roof storage tank, storing isobutanol | OAC rule 3745-31-05(A)(3) (PTI 14-02539) | 0.065 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-02539, issued on May 28, 1992: sections A.III.1 and A.III.2. 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.

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.065 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** T16-1 FUEL OIL TANK (T050)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40,000-gallon fixed roof storage tank, storing No. 2 fuel oil | OAC rule 3745-31-05(A)(3) (PTI 14-04211) | 0.06 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-04211, issued on August 28, 1996: sections A.III.1 and A.III.2. 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.

### IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.06 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** T16-2 FUEL OIL TANK (T051)

**Activity Description:** TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40,000-gallon fixed roof storage tank, storing No. 2 fuel oil | OAC rule 3745-31-05(A)(3) (PTI 14-04211) | 0.06 tpy of organic compounds |
| | 40 CFR Part 60, Subpart Kb | none |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

[40 CFR 60.116b(a) and (b)]

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material is a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

**3.** 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 #14-04211, issued on August 28, 1996: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. This notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.06 tpy of organic compounds

Applicable Compliance Method:

The permittee shall demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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:** B30 EB TANK (T054)

**Activity Description:** RAW MATERIAL STORAGE TANK

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 40 CFR Part 63, Subpart JJJ Group 2 fixed roof storage tank, 18,500-gallon capacity, storing ethyl benzene | OAC rule 3745-31-05(A)(3) (PTI 14-04703) | 0.12 tpy of organic compounds |
| | OAC rule 3745-21-07(D) | See section A.II.1 below. |
| | 40 CFR Part 63, Subpart JJJ | See section A.I.2.a below. |

**2. Additional Terms and Conditions**

**2.a** Except as provided in paragraphs (b) through (d) of 40 CFR 63.1314, the permittee shall comply with the applicable requirements of 40 CFR 63.119 through 63.123 and 63.148, with the differences noted in paragraphs (a)(1) through (a)(17) of 40 CFR 63.1314 for the purpose of Subpart JJJ. As specified in 40 CFR 63.119(a)(3), a Group 2 storage tank is only required to comply with the record keeping requirements of 40 CFR 63.123(a).

### II. Operational Restrictions

**1.** If the permittee stores a volatile photochemically reactive material, as defined in OAC rule 3745-21-01(C)(7), in this emissions unit, the permittee shall comply with the requirements of OAC rule 3745-21-07(D)(1).

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

**1.** The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status (as defined in 40 CFR 63.1312) and is in operation.

**2.** The permittee shall maintain the following information for each material stored in this emissions unit:

a. the identification of the material stored; and

b. whether or not the material stored is a volatile photochemcially reactive material as defined on OAC rule 3745-21-01(C)(7).

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

**3.** 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 #14-04703, issued on August 4, 1999: sections A.III.1 and A.III.2. 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.

## IV. Reporting Requirements

**1.** The permittee shall notify the Hamilton County Department of Environmental Services of any volatile photochemically reactive material stored in this emissions unit. The notification shall be submitted within thirty days after the commencement of the storage of a volatile photochemically reactive material.

## V. Testing Requirements

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

**1.a** Emission Limitation:

0.12 tpy of organic compounds

Applicable Compliance Method:

The permittee may demonstrate compliance by using emission factors from USEPA reference document AP-42, fifth edition, Section 7.1, organic liquid storage tanks (March, 1998).

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**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**

**********

## THIS IS THE LAST PAGE OF THE PERMIT

**********