



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

12/31/02

CERTIFIED MAIL

RE: Final Title V Administrative Permit Amendment Chapter 3745-77 permit

01-45-02-0235

Safety-Kleen Corp. - Hebron Recycle Center
Timothy A. Semones
581 Milliken Drive, S.E.
Hebron, OH 43025-9687

Dear Timothy A. Semones:

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
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Central District Office.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Central District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V ADMINISTRATIVE PERMIT AMENDMENT

Effective Date: **01/16/03**

Expiration Date: **01/16/08**

Modification Issue Date: **12/31/02**

This document constitutes issuance of a Title V permit for Facility ID: 01-45-02-0235 to:
Safety-Kleen Corp. - Hebron Recycle Center
581 Milliken Drive, S.E.
Hebron, OH 43025-9687

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

| | | |
|---|---|--|
| B004 (20.9 MMBTU Boiler) 20.9 MMBTU Boiler | Safety-Therm #1 (Solids/sludge distillation unit) | Drum Receiving vat |
| J002 (MS Loading Rack) Loading Rack for bulk truck loading | P006 (Safety-Therm #2) Safety-Therm #2 (Solids/sludge distillation unit) | P016 (Drum Washing) Drums and Lid Washing |
| J003 (Loading Rack) Loading Rack for bulk truck loading | P007 (Safety-Therm #3) Safety-Therm #3 (Solids/sludge distillation unit) | T095 (Tank No. 127) Tank No. 127 |
| P001 (LUWA E-2,3) LUWA E-2,3 Thin-film evaporator | P008 (Safety-Therm #4) Safety-Therm #4 (Solids/sludge distillation unit) | T180 (Tank No. 80) Tank No. 80 |
| P002 (Washex Still (36VS)) Washex Still 36VS | P009 (LUWA #2) LUWA #2 Thin-film evaporator | T188 (Tank No. 88) Tank No. 88 |
| P003 (Washex Still (24VS)) Washex Still 24VS | P010 (Filter Grinder) Filter shredder for drycleaning filters | T213 (Tank No. 113) Tank No. 113 |
| P004 (Fractional Dist) Fractional Distillation Column | P011 (Drying Beds) Solvent dewatering beds to remove moisture from chlorinated solvents | T214 (Tank No. 114) Tank No. 114 |
| P005 (Safety-Therm #1) | P013 (Drum Receiving) | |

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:

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

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, 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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or 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))
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
(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 are true, accurate, and complete.
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. **Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset condition, of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upset conditions.

Except as provided in OAC rule 3745-15-06, 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).

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. **Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

(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, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in

emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

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

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

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

(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))

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 (a) 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, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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 Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. National Emissions Standards for Hazardous Air Pollutants

The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations as promulgated by the United States Environmental Protection Agency under 40 CFR 63, Subpart DD.

Various standards and compliance requirements of 40 CFR 63, Subpart DD are applicable to not only permitted emissions units but also their auxiliary components that affect air emissions. The sections of 40 CFR 63, Subpart DD that are applicable to these auxiliary components are addressed in this section of the Title V permit.

- 1.a** The terms and conditions of this permit do not follow the standard STARS numbering format when referencing the requirements of the MACT Subpart DD inspection and monitoring requirements for Closed-Vent Systems (section A.5.e), the MACT Subpart DD requirements for Transfer Systems (section A.6), the NSPS Subpart V requirements for Equipment Leaks (section A.17), the MACT Subpart PP requirements for Containers (sections A.22-24), the General Provisions of 40 CFR 63.9 (section A.19) and 40 CFR 63.10 (section A.20), the MACT Subpart DD procedure for determining no detectable organic emissions (section A.25), and the MACT Subpart DD control device performance test procedures (section A.26). The Ohio EPA deviated from the traditional format due to the length and complexity of these federal rules.

2. Standards: P001 - P009

For each off-site material management unit that is part of an affected source except when exempted by section 63.683(c) of 40 CFR 63, Subpart DD, per 40 CFR 63.683(b)(1)(i), the permittee shall operate air emission controls on the off-site material management unit in accordance with the standards specified in 40 CFR 63.685 through 40 CFR 63.689 as applicable to the unit.

3. Standards: Equipment Leaks

Per 40 CFR 63.683(b)(3), the permittee shall control the HAP emitted from equipment leaks by implementing control measures in accordance with the standards specified in 40 CFR 63.691 for each equipment component that is part of an affected emissions unit and meets the following criteria:

- a. the equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight;
- b. the equipment component is a piece of a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system; and
- c. the equipment component is intended to operate 300 hours or more during a 12-month period.

Per 40 CFR 63.691(b), the permittee shall control the HAP emitted from equipment leaks in accordance with the applicable provisions of Section 61.242 through Section 61.247 in 40 CFR 61 Subpart V - National Emission Standards for Equipment Leaks as stated in these terms and conditions.

4. Standards: Process Vents for P001 - P009

For each process vent that is part of an affected emissions unit, per 40 CFR 63.683(b)(2)(i), the permittee shall control the HAP emitted from the process vent by operating the regenerative fume oxidizer (RFO) in accordance with the standards specified in 40 CFR 63.690.

Per 40 CFR 63.690, the permittee shall control HAP emitted from the process vents within the affected emissions unit by connecting each process vent through a closed-vent system to the RFO that is designed and operated in accordance with the standards in 40 CFR 63.693 except that the RFO is not required to meet the level of performance, as specified in 40 CFR 63.693(f)(1)(i) provided that the RFO is designed and operated to achieve a total reduction of 95 weight percent or more in the quantity of HAP, listed in Table 1 of 40 CFR 63, Subpart DD (see A.18), that is emitted from all process vents within an affected emissions unit.

A. State and Federally Enforcable Section (continued)

5. Standards: Closed-Vent Systems and Control Device for P001 - P009

Per 40 CFR 63.693(b), for each closed-vent system and control device (i.e., the RFO), the permittee shall meet the following requirements:

5.a The closed-vent system shall be designed and operated in accordance with the requirements specified in 40 CFR 63.693(c) as stated in these terms and conditions.

5.b The RFO shall remove, recover, or destroy HAP at a level of performance that achieves the requirements specified in paragraph (f) of 40 CFR 63.693 as stated in these terms and conditions.

The permittee demonstrated that the RFO achieves the applicable performance requirements by conducting and passing an emission test on August 8, 2001 for the RFO in accordance with the Testing Methods and Procedures specified in 40 CFR 63.694.

See A.29 and A.29.a below.

5.c Whenever gases or vapors containing HAP are vented through a closed-vent system connected to the RFO, the RFO shall be operating except at the following times:

- i. The RFO may be bypassed for the purpose of performing planned routine maintenance of the closed vent system or RFO in situations when the routine maintenance cannot be performed during periods that the emission point vented to the RFO is shutdown. On an annual basis, the total time that the closed-vent system or RFO is bypassed to perform routine maintenance shall not exceed 240 hours per each 12 month period.
- ii. The RFO may be bypassed for the purpose of correcting a malfunction of the closed-vent system or RFO. The permittee shall perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.

5.d The permittee shall ensure that the RFO is achieving the performance requirements specified in paragraph (b)(2) of section 63.693 by continuously monitoring the operation of the RFO as follows:

- i. The temperature monitoring system shall include a continuous recorder that records the measured temperature values. The monitoring equipment shall be installed, calibrated, and maintained in accordance with the equipment manufacturer's specifications. The continuous recorder shall be a data recording device that records either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15-minute or less.
- ii. The permittee shall establish a minimum operating temperature to define the range of conditions at which the RFO must be operated to continuously achieve the applicable performance requirements of section 63.693. The minimum temperature shall be established as follows:
 - (a) If the permittee conducts a performance test to demonstrate the performance of the RFO, then the minimum temperature shall be established based on values established during the most recent emissions test, and supplemented, as necessary, by control device design analysis and manufacturer recommendations.
 - (b) If the permittee uses a control device design analysis to demonstrate performance of the RFO, then the minimum operating temperature shall be established based on the control device design analysis and the RFO manufacturer's recommendations.
 - (c) When the control device is required to be operating in accordance with the provisions of paragraph (b)(3) of section 63.693, the permittee shall inspect the data recorded by the continuous monitoring system on a routine basis and operate the control device such that the actual operating temperature is greater than the minimum operating temperature established for the RFO.

A. State and Federally Enforcable Section (continued)

5.e The permittee shall inspect and monitor the closed-vent system in accordance with the requirements of 40 CFR 63.695(c) as stated below:

Per 40 CFR 63.695(c), the permittee shall meet the following inspection and monitoring requirements:

(1) Each closed-vent system that is used to comply with section 63.693(c)(1)(i) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) At initial startup, the permittee shall monitor the closed-vent system components and connections using the procedures specified in section 63.694(k) of this subpart and A.25 of this section to demonstrate that the closed-vent system operates with no detectable organic emissions.

(ii) After initial startup, the permittee shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The permittee shall monitor a component or connection using the procedures specified in section 63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in section 63.694(k) of this subpart to demonstrate that components or connections operate with no detectable organic emissions.

A. State and Federally Enforcable Section (continued)

(iii) In the event that a defect or leak is detected, the permittee shall repair the defect or leak in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The permittee shall maintain a record of the inspection and monitoring in accordance with the requirements specified in section 63.696 of this subpart.

(2) Each closed-vent system that is used to comply with section 63.693(c)(1)(ii) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping; loose connections; or broken or missing caps or other closure devices.

(ii) The permittee must perform an initial inspection following installation of the closed-vent system. Thereafter, the permittee must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The permittee shall maintain a record of the inspection in accordance with the requirements specified in ? 63.696 of this subpart.

(3) The permittee shall repair all detected defects as follows:

(i) The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.

(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the permittee must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown.

Repair of the defect must be completed before the process or unit resumes operation.

(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.

(B) The permittee determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.

(iii) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in section 63.696 of this subpart.

5.f The permittee of a control device subject to 40 CFR 63, Subpart DD shall maintain the records in accordance with the requirements of 40 CFR 63.10 (see A.20).

5.g The permittee shall prepare and submit reports for each closed-vent system and control device in accordance with the requirements of 40 CFR 63.697 as stated in these terms and conditions.

5.h The permittee shall collect and record the following information for each day:

- i. the downtime for the control device and monitoring equipment; and
- ii. the by-pass time for the control device and monitoring equipment.

A. State and Federally Enforcable Section (continued)

6. Standards: Transfer Systems

Per the definitions in 40 CFR 63.681, there are three transfer systems at this facility: transfer of off-site waste material from the tanks to the process units, transfer of off-site waste material from containers (i.e., drums) to tanks, and transfer of off-site waste material from tanks to trucks.

c. Per 40 CFR 63.689(c), for each transfer system that is subject to this section but is not an individual drain system, the permittee shall control air emissions by using one of the transfer systems specified in paragraphs (c)(1) through (c)(3) of this section. The specifications of (c)(1) through (c)(3) follow:

(1) A transfer system that uses covers in accordance with the requirements specified in paragraph (d) of this section.

(2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(3) A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.

(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed-vent system and control device are designed and operated in accordance with the requirements of section 63.693 of this subpart as stated in these terms and conditions.

d. The permittee controlling air emissions from a transfer system using covers in accordance with the provisions of paragraph (c)(1) of this section shall meet the requirements specified in paragraphs (d)(1) through (d)(6) of this section.

(1) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the off-site material as it is conveyed by the transfer system except for the openings at the inlet and outlet to the transfer system through which the off-site material passes. The inlet and outlet openings used for passage of the off-site material through the transfer system shall be the minimum size required for practical operation of the transfer system.

(2) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section joints or between the interface of the cover edge and its mounting.

(3) Except for the inlet and outlet openings to the transfer system through which the off-site material passes, each opening in the cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.

(4) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the material or its vapors conveyed in the transfer system; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the transfer system on which the cover is installed.

(5) Whenever an off-site material is in the transfer system, the cover shall be installed with each closure device secured in the closed position except as specified in paragraph (d)(5)(i) or (d)(5)(ii) of this section.

A. State and Federally Enforcable Section (continued)

(i) Opening of closure devices or removal of the cover is allowed to provide access to the transfer system for performing routine inspection, maintenance, repair, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a hatch or remove the cover to repair conveyance equipment mounted under the cover or to clear a blockage of material inside the system. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable.

(ii) Opening of a safety device, as defined in section 63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

(6) The permittee shall inspect the air emission control equipment in accordance with the requirements specified in section 63.695 of this subpart.

7. Standards: Tanks - Part of an Existing Affected Source

Per 40 CFR 63.685(b)(1), for a tank that is part of an existing affected source but the tank is not used to manage off-site material having a maximum organic vapor pressure that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in 40 CFR 63.681 (see A.27), the permittee shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 3 of 40 CFR 63.685 (see A.21) based on the off-site material maximum HAP vapor pressure and the tank's design capacity.

8. Standards: Tank(s) - Part of a New Affected Source

Per 40 CFR 63.685(b)(2), for a tank that is part of a new affected source but the tank is not used to manage off-site material having a maximum organic vapor pressure that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in section 63.681 of this subpart, the permittee shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 4 of 40 CFR 63, Subpart DD (see A.21) based on the off-site material maximum HAP vapor pressure and the tank's design capacity.

9. Standards: Containers

Per 40 CFR 63.688(b)(1), for a container having a design capacity greater than 0.1 cubic meter (26 gal) and less than or equal to 0.46 cubic meter (121 gal), the permittee shall control air emissions from the container in accordance with the standards for Container Level 1 controls as specified in 40 CFR 63 Subpart PP - National Emissions Standards for Containers (see A.22).

Per 40 CFR 63.688(b)(2), for a container having a design capacity greater than 0.46 cubic meter (121 gal) and the container is not in light-material service as defined in 40 CFR 63.681 (see A.27), the permittee shall control air emissions from the container in accordance with the standards for Container Level 1 controls as specified in 40 CFR 63 Subpart PP - National Emissions Standards for Containers (see A.22).

Per 40CFR63.688(b)(3), for a container having a design capacity greater than 0.46 cubic meter (121 gal) and the container is in light-material service as defined in 40CFR63.681, the permittee shall control air emissions from the container in accordance with the standards for Container Level 2 controls (see A.23) as specified in 40 CFR 63 Subpart PP - National Emissions Standards for Containers.

Per 40 CFR 63.688(c), for a container having a design capacity greater than 0.1 cubic meter (26 gal) used for treatment of a off-site waste material by waste stabilization process as defined in 40 CFR 63.681, the permittee shall control air emissions from the container at those times during the process when the off-site material in container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls as specified in 40 CFR 63 Subpart PP - National Emissions Standards for Containers (see A.24).

10. Standards: Closed Vent System Requirements

A. State and Federally Enforcable Section (continued)

- 10.a** Per 40 CFR 63.693(c)(1), the vent stream required to be controlled shall be conveyed to the RFO by either of the following closed-vent systems:
- i. a closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in 40 CFR 63.694(k) as stated in these terms and conditions; or
 - ii. a closed-vent system that is designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gage or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the RFO is operating.
- 10.b** Per 40 CFR 63.693(c)(2), in situations when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the RFO, each bypass device shall be equipped with either a flow indicator or a seal or locking device as specified below:
- i. If a flow indicator is used, the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this paragraph, a flow indicator means a device which indicates either the presence of gas or vapor flow in the bypass line.
 - ii. If a seal or locking device is used to comply, the device shall be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. The permittee shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.
- 11.** Standards: Vapor Incinerator Control Device Requirements
- 11.a** Per 40 CFR 63.693(f)(1), the RFO shall be designed and operated to achieve one of the following performance specifications:
- i. Destroy the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the oxidizer either:
 - (a) by 95 percent or more, on a weight-basis; or
 - (b) achieve a total oxidizer outlet concentration for the TOC, less methane and ethane, of less than or equal to 20 parts per million by volume (ppmv) on a dry basis corrected to 3 percent oxygen.
 - ii. Destroy the HAP listed in Table 1 of 40 CFR Part 63, Subpart DD (see A.18) contained in the vent stream entering the oxidizer either:
 - (a) 95 percent or more, on a total HAP weight-basis; or
 - (b) achieve a total incinerator outlet concentration for the HAP, listed in Table 1 of 40 CFR Part 63, Subpart DD, of less than or equal to 20 parts per million by volume (ppmv) on a dry basis corrected to 3 percent oxygen.
 - iii. Maintain the conditions in the RFO at a residence time of 0.5 second or longer and at a temperature of 1400F or higher.

A. State and Federally Enforcable Section (continued)

- 11.b** The permittee shall demonstrate that the RFO achieves the performance requirements of 40 CFR 63.693(f)(1) by one of the methods listed in 40 CFR 63.693(f)(2) which follow:

Per 40 CFR 63.693(f)(2), the permittee must demonstrate that the RFO achieves the performance requirements in paragraph (f)(1) of 40 CFR 63.693 by either performing a performance test as specified in paragraph (f)(2)(i) of 40 CFR 63.693 or a design analysis as specified in paragraph (f)(2)(ii) of 40 CFR 63.693.

Per 40 CFR 63.693(f)(2)(i), the permittee choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of section 63.694(l) of 40 CFR 63, Subpart DD.

Per 40 CFR 63.693(f)(2)(ii), the permittee choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (f)(2)(ii)(A) or (f)(2)(ii)(B) of 40 CFR 63.693 as applicable to the RFO design.

Per 40 CFR 63.693(f)(2)(ii)(A), for a RFO, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures in the combustion chamber and the combustion chamber residence time.

Per 40 CFR 63.693(f)(3), the permittee must monitor the operation of the RFO in accordance with the requirements of section 63.695(e) of 40 CFR 63, Subpart DD using one of the continuous monitoring systems specified in paragraphs (f)(3)(i) through (f)(3)(iv) of 40 CFR 63.693 as applicable to the type of RFO used.

- i. For a RFO, a continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device must be +/- 1 percent of the temperature being measured, expressed in degrees Celsius of +/- 0.5 degrees C, whichever is greater.
- ii. For the RFO, a continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, Appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.
- iii. For the RFO, a continuous monitoring system that measures alternative operating parameters other than those specified in paragraph (f)(3)(i) or (f)(3)(ii) of 40 CFR 63.693 upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of 40 CFR 63.693.

- 11.c** The RFO may be bypassed for the purpose of performing planned routine maintenance of the closed vent system or RFO in situations when the routine maintenance can not be performed during periods that the emission point vented to the RFO is shut down.

On an annual basis, the total time that the closed-vent system or RFO is bypassed to perform routine maintenance shall not exceed 240 hours per each 12-month period.

- 11.d** The permittee shall maintain the RFO combustion chamber at a minimum residence time of 0.5 second and at a minimum temperature of 1400 degrees Fahrenheit.

12. Control Requirements: Tanks

The permittee shall control air emissions from a tank required by Table 3 or Table 4 to use Tank Level 1 controls in accordance with 40 CFR 63.685(c) as stated in these terms and conditions.

The permittee shall control air emissions from a tank required by Table 3 or Table 4 to use Tank Level 2 controls in accordance with 40 CFR 63.685(d) as stated in these terms and conditions.

A. State and Federally Enforcable Section (continued)

13. Inspection and Monitoring Requirements: Closed-Vent Systems

The permittee shall meet the inspection and monitoring requirements specified in 40 CFR 63.695(c) for a closed-vent system operated in accordance with the provisions of 40 CFR 63.693.

14. Record keeping Requirements

14.a Per 40 CFR 63.696(a), the permittee shall comply with the record keeping requirements in section 63.10 under 40 CFR 63 Subpart A - General Provisions that are applicable as specified in Table 2 of 40 CFR 63 Subpart DD (see A.20).

14.b Per 40 CFR 63.696(g), a permittee shall record, on a semiannual basis, the following information for those planned routine maintenance operations that would require the RFO not to meet the requirements of section 63.693(f):

i. A description of the planned routine maintenance that is anticipated to be performed for the RFO during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

ii. A description of the planned routine maintenance that was performed for the RFO during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6-months that the RFO did not meet the requirement of 40 CFR 63.693(f) due to planned routine maintenance.

14.c Per 40 CFR 63.696(h), a permittee shall record the following information for those unexpected control device system malfunctions that would require the RFO not to meet the requirements of section 63.693(f):

i. the occurrence and duration of each malfunction of the RFO;

ii. the duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the RFO while the RFO is not properly functioning; and

iii. actions taken during periods of malfunction to restore the RFO to its normal or usual manner of operation.

15. Reporting Requirements

The permittee shall submit quarterly deviation (excursion) reports which identify all periods of time during which the combustion temperature within the RFO is less than 1400 degrees F.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

15.a Per 40 CFR 63.697(a), the permittee shall comply with the notification requirements in section 63.9 and the reporting requirements in section 63.10 under 40 CFR 63 Subpart A - General Provisions that are applicable to 40 CFR Part 63, Subpart DD as specified in Table 2 of 40 CFR Part 63, Subpart DD (see A.19 and A.20).

A. State and Federally Enforcable Section (continued)

- 15.b** Per 40 CFR 63.697(b), the permittee shall submit the following reports to the Director, where applicable:
- i. Notification of Performance Tests specified in section 63.7 and section 63.9(g) of 40 CFR Part 63, Subpart DD;
 - ii. Performance test reports specified in section 63.10(d)(2) of 40 CFR Part 63, Subpart DD;
 - iii. Startup, shutdown, and malfunction reports specified in section 63.10(d)(5) of 40 CFR Part 63, Subpart DD:
 - (a) If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in section 63.6(e)(3) of this part, the permittee shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Director; and
 - (b) Separate startup, shutdown, or malfunction reports are not required if the information is included in the report specified in A.15.b.iv.
 - iv. A summary report specified in section 63.10(e)(3) of 40 CFR Part 63, Subpart DD shall be submitted on a semi-annual basis (i.e., once every 6-month period). The summary report must include a description of all excursions as defined in section 63.695(e) of this subpart that have occurred during the 6-month reporting period. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the exceedance occurred.

For each excursion caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.

- 15.c** The permittee shall submit quarterly deviation (excursion) reports which identify any exceedance of the annual, allowable 240 hours for RFO bypass.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

16. Testing Methods and Procedures

- 16.a** Per 40 CFR 63.694(a)(9), the maximum organic HAP vapor pressure of off-site materials in tanks for compliance with the standards specified in section 63.685 of 40 CFR Part 63, Subpart DD shall be determined using the testing methods and procedures specified in 63.694(j).
- 16.b** Per 40 CFR 63.694(a)(9), no detectable organic emissions shall be determined using the testing methods and procedures specified in 63.694(k) as stated in these terms and conditions.
- 16.c** Per 40 CFR 63.694(a)(11), to determine closed-vent system and RFO performance for compliance with the standards specified in section 63.693, the permittee shall meet the testing methods and procedures as specified in 40 CFR 63.694(l) as stated in these terms and conditions.
- 17. 40 CFR 61 Subpart V - 61.242-7 Standards: Valves.**
- 17.a** Each valve shall be monitored monthly to detect leaks by the method specified in section 61.245(b) and shall comply with paragraphs (b)-(e), except as provided in paragraphs (f), (g), and (h) of this section, section 61.243-1 or sections 61.243-2, and section 61.242-1(c).
- 17.b** If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- 17.c** (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

A. State and Federally Enforcable Section (continued)

- 17.d** (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in section 61.242-10.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- 17.e** First attempts at repair include, but are not limited to, the following best practices where practicable:
- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Tightening of packing gland nuts; and
- (4) Injection of lubricant into lubricated packing.
- 17.f** Any valve that is designated, as described in section 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
- (1) Has no external actuating mechanism in contact with the process fluid;
- (2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in section 61.245(c); and
- (3) Is tested for compliance with paragraph (f)(2) initially upon designation, annually, and at other times requested by the Director.
- 17.g** Any valve that is designated, as described in section 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
- (1) The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a); and
- (2) The permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- 17.h** Any valve that is designated, as described in section 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
- (1) The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
- (2) The process unit within which the valve is located is an existing process unit; and
- (3) The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

A. State and Federally Enforcable Section (continued)

18. Applicable HAPs from Table 1 to Subpart DD - List of Hazardous Air Pollutants for Subpart DD

| CAS no. | Chemical Name |
|---------|---|
| 71556 | 1,1,1 - Trichloroethane (Methyl chlorform) |
| 75092 | Methylene chloride (Dichloromethane) |
| 127184 | Tetrachloroethylene (Perchloroethylene) |
| 108883 | Toluene |
| 79016 | Trichloroethylene |
| 79005 | 1,1,2 - Trichloroethane (Vinyl trichloride) |
| 75003 | Ethylene Chloride (Chloroethane) |
| 107062 | Ethylene Dichloride (1,2-Dichloroethane) |
| 75343 | Ethylidene Dichloride (1,1-Dichloroethane) |
| 95476 | O-Xylenes |
| 71432 | Benzene |

19. Applicable Requirements of 40 CFR 63.9 per Table 2 to Subpart DD

Per 63.9(a), Applicability and general information.

(1) The requirements in this section apply to permittees of affected sources that are subject to the provisions of this part, unless specified otherwise in a relevant standard.

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the permittee may send the Director a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4)(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the permittee of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in section 63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the permittee of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the permittee shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

A. State and Federally Enforcable Section (continued)

Per 40 CFR 63.9(b)(1)(i), Initial notifications. The requirements of this paragraph apply to the permittee of an affected source when such source becomes subject to a relevant standard.

Per 40 CFR 63.9(b)(2), the permittee of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

- (i) The name and address of the permittee;
- (ii) The address (i.e., physical location) of the affected source;
- (iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
- (iv) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
- (v) A statement of whether the affected source is a major source or an area source.

Per 40 CFR 63.9(b)(4), the permittee of a new or reconstructed major affected source that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or reconstruction is required under section 63.5(d) shall provide the following information in writing to the Director:

- (i) A notification of intention to construct a new major affected source, reconstruct a major affected source, or reconstruct a major source such that the source becomes a major affected source with the application for approval of construction or reconstruction as specified in section 63.5(d)(1)(i);
- (ii) A notification of the date when construction or reconstruction was commenced, submitted simultaneously with the application for approval of construction or reconstruction, if construction or reconstruction was commenced before the effective date of the relevant standard;
- (iii) A notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction or reconstruction was commenced after the effective date of the relevant standard;
- (iv) [Reserved]
- (v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

A. State and Federally Enforcable Section (continued)

Per 40 CFR 63.9(b)(5), After the effective date of any relevant standard established by the Director under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, the permittee who intends to construct a new affected source or reconstruct an affected source subject to such standard, or reconstruct a source such that it becomes an affected source subject to such standard, shall notify the Director, in writing, of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of the relevant standard) if the construction or reconstruction commences after the effective date of a relevant standard promulgated in this part. The notification shall be submitted as soon as practicable before startup but no later than 60 days after the effective date of a relevant standard promulgated in this part if the construction or reconstruction had commenced and initial startup had not occurred before the standard's effective date. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in section 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.

Per 40 CFR 63.9(c), Request for extension of compliance. If the permittee of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with section 63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in section 63.6(i)(4) through section 63.6(i)(6).

Per 40 CFR 63.9(h), Notification of compliance status.

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2)(i) Before a title V permit has been issued to the permittee of an affected source, and each time a notification of compliance status is required under this part, the permittee of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list --

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) An analysis demonstrating whether the affected source is a major source or an area source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the permittee of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

A. State and Federally Enforcable Section (continued)

(ii) The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in a relevant standard, in which case the letter shall be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations.

(3) After a title V permit has been issued to the permittee of an affected source, the permittee of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the permittee of an affected source, and each time a notification of compliance status is required under this part, the permittee of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If the permittee of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in section 63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of section 63.5, the permittee shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Director.

(i) Adjustment to time periods or postmark deadlines for submittal and review of required communications. (1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Director under paragraphs (i)(2) and (i)(3) of this section, the permittee of an affected source remains strictly subject to the requirements of this part.

(ii) The permittee shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Director by the permittee, or the review of such information by the Director, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Director. The permittee who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Director's judgment, the permittee's request for an adjustment to a particular time period or postmark deadline is warranted, the Director will approve the adjustment. The Director will notify the permittee in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Director is unable to meet a specified deadline, he or she will notify the permittee of any significant delay and inform the permittee of the amended schedule.

A. State and Federally Enforcable Section (continued)

20. Applicable Requirements of 40 CFR 63.10 per Table 2 to Subpart DD

Per 63.10(b)(1), the permittee of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Per 63.10(b)(2), The permittee of an affected source subject to the provisions of this part shall maintain relevant records for such source of:

Per 63.10(b)(2)(i), The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

Per 63.10(b)(2)(ii), The occurrence and duration of each malfunction of the air pollution control equipment;

Per 63.10(b)(2)(iv), Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan;

Per 63.10(b)(2)(v), All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate

conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

Per 63.10(d)(2), Reporting results of performance tests. Before a title V permit has been issued to the permittee of an affected source, the owner or operator shall report the results of any performance test under section 63.7 to the Director. After a title V permit has been issued to the owner or operator of an affected source, the permittee shall report the results of a required performance test to the appropriate permitting authority. The permittee of an affected source shall report the results of the performance test to the Director (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Director. The results of the performance test shall be submitted as part of the notification of compliance status required under section 63.9(h).

Per 63.10(d)(4), Progress reports. The permittee of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under section 63.6(i) shall submit such reports to the Director (or the State with an approved permit program) by the dates specified in the written extension of compliance.

A. State and Federally Enforcable Section (continued)

Per 63.10(d)(5)(i), Periodic startup, shutdown, and malfunction reports. If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see section 63.6(e)(3)], the permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Director semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the permittee is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the permittee receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Director does not object to the intended change.

Per 63.10(d)(5)(ii), Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile (FAX) transmission) to the Director within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in section 63.9(i).

A. State and Federally Enforcable Section (continued)

Per 63.10(f), Waiver of recordkeeping or reporting requirements.

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Director under this paragraph, the permittee of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Director if, in the Director's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the permittee has requested an extension of compliance and the Director is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under section 63.6(i), any required compliance progress report or compliance status report required under this part (such as under section 63.6(i) and section 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the permittee considers useful to convince the Director that a waiver of recordkeeping or reporting is warranted.

(4) The Director will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she:

(i) Approves or denies an extension of compliance;

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Director.

(6) Approval of any waiver granted under this section shall not abrogate the Director's authority under the Act or in any way prohibit the Director from later canceling the waiver. The cancellation will be made only after notice is given to the permittee of the affected source.

A. State and Federally Enforcable Section (continued)

21. Summary of Table 3 to Subpart DD. -- Tank Control Levels for Tanks at Existing Affected Sources as Required by 40 CFR 63.685(b)(1)

a. Level 1 Tank Control Level

- i. Design capacity less than 75 cubic meters with maximum HAP vapor pressure less than 76.6 kPa,
- ii. Design capacity equal to or greater than 75 cubic meters and less than 151 cubic meters with maximum HAP vapor pressure less than 27.6 kPa, and
- iii. Design capacity equal to or greater than 151 cubic meters with maximum HAP vapor pressure less than 5.2 kPa.

b. Level 2 Tank Control Level

- i. Design capacity equal to or greater than 75 cubic meters and less than 151 cubic meters with maximum HAP vapor pressure equal to or less than 27.6 kPa, and
- iii. Design capacity equal to or greater than 151 cubic meters with maximum HAP vapor pressure equal to or less than 5.2 kPa.

Summary of Table 4 to Subpart DD. -- Tank Control Levels for Tanks at New Affected Sources as Required by 40 CFR 63.685(b)(1)

a. Level 1 Tank Control Level

- i. Design capacity less than 38 cubic meters with maximum HAP vapor pressure less than 76.6 kPa,
- ii. Design capacity equal to or greater than 38 cubic meters and less than 151 cubic meters with maximum HAP vapor pressure less than 13.1 kPa, and
- iii. Design capacity equal to or greater than 151 cubic meters with maximum HAP vapor pressure less than 0.7 kPa.

b. Level 2 Tank Control Level

- i. Design capacity equal to or greater than 38 cubic meters and less than 151 cubic meters with maximum HAP vapor pressure equal to or less than 13.1 kPa, and
- iii. Design capacity equal to or greater than 151 cubic meters with maximum HAP vapor pressure equal to or less than 0.7 kPa.

22. 40 CFR 63.922 Standards -- Container Level 1 controls.

22.a This section applies to permittee subject to this subpart and required to control air emissions from containers using Container Level 1 controls.

A. State and Federally Enforcable Section (continued)

22.b A container using Container Level 1 controls is one of the following:

(1) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(2) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum, a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a bulk cargo container equipped with a screw-type cap).

(3) An open-top container in which an organic vapor-suppressing barrier is placed on or over the regulated-material in the container such that no regulated-material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

22.c A container used to meet the requirements of either paragraph (b)(2) or (b)(3) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the regulated-material to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability, the effects of contact with the material or its vapor managed in the container; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for container on which the cover is installed.

22.d Whenever a regulated-material is in a container using Container Level 1 controls, the permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(1) Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:

(i) In the case when the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(2) Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:

(i) For the purpose of meeting the requirements of this section, an empty container as defined in section 63.921 of this subpart may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).

(ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in section 63.921 of this subpart, the permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever conditions occurs first.

(3) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

A. State and Federally Enforcable Section (continued)

(4) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(5) Opening of a safety device, as defined in section 63.921 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

22.e The permittee shall inspect containers using Container Level 1 controls in accordance with the procedures specified in section 63.926(a) of this subpart.

22.f For the purpose of compliance with paragraph (b)(1) of this section, containers shall be used that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 -- Specifications for Packagings or 49 CFR part 179 -- Specifications for Tank Cars.

(2) Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107 subpart B -- Exemptions; 49 CFR part 172 -- Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 -- Shippers -- General Requirements for Shipments and Packaging; and 49 CFR part 180 -- Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.

23. 63.923 Standards -- Container Level 2 controls.

23.a This section applies to the permittee subject to this subpart and required to control air emissions from containers using Container Level 2 controls.

23.b A container using Container Level 2 controls is one of the following:

(1) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(2) A container that has been demonstrated to operate with no detectable organic emissions as defined in section 63.921 of this subpart.

(3) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27 in Appendix A of 40 CFR part 60 in accordance with the procedure specified in section 63.925(b) of this subpart.

A. State and Federally Enforcable Section (continued)

- 23.c** Transfer of regulated-material in to or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the regulated-material to the atmosphere, to the extent practical, considering the physical properties of the regulated-material and good engineering and safety practices for handling flammable, ignitable, explosive, or other hazardous materials. Examples of container loading procedures that meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the regulated-material is filled, with subsequent purging of the transfer line before removing it from the container opening.
- 23.d** Those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

Opening of a safety device, as defined in section 63.921 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

Whenever a regulated-material is in a container using Container Level 2 controls, the permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(1) Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:

(i) In the case when the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level, the completion of a batch loading after which no additional material will be added to the container within 15 minutes, the person performing the loading operation leaves the immediate vicinity of the container, or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(2) Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:

(i) For the purpose of meeting the requirements of this section, an empty container as defined in section 63.921 of this subpart may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).

(ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in section 63.921 of this subpart, the permittee shall promptly secure the closure

A. State and Federally Enforcable Section (continued)

devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(3) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(4) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during

23.e The permittee shall inspect containers using Container Level 2 controls in accordance with the procedures specified in section 63.926(a) of this subpart.

23.f For the purpose of compliance with paragraph (b)(1) of this section, containers shall be used that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 -- Specifications for Packagings or 49 CFR part 179 -- Specifications for Tank Cars.

(2) Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107 subpart B -- Exemptions; 49 CFR part 172 -- Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 -- Shippers -- General Requirements for Shipments and Packaging; and 49 CFR part 180 -- Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.

(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, the permittee may comply with the exceptions for those packagings specified in 49 CFR 173.12(b).

24. 40 CFR 63.924 Standards -- Container Level 3 controls.

24.a This section applies to the permittee subject to this subpart and required to control air emissions from containers using Container Level 3 controls.

A. State and Federally Enforcable Section (continued)

24.b A container using Container Level 3 controls is one of the following:

(1) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of paragraphs (c)(2) of this section.

(2) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (c)(1) and (c)(2) of this section.

24.c The permittee shall meet the following requirements as applicable to the type of air emission control equipment selected by the permittee:

(1) The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T -- Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or to direct airflow into the enclosure. The permittee shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T -- Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(2) The closed-vent system and control device shall be designed and operated in accordance with the requirements of section 63.693.

24.d Safety devices, as defined in section 63.921 of this subpart, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with this section.

25. 40 CFR 63.694(k), Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air); and

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.

(6) The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument

A. State and Federally Enforcable Section (continued)

readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) The permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (k)(8)(i) or (k)(8)(ii) of this section.

(i) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(ii) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (k)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (k)(9)(i) and (k)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 10,000 ppmv.

A. State and Federally Enforcable Section (continued)

26. 40 CFR 63.694(l) Control device performance test procedures.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites at the inlet and outlet of the control device.

(i) To determine compliance with a control device percent reduction requirement, sampling sites shall be located at the inlet of the control device as specified in paragraphs (l)(1)(i)(A) and (l)(1)(i)(B) of this section, and at the outlet of the control device.

(A) The control device inlet sampling site shall be located after the final product recovery device.

(B) If a vent stream is introduced with the combustion air or as a auxiliary fuel into a boiler or process heater, the location of the inlet sampling sites shall be selected to ensure that the measurement of total HAP concentration or TOC concentration, as applicable, includes all vent streams and primary and secondary fuels introduced into the boiler or process heater.

(ii) To determine compliance with an enclosed combustion device concentration limit, the sampling site shall be located at the outlet of the device.

(2) The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(3) To determine compliance with the control device percent reduction requirement, the permittee shall use Method 18 of 40 CFR part 60, appendix A of this chapter; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 in 40 CFR part 63, appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.

(ii) The mass rate of either TOC (minus methane and ethane) or total HAP (E_i and E_o , respectively) shall be computed.

(A) The equations listed in this section shall be used.

(B) When the TOC mass rate is calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, appendix A shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.

(C) When the total HAP mass rate is calculated, only the HAP constituents shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.

(iii) The percent reduction in TOC (minus methane and ethane) or total HAP shall be calculated using the equation in this section.

(iv) If the vent stream entering a boiler or process heater is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total HAP exiting the device, respectively.

A. State and Federally Enforcable Section (continued)

(4) To determine compliance with the enclosed combustion device total HAP concentration limit of this subpart, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure either TOC (minus methane and ethane) or total HAP. Alternatively, any other method or data that has been validated according to Method 301 in appendix A of this part, may be used. The procedures and equation used in this section shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen.

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(ii) The TOC concentration or total HAP concentration shall be calculated according to paragraph (m)(4)(ii)(A) or (m)(4)(ii)(B) of this section.

(A) The TOC concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using the equation located in this section.

(B) The total HAP concentration (CHAP) shall be computed according to the equation in paragraph (l)(4)(ii)(A) of this section except that only HAP constituents shall be summed.

(iii) The measured TOC concentration or total HAP concentration shall be corrected to 3 percent oxygen as follows:

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration (%O₂dry). The samples shall be collected during the same time that the samples are collected for determining TOC concentration or total HAP concentration.

(B) The concentration corrected to 3 percent oxygen (C_c) shall be computed using the following equation in this section.

- 27.** Per 40 CFR 63.681, Definitions, Light-material service means the container is used to manage an off-site material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the off-site material is greater than 0.3 kilopascals (kPa) at 20 degrees C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 degrees C is equal to or greater than 20 percent by weight.

Per 40 CFR 63.681, Definitions, Waste stabilization process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a waste or eliminate free liquids as determined by Test Method 9095 -- Paint Filter Liquids Test in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. (As an alternative, a permittee may use any more recent, updated version of Method 9095 approved by the EPA.) A waste stabilization process includes mixing the waste with binders or other materials and curing the resulting waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification." A waste stabilization process does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

28. Scrubber Requirements

The RFO destruction efficiency testing referenced in A.5.b was conducted at the outlet of the scrubber because the scrubber is located downstream of the RFO. The scrubber operating parameters below (established during the testing referenced in A.5.b) shall be monitored to ensure ongoing compliance with the HCl emission limitation for P005 (see A.29.b).

A. State and Federally Enforcable Section (continued)

28.a Scrubber Operational Restrictions

The pH of the scrubber liquor shall be maintained within the range of 6.5 to 10.0.

The pressure drop across the scrubber shall be continuously maintained at a range of 1 to 4 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value greater than 300 gallons per minute at all times while the emissions unit is in operation.

28.b Scrubber Monitoring and Recordkeeping Requirements

i. The permittee shall properly operate and maintain equipment to continuously monitor and display the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor 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 pH of the scrubber liquor, when the RFO was in operation.
- b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- ii. The permittee shall properly operate and maintain equipment to monitor the scrubber water flow rate while the emissions unit is in operation. The monitoring device 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 water flow rate, in gallons per minute, on a hourly basis.
- b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- iii. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the scrubber while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the scrubber on a daily basis.

28.c Scrubber Reporting Requirements

The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:

- i. The scrubber liquor pH.
- ii. The static pressure drop across the scrubber.
- iii. The scrubber water flow rate.

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

A. State and Federally Enforcable Section (continued)

29. RFO Performance Requirements

40 CFR 63 Subpart DD requires that the permittee demonstrate that the control device achieves the applicable performance requirements either by conducting a performance test or preparing a design analysis for the control device (RFO) in accordance with the requirements specified in 40 CFR 63.693. Safety-Kleen chose to show compliance with the MACT through preparing a design analysis for the RFO.

In Appendix B of the March 2, 2001 Request for Information sent by the U.S. EPA to Safety-Kleen Corp. - Hebron Recycle Center, the U.S. EPA required Safety-Kleen Corp. - Hebron Recycle Center to demonstrate compliance with 40 CFR 63.693(f)(1)(ii)(A) and (f)(1)(iii) through a performance test.

29.a RFO Testing

Compliance with the destruction efficiency performance specifications in 40 CFR 63.693(f)(1) for the RFO was demonstrated in an emission test performed on August 8, 2001 and witnessed by a representative of the Ohio EPA, Central District Office. The emission testing yielded a destruction efficiency of 97.5 percent, on a total weight-basis for total organic carbon (minus methane and ethane) and a destruction efficiency of 99.5 percent for HAPs, on a total weight-basis while P001, P002, P003, P004, P005, P006, P007, P008, P009 and P013 were operating under worst-case operating conditions.

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

- i. The emission testing shall be conducted approximately 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the performance specifications in 40 CFR 63.693(f)(1) for the RFO (see A.11.a).
- iii. The emission test(s) shall be conducted in accordance with the testing methods and procedures specified in 40 CFR 63.694(l) (see A.26).
- iv. The test(s) shall be conducted while emissions units P001, P002, P003, P004, P005, P006, P007, P008, P009 and P013 are operating at or near their maximum capacities unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

A. State and Federally Enforcable Section (continued)

29.b Scrubber Testing

The August 8, 2001 emission test was conducted at the outlet of the scrubber (located downstream of the RFO). The emission testing was conducted to determine the destruction efficiency of the RFO and to demonstrate compliance with the hourly HCl emission limitation for P005*. The emission test yielded an average hourly emission rate of 0.069 lb HCl/hr while P001, P002, P003, P004, P005, P006, P007, P008, P009 and P013 were operating under worst case operating conditions.

*P005 is the only emissions unit subject to 40 CFR 63, Subpart DD also subject to an HCl emission limitation (established through the BAT determination in PTI 01-08237).

If required, the permittee shall demonstrate compliance with the HCl emission limitation for P005 through emission testing performed in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 26.

30. MACT Provision for RFO "planned routine maintenance"

40 CFR 63, Subpart DD contains a provision that allows the RFO to be bypassed for up to 240 hours on an annual basis during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i) (see A.5.c). During "planned routine maintenance", all emissions units vented to the RFO are subject to OAC rule 3745-15-06(A).

OAC rule 3745-15-06(A)(3) addresses cases where a complete source shutdown may result in damage to the air pollution emissions units or is otherwise impossible or impractical. In these cases, the owner or operator may request authorization to continue to operate the emissions unit(s) during the scheduled maintenance of the air pollution control equipment (RFO).

Any scheduled maintenance of the RFO shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset condition, of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the Ohio EPA, Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06.

30.a Operational Restriction during RFO "planned routine maintenance"

During "planned routine maintenance" when emissions bypass the RFO or were vented to the RFO while the RFO was not in operation and P001, P002, P003, P004, P005, P006, P007, P008 or P009 is in operation, the condenser portion of the operating emissions unit(s) shall be operated at a temperature no greater than 70 degrees Fahrenheit. Compliance with this operational restriction shall satisfy the requirement of OAC rule 3745-15-06(A)(3)(f) pertaining to "A demonstration that all feasible interim control measures will be taken to reduce emissions from the source during the shutdown period."

30.b Monitoring and/or Record keeping Requirements during RFO "planned routine maintenance"

i. Per 40 CFR 63.696(g), the permittee shall record the following information for "planned routine maintenance" operations (see A.5.c):

A. a description of the "planned routine maintenance" that is anticipated to be performed for the RFO during the next six months; the description shall include the type of maintenance necessary, planned frequency of maintenance and lengths of maintenance periods;

B. A description of the "planned routine maintenance" that was performed for the RFO during the previous six months; the description shall include the type of maintenance performed and the total number of hours of "planned routine maintenance" performed.

ii. During "planned routine maintenance" when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation, the permittee shall maintain a log or record of the operating hours for P001, P002, P003, P004, P005, P006, P007, P008 or P009 along with the average temperature of the exhaust gases from the condenser(s) during each 3-hour block of time during the day for each emissions unit was in operation.

A. State and Federally Enforcable Section (continued)

30.c Reporting of RFO "planned routine maintenance"

The quarterly deviation (excursion) reports which identify any exceedance of the annual, allowable 240 hours for RFO bypass (see A.15.c), shall also include the information pertaining to RFO "planned routine maintenance" specified in A.30.b.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

B. State Only Enforceable Section

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

- B003 8.5 MMBtu/hr - 235 HP Clayton steam generator
- P012 drum filling station
- P014 groundwater air stripper
- P015 drycleaning solids handling system
- T067 SK#206 8000-gallon waste oil storage tank
- T068 SK#207 8000-gallon waste oil storage tank
- T075 SK#097 20,000-gallon Stoddard storage tank
- T091 SK#208 10,500-gallon waste oil storage tank
- T092 SK#030 10,500-gallon perchloroethylene storage tank
- T093 SK#031 10,500-gallon perchloroethylene storage tank
- T096 SK#203 15,000-gallon chlorinated solvent storage tank
- T101 SK#204 15,000-gallon chlorinated solvent storage tank
- T102 SK#205 15,000-gallon chlorinated solvent storage tank
- T103 SK#209 15,000-gallon chlorinated solvent storage tank
- T106 SK#048B 7,500-gallon mineral spirits storage tank
- T107 SK#083B 7,500-gallon chlorinated solvent storage tank
- T108 SK#084B 7,500-gallon chlorinated solvent storage tank
- T109 SK#089B 7,500-gallon chlorinated solvent storage tank
- T110 SK#092B 7,500-gallon chlorinated solvent storage tank
- T111 SK#094B 7,500-gallon chlorinated solvent storage tank
- T112 SK#102B 7,500-gallon chlorinated solvent storage tank
- T132 SK#032 15,000-gallon mineral spirits storage tank
- T133 SK#033 15,000-gallon mineral spirits storage tank
- T134 SK#034 15,000-gallon mineral spirits storage tank
- T135 SK#035 15,000-gallon mineral spirits storage tank
- T136 SK#036 15,000-gallon mineral spirits storage tank
- T137 SK#037 15,000-gallon mineral spirits storage tank
- T139 SK#039 15,000-gallon mineral spirits storage tank
- T140 SK#040 15,000-gallon mineral spirits storage tank

B. State Only Enforceable Section (continued)

| | | |
|------|---------|--|
| T141 | SK#041 | 15,000-gallon mineral spirits storage tank |
| T142 | SK#042 | 15,000-gallon mineral spirits storage tank |
| T143 | SK#043 | 15,000-gallon mineral spirits storage tank |
| T144 | SK#044 | 15,000-gallon mineral spirits storage tank |
| T145 | SK#045 | 15,000-gallon mineral spirits storage tank |
| T148 | SK#048A | 7,500-gallon mineral spirits storage tank |
| T149 | SK#049 | 20,000-gallon mineral spirits storage tank |
| T150 | SK#050 | 20,000-gallon mineral spirits storage tank |
| T151 | SK#051 | 30,000-gallon mineral spirits storage tank |
| T152 | SK#052 | 30,000-gallon mineral spirits storage tank |
| T153 | SK#053 | 30,000-gallon mineral spirits storage tank |
| T156 | SK#056 | 15,000-gallon diesel fuel storage tank |
| T157 | SK#057 | 15,000-gallon mineral spirits storage tank |
| T158 | SK#058 | 15,000-gallon mineral spirits storage tank |
| T159 | SK#059 | 15,000-gallon mineral spirits storage tank |
| T160 | SK#060 | 15,000-gallon mineral spirits storage tank |
| T161 | SK#061 | 30,000-gallon mineral spirits storage tank |
| T163 | SK#063 | 15,000-gallon mineral spirits/waste water storage tank |
| T164 | SK#064 | 20,000-gallon mineral spirits storage tank |
| T165 | SK#065 | 5,000-gallon mineral spirits storage tank |
| T166 | SK#066 | 15,000-gallon mineral spirits storage tank |
| T167 | SK#067 | 30,000-gallon mineral spirits oil storage tank |
| T168 | SK#068 | 30,000-gallon mineral spirits storage tank |
| T169 | SK#069 | 30,000-gallon mineral spirits storage tank |
| | | |
| T181 | SK#081 | 15,000-gallon chlorinated solvent storage tank |
| T182 | SK#082 | 15,000-gallon chlorinated solvent storage tank |
| T183 | SK#083A | 7,500-gallon chlorinated solvent storage tank |
| T184 | SK#084A | 7,500-gallon chlorinated solvent storage tank |
| T185 | SK#085 | 15,000-gallon chlorinated solvent storage tank |
| T186 | SK#086 | 15,000-gallon chlorinated solvent storage tank |
| T187 | SK#087 | 15,000-gallon chlorinated solvent storage tank |
| T189 | SK#089A | 7,500-gallon chlorinated solvent storage tank |
| T190 | SK#090 | 15,000-gallon chlorinated solvent storage tank |
| T191 | SK#091 | 15,000-gallon chlorinated solvent storage tank |
| T192 | SK#092A | 7,500-gallon chlorinated solvent storage tank |
| T193 | SK#093 | 15,000-gallon chlorinated solvent storage tank |
| T194 | SK#094A | 7,500-gallon chlorinated solvent storage tank |
| T195 | SK#095 | 15,000-gallon chlorinated solvent storage tank |
| T196 | SK#096 | 12,000-gallon chlorinated bottom oils storage tank |
| T200 | SK#100 | 15,000-gallon chlorinated solvent storage tank |
| T201 | SK#101 | 15,000-gallon chlorinated solvent storage tank |
| T202 | SK#102 | 7,500-gallon chlorinated wastewater storage tank |
| T203 | SK#103 | 15,000-gallon chlorinated solvent storage tank |
| T204 | SK#104 | 15,000-gallon chlorinated solvent storage tank |
| T205 | SK#105 | 15,000-gallon chlorinated solvent storage tank |
| T206 | SK#106 | 30,000-gallon chlorinated solvent storage tank |
| T207 | SK#107 | 30,000-gallon chlorinated solvent storage tank |
| T208 | SK#108 | 15,000-gallon chlorinated solvent storage tank |
| T209 | SK#109 | 15,000-gallon chlorinated solvent storage tank |
| T210 | SK#110 | 15,000-gallon chlorinated solvent storage tank |
| T211 | SK#111 | 30,000-gallon chlorinated solvent storage tank |
| T212 | SK#112 | 30,000-gallon chlorinated solvent storage tank |
| T225 | SK#125 | 20,000-gallon chlorinated solvent storage tank |
| T226 | SK#126 | 20,000-gallon chlorinated solvent storage tank |

B. State Only Enforceable Section (continued)

T230 SK#130 20,000-gallon chlorinated solvent storage tank
T231 SK#131 20,000-gallon recycled perchloroethylene storage tank
T232 SK#132 20,000-gallon recycled perchloroethylene storage tank
T235 SK#135 20,000-gallon perchloroethylene storage tank
T236 SK#136 20,000-gallon recycled perchloroethylene storage tank
T237 SK#137 20,000-gallon recycled perchloroethylene storage tank
T240 SK#140 20,000-gallon trichloroethylene storage tank
T241 SK#141 20,000-gallon recycled trichloroethylene storage tank
T242 SK#142 20,000-gallon recycled trichloroethylene storage tank
T245 SK#145 20,000-gallon trichloroethylene storage tank
T246 SK#146 20,000-gallon trichloroethylene storage tank
T247 SK#147 20,000-gallon trichloroethylene storage tank
T248 SK#148 20,000-gallon distillation bottom storage tank
Z001 dry cleaning filter bin
Z004 plant roadways
Z005 waste water treatment tank

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 20.9 MMBTU Boiler (B004)

Activity Description: 20.9 MMBTU Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 20.9 mmBtu/hr natural gas and number two fuel oil-fired boiler | OAC rule 3745-31-05(A)(3) (PTI 01-2876) | Sulfur dioxide emissions shall not exceed 0.0006 pound per million Btu from natural gas combustion. |
| | | Nitrogen oxides emissions shall not exceed 0.13 pound per million Btu from natural gas combustion. |
| | | Nitrogen oxides emissions shall not exceed 0.27 pound per million Btu from fuel oil combustion. |
| | | Carbon monoxide emissions shall not exceed 0.084 pound per million Btu from natural gas combustion. |
| | | Carbon monoxide emissions shall not exceed 0.036 pound per million Btu from fuel oil combustion. |
| | | Volatile organic compound emissions shall not exceed 0.0055 pound per million Btu from natural gas combustion. |
| | | Volatile organic compound emissions shall not exceed 0.002 pound per million Btu from fuel oil combustion. |
| | | Particulate emissions shall not exceed 0.0099 pound per million Btu from natural gas combustion. |
| | | Particulate emissions shall not exceed 0.0154 pound per million Btu from fuel oil combustion. |

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| | | See A.II.3 below. |
| | OAC rule 3745-17-10(B)(1) | The requirements established pursuant to this rule include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR 60, Subpart Dc. 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 3745-18-06(D) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | 40 CFR Part60, Subpart Dc | Sulfur dioxide emissions shall not exceed 0.50 lb/million Btu of actual heat input and no more than 0.5 weight percent sulfur from fuel oil. |
| | OAC rules 3745-21-08(B) and 3745-23-06(B) | None, see A.I.2.a below. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |

2. Additional Terms and Conditions

- 2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-2876.

II. Operational Restrictions

1. The permittee shall burn only natural gas or number two fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.5 lb/mmBtu actual heat input.
3. The maximum amount of number two fuel oil combusted in this emissions unit shall not exceed 172,000 gallons per rolling, 3-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, 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)

2. For each shipment of oil received for burning in this emissions unit, the permittee shall 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).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of oil during a calendar month.
3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
4. The permittee shall maintain monthly records of the following information:
 - a. the number two fuel oil consumption rate for B004, in gallons; and
 - b. the number two fuel oil consumption rate for B004 as a rolling, 3-month summation, in gallons.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two 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 deviation (excursion) reports that identify all exceedances of the rolling, 3-month number two fuel oil consumption rate limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.
3. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon a volume-weighted average of the calculated sulfur dioxide emission rates from section A.III above. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 45 days after the deviation occurs.

V. Testing Requirements

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions shall not exceed 0.0099 lb/mmBtu from natural gas combustion

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0209 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs filterable particulate matter/mmcf) from Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (20.9 mmBtu/hr).

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

1.c Emission Limitation:

Particulate emissions shall not exceed 0.0154 lb/mmBtu from fuel oil combustion

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel capacity of the emissions unit (160.77 gals/hr) by the AP-42 emission factor for distillate oil firing (0.002 lbs/gal) from Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (20.9 mmBtu/hr).

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

1.d Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.50 pound per million Btu from fuel oil combustion.

Applicable Compliance Method:

When firing fuel oil, except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments of oil during the calendar month.

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

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.0006 pound per million Btu from natural gas combustion.

Applicable Compliance Method:

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

V. Testing Requirements (continued)

1.f Emission Limitation:

Nitrogen oxides emissions shall not exceed 0.13 pound per million Btu from natural gas combustion.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0209 mmcf/hr) by the AP-42 emission factor for natural gas combustion (100 lbs nitrogen oxide/mmcf) from Table 1.4-1, 7/98, and dividing by the maximum rated heat input capacity of the emissions unit (20.9 mmBtu/hr).

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

1.g Emission Limitation:

Nitrogen oxides emissions shall not exceed 0.27 pound per million Btu from fuel oil combustion.

Applicable Compliance Method:

Compliance may be demonstrated by dividing the AP-42 emission factor for distillate oil firing (0.020 lb nitrogen oxides/gal) from Table 1.3-1, 9/98, by the heat content of number two fuel oil (0.14 mmBtu per gallon).

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

1.h Emission Limitation:

Carbon monoxide emissions shall not exceed 0.084 pound per million Btu from natural gas combustion.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0209 mmcf/hr) by the AP-42 emission factor for natural gas (84 lbs carbon monoxide/mmcf) from Table 1.4-1, 7/98 and dividing by the maximum rated heat input capacity of the emissions unit (20.9 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 10.

1.i Emission Limitation:

Carbon monoxide emissions shall not exceed 0.036 pound per million Btu from fuel oil combustion.

Applicable Compliance Method:

Compliance may be demonstrated by dividing the AP-42 emission factor for distillate oil firing (0.005 lb carbon monoxide/gal) from Table 1.3-1, 9/98, by the heat content of number two fuel oil (0.14 mmBtu per gallon).

If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 10.

1.j Emission Limitation:

Volatile organic compound emissions shall not exceed 0.0055 pound per million Btu from natural gas combustion.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0209 mmcf/hr) by the AP-42 emission factor for natural gas (5.5 lbs volatile organic compounds/mmcf) from Table 1.4-2, 7/98 and then dividing by the mmBtu/hr demand (20.9) of the emissions unit.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 25.

V. Testing Requirements (continued)

1.k Emission Limitation:
Volatile organic compound emissions shall not exceed 0.0002 pound per million Btu from fuel oil combustion.

Applicable Compliance Method:
Compliance with the emission limitation may be demonstrated by dividing the AP-42 emission factor for distillate oil firing (0.000252 lb carbon monoxide/gal) from Table 1.3-1, 9/98, by the heat content of number two fuel oil (0.14 mmBtu per gallon).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 25.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 20.9 mmBtu natural gas and number two fuel oil-fired boiler | none | none |

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: MS Loading Rack (J002)
Activity Description: Loading Rack for bulk truck 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 50,000 gallons per day non-chlorinated (aliphatic, aromatic, alcohol and ketone containing) organic solvent loading rack SK# E-18 | OAC rule 3745-31-05(A)(3) (PTI 01-1574) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(E). Organic compound emissions shall not exceed 1.8 pounds per hour. See A.I.2.a and A.II.1 - A.II.3 below. |
| | OAC rule 3745-21-07(E) | Exempt, see A.II.3 - 6 below. |

2. Additional Terms and Conditions

- 2.a The "Operations, Property, and/or Equipment" description for materials loaded in J002 does not exclude chlorinated materials or those materials containing chlorinated components but instead defines the types of organic solvents that can be loaded, as indicated by the permittee. Flammability is the deciding factor for the types of solvents loaded by J002 since it is equipped to load flammable materials while J003 is not. Chlorinated solvents are not flammable but a solvent that contains a chlorinated component may still meet the definition of flammable. For instance, J002 is used to load bottoms oil (see composition in A.II.5).

Therefore, the permittee has differentiated J002 and J003 as the non-chlorinated solvent loading rack and chlorinated solvent loading rack, respectively. If a material that is loaded in J002 contains a percentage of chlorinated solvent(s) and is classified by the permittee as "flammable", the material is subject to the emission limitations/control requirements specified in this permit.

II. Operational Restrictions

1. The maximum daily throughput for this emissions unit shall not exceed 50,000 gallons.
2. The permittee shall employ a vapor balance system when this emissions unit is in operation.
3. The permittee shall only load materials in J002 that do not meet the definition of a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).
4. Mineral spirits does not meet the definition of a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

II. Operational Restrictions (continued)

5. The composition of bottoms oil consists of
9.1% perchloroethylene,
9.0% high boiling hydrocarbons (C14 - C20),
5.7% medium boiling hydrocarbons (C9 - C13),
63.2% mineral spirits, and
13.0% water.

Bottoms oil does not meet the definition of a volatile photochemically reactive material as defined in OAC rule 3745-21-01(C)(7).

6. The permittee shall only process mineral spirits or bottoms oil in this emissions unit unless the permittee determines that the loading of a new material meets the description of an allowable material to be loaded as defined in A.I.2.a.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the following information:
 - a. the emissions unit's operating time (hrs);
 - b. the throughput of mineral spirits (gallons/day);
 - c. the daily organic compound emissions from mineral spirits, calculated using the compliance method in A.V.1.a.i (lbs/day);
 - d. the throughput of bottoms oil (gallons/day);
 - e. the daily organic compound emissions from bottoms oil, calculated using the compliance method in A.V.1.a.ii (lbs/day);
 - f. the throughput of materials loaded except mineral spirits and bottoms oil (gallons/day);
 - g. the daily organic compound emissions from materials loaded except mineral spirits and bottoms oil, calculated using the compliance method in A.V.1.a.iii (lbs/day);
 - h. the total daily throughput for all materials loaded, calculated as the sum of A.III.1.b, A.III.1.d, and A.III.1.f (gallons/day);
 - i. the total daily organic compound emission rate for all materials loaded, calculated as the sum of A.III.1.c, A.III.1.e, and A.III.1.g (lbs/day); and
 - j. the average hourly organic compound emission rate calculated as A.III.1.i divided by the emissions unit's operating time recorded in A.III.1.a (hrs).
2. For each day during which the permittee loaded materials other than mineral spirits or bottoms oil, the permittee shall maintain a record of the type and quantity of material loaded and an explanation of whether or not the material meets the description of an allowable material to be loaded and is a volatile photochemically reactive material.
3. The permittee shall maintain a record of all periods of time when the vapor balance system was not employed when this emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the hourly emission limitation in Section A.I.1.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily throughput limitation.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the vapor balance system was not employed when this emissions unit was in operation.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

4. The permittee shall submit deviation (excursion) reports that identify each day during which any photochemically reactive materials were employed in this emissions unit.

These reports shall be submitted within 30 days after the occurrence.

5. The permittee shall also submit annual reports that specify the total annual throughput of each type of material loaded, in gallons, and the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

- 1.a Emission Limitation:
Organic compound emissions shall not exceed 1.8 pounds per hour.

Applicable Compliance Method:

Compliance with this hourly limitation may be based on the record keeping in A.III.1.j.

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

Daily organic compound emissions shall be calculated as follows:

i. Daily organic compound emissions from mineral spirits are derived from multiplying the daily throughput (see A.III.1.b) of mineral spirits by the loading loss factor derived from expression (1) in AP-42, Section 5.2, 1/95, [0.1133 lb/mgal].

ii. Daily organic compound emissions from bottoms oil are derived by:

A. calculating the organic compound emissions for each individual constituent of bottoms oil (listed in A.II.5) using the expression below:

$LI = [12.46 \text{ SPM}] / T$, where

LI = loading loss, pound(s) per 1000 gallons of liquid loaded

S = saturation factor for dedicated vapor balance service = 1.00

P = true vapor pressure of liquid loaded (psia)

M = molecular weight of vapors (lb/lb-mole)

T = temperature of bulk liquid loaded (R);

B. multiplying each constituent's loading loss factor by its percent make-up of bottoms oil and by the daily amount of material loaded (see A.III.1.d) dividing by 100, and;

C. summing the organic compound emissions for all constituents.

V. Testing Requirements (continued)

iii. Daily organic compound emissions from other loaded materials are derived by:

A. calculating the organic compound emissions for each individual constituent of the new material using the expression below:

LI = $[12.46 \text{ SPM}] / T$, where

LI = loading loss, pound(s) per 1000 gallons of liquid loaded

S = saturation factor for dedicated vapor balance service = 1.00

P = true vapor pressure of liquid loaded (psia)

M = molecular weight of vapors (lb/lb-mole)

T = temperature of bulk liquid loaded (R);

B. multiplying each constituent's loading loss factor by its percent make-up and by the daily amount of material loaded (see A.III.1.f) dividing by 100, and;

C. summing the organic compound emissions for all constituents.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 50,000 gallons per day non-chlorinated (aliphatic, aromatic, alcohol and ketone containing) organic solvent loading rack SK# E-18 | none | none |

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: Loading Rack (J003)
Activity Description: Loading Rack for bulk truck loading

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|---|
| chlorinated solvent loading rack SK#E-19 | OAC rule 3745-31-05(A)(3) (PTI 01-1574) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(E). Organic compound emissions shall not exceed 1.8 pounds per hour. See A.II.1. - A.II.3 below. |
| | OAC rule 3745-21-07(E) | Exempt, see A.II.2 below. |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall employ a vapor balance system when this emissions unit is in operation.
- Per OAC rule 3745-31-05(A)(3), the maximum daily throughput for this emissions unit shall not exceed 20,000 gallons of chlorinated solvents as well as not operate without a vapor balance system.
- The maximum annual throughput for this emissions unit shall not exceed 1,500,000 gallons of chlorinated solvents.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the following information:
 - a. the emissions unit's operating time (hrs);
 - b. the throughput of each chlorinated solvent (gallons/day);
 - c. the daily organic compound emissions from each chlorinated solvent, calculated using the compliance method in A.V.1.a.i (lbs/day);
 - d. the total daily throughput for all chlorinated solvents loaded, calculated as the sum of A.III.1.b for all chlorinated solvents (gallons/day);
 - e. the total daily organic compound emission rate for for all chlorinated solvents, calculated as the sum of A.III.1.c for all chlorinated solvents; and
 - f. the average hourly organic compound emission rate calculated as A.III.1.e divided by the emissions unit's operating time recorded in A.III.1.a (hrs).
2. The permittee shall maintain a record of all periods of time when the vapor balance system was not employed when this emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the hourly emission limitation in Section A.I.1.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily throughput limitation.

These reports are due by the date specified in General Term and Condition A.1.c.ii of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the vapor balance system was not employed when this emissions unit was in operation.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

4. The permittee shall also submit annual reports that specify the total annual throughput of chlorinated solvents, in gallons, and the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

V. Testing Requirements (continued)

- 1.a** Emission Limitation:
Organic compound emissions shall not exceed 1.8 pounds per hour.

Applicable Compliance Method:
Compliance with this hourly limitation may be based on the record keeping in A.III.1.f.

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

i. Daily organic compound emissions are derived by:

A. calculating the organic compound emissions for each individual chlorinated solvent using the expression below:

LI = $[12.46 \text{ SPM}] / T$, where
LI = loading loss, pound(s) per 1000 gallons of liquid loaded
S = saturation factor for dedicated vapor balance service = 1.00
P = true vapor pressure of liquid loaded (psia)
M = molecular weight of vapors (lb/lb-mole)
T = temperature of bulk liquid loaded (R);

B. multiplying each chlorinated solvent's loading loss factor by the daily amount of material loaded (see A.III.1.b) dividing by 100, and;

C. summing the organic compound emissions for all chlorinated solvents.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| chlorinated solvent loading rack SK#E-19 | none | none |

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: LUWA E-2,3 (P001)
Activity Description: LUWA E-2,3 Thin-film evaporator

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|--|
| 550 gallons per hour LUWA evaporator #E-3 with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-354) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). See A.II.1 below. |
| | 40 CFR 63, Subpart DD | See A.I.2.a - A.I.2.d and A.II.2 below. |
| | OAC rule 3745-21-07(G)(2) | Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. See A.I.2.e below. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P002 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

- 2.e** Laboratory analyses conducted by the permittee of recovered mineral spirits from this emissions unit revealed values as high as 7.9% combined aromatic hydrocarbons with eight or more carbon atoms to the molecule except ethyl benzene.

Exempted in the past from OAC rule 3745-21-07(G)(2) based on available technical information, mineral spirits has not been considered a photochemically reactive material. In light of these laboratory analyses, this emissions unit will be subjected to OAC rule 3745-21-07(G)(2).

- 2.f** This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P001 is 5.8 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 6.9 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
2. If the emissions unit is operated for more than 6.9 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. All emissions from the condenser must be vented to the RFO.
2.
 - a. The permittee shall not operate this emissions unit for more than 6.9 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.
 - b. If this emissions unit is operated for more than 6.9 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P001:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (90%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (90%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is always recovered by the condenser.

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 6.9 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 6.9 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 6.9 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

1.a Emission Limitations:

Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance may be demonstrated based on the record keeping in A.III.1. If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

1.b Emission Limitation:

95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 550 gallons per hour LUWA evaporator #E-3 with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Washex Still (36VS) (P002)

Activity Description: Washex Still 36VS

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|---|
| 750 gallons per hour chlorinated Washex vacuum pot still - 36VS, #E-5, with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-354) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | See A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | See A.I.2.a - A.I.2.d and A.II.2 below. Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P002 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

2.e This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P002 is 6.2 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 6.5 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
2. If the emissions unit is operated for more than 6.5 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. All emissions from the condenser must be vented to the RFO.
2. a. The permittee shall not operate this emissions unit for more than 6.5 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.

b. If this emissions unit is operated for more than 6.5 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P002:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (70%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (70%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is recovered by the condenser and stored in a distillate tank. P002 and P003 both vent to the same condenser.

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

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 6.5 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 6.5 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 6.5 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

- 1.a Emission Limitations:
Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance may be demonstrated based on the record keeping in A.III.1. If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

- 1.b Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|--|
| 750 gallons per hour chlorinated Washtex vacuum pot still - 36VS, #E-5, with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Washex Still (24VS) (P003)

Activity Description: Washex Still 24VS

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|---|
| 300 gallons per hour chlorinated Washex vacuum pot still - 24VS, #E-6, with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-487) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | See A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | See A.I.2.a - A.I.2.d and A.II.2 below. Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P003 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

2.e This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P003 is 4.1 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 9.8 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
2. If the emissions unit is operated for more than 9.8 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. All emissions from the condenser must be vented to the RFO.
2. a. The permittee shall not operate this emissions unit for more than 9.8 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.

b. If this emissions unit is operated for more than 9.8 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P003:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (70%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (70%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is recovered by the condenser and stored in a distillate tank. P002 and P003 both vent to the same condenser.

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

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 9.8 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 9.8 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 9.8 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

- 1.a Emission Limitations:
Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance may be demonstrated based on the record keeping in A.III.1. If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

- 1.b Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 300 gallons per hour chlorinated Washtex vacuum pot still - 24VS, #E-6, with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Fractional Dist (P004)
Activity Description: Fractional Distillation Column

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|---|
| fractional, mixed chlorination distillation system #E-7 with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-487) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | See A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | See A.I.2.a - A.I.2.d and A.II.2 below. Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P004 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

- 2.e** This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:
1. Because the calculated, uncontrolled potential to emit for emissions unit P004 is 7.3 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 5.5 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
 2. If the emissions unit is operated for more than 5.5 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. All emissions from the condenser must be vented to the RFO.
2. a. The permittee shall not operate this emissions unit for more than 5.5 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.

b. If this emissions unit is operated for more than 5.5 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P004:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (95%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (95%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

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

Note: Desired liquid product from this emissions unit is not always recovered by the condenser. However, when the desired product is not recovered by the condenser, it is recovered using the bottoms pump of the unit and stored in a tank. Unless the material is the final product (requiring no further processing) emissions are not exhausted to the ambient air.

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 5.5 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 5.5 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 5.5 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitations:
Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance may be demonstrated based on the record keeping in A.III.1. If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

V. Testing Requirements (continued)

1.b Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:
See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|--|
| fractional, mixed chlorination distillation system #E-7 with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Safety-Therm #1 (P005)
Activity Description: Safety-Therm #1 (Solids/sludge distillation 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| Safety-Therm #1: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) and wet scrubber | OAC rule 3745-31-05(A)(3) (PTI 01-08237) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 40 CFR 63, Subpart DD. Organic compound emissions shall not exceed 1.51 pounds per hour and 6.6 tons per year. Hydrogen chloride emissions shall not exceed 0.44 pound per hour and 1.9 tons per year. |
| | OAC rule 3745-21-07(G)(2) | See A.II.1 - A.II.4 below. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | 40 CFR 63, Subpart DD OAC rule 3745-23-06(B) | See A.II.2 below. See A.I.2.a - A.I.2.d and A.II.2 below. See A.I.2.e and A.II.4 below. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative, fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.

2. Additional Terms and Conditions (continued)

- 2.c** HAP (see Table 1 of 40 CFR 63, subpart DD) contained in the vent stream from P005 shall be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d** The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).
- 2.e** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- 2.f** This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:
1. Because the calculated, uncontrolled potential to emit for emissions unit P005 is 2.6 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 15.2 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
 2. If the emissions unit is operated for more than 15.2 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. The permittee shall vent all emissions from this emissions unit to the condenser, RFO and wet scrubber.
2.
 - a. The permittee shall not operate this emissions unit for more than 15.2 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.
 - b. If this emissions unit is operated for more than 15.2 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.
3.
 - a. The pH of the scrubber liquor shall be maintained within the range of 6.5 to 10.00.
 - b. The pressure drop across the scrubber shall be continuously maintained at a range of 1 to 4 inches of water at all times while the emissions unit is in operation.
 - c. The scrubber water flow rate shall be continuously maintained at a value greater than 300 gallons per minute at all times while the emissions unit is in operation.
4. The permittee shall only burn natural gas in the RFO and operate this control device with a low-NOx burner.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P005:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled hourly OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, multiplying by the RFO destruction efficiency (1-0.95), and then dividing by 2000 lbs/ton and 100;
 - e. the hourly OC emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, and dividing by 2000 lbs/ton and 100;
 - f. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, by the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - g. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, dividing by 2000 lbs/ton and 100 and multiplying by the total number of hours that emissions bypassed the RFO or were vented to the RFO was not in operation (from term A.III.1.b);
 - h. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.f and A.III.1.g; and
 - i. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.h divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is always recovered by the condenser and stored in overhead tanks shared by all four Safety-Therm cookers (P005, P006, P007 and P008).

2. The permittee shall maintain records of the annual organic compound emissions by summing the daily emissions (calculated in A.III.1.h) for the calendar year.
3. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 15.2 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.
4. The permittee shall properly operate and maintain equipment to continuously monitor and display the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor 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 pH of the scrubber liquor, when the RFO was in operation.
- b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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

5. The permittee shall properly operate and maintain equipment to monitor the scrubber water flow rate while the emissions unit is in operation. The monitoring device 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 water flow rate, in gallons per minute, on a hourly basis.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
6. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the scrubber while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the scrubber on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
- a. The scrubber liquor pH.
 - b. The static pressure drop across the scrubber.
 - c. The scrubber water flow rate.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
- a. An identification of each day during which this emissions unit was operated for more than 15.2 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 15.2 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the average hourly organic compound emissions exceeded 1.51 pounds per hour, and the actual average hourly organic compound emissions for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the RFO.

These reports shall be submitted within 30 days after the occurrence.

5. The permittee shall also submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

1.a Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:
See A.5.b and A.29.a of Part II - Specific Facility Terms and Conditions.

1.b Emission Limitation:
Organic compound emissions shall not exceed 1.51 pounds per hour.

Applicable Compliance Method:
Compliance with the hourly limitation may be demonstrated based on the record keeping on term A.III.1.i. If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

1.c Emission Limitation:
Organic compound emissions shall not exceed 6.6 tons per year.

Applicable Compliance Method:
Compliance with the annual limit shall be demonstrated based on the record keeping in term A.III.2.

1.d Emission Limitations:
Hydrogen chloride emissions shall not exceed 0.44 pound per hour and 1.9 tons per year.

Applicable Compliance Method:
Compliance with the hourly limitation was demonstrated in an emission test performed on August 8, 2001 and witnessed by a representative of the Ohio EPA, Central District Office. The emission test yielded an average hourly emission rate of 0.069 lb HCl/hr while P001, P002, P003, P004, P005, P006, P007, P008, P009 and P013 were operating under worst case operating conditions.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 26.

Compliance with the annual limit shall be demonstrated by multiplying the pound per hour emission rate established during the test mentioned above by 8760 hours of operation and dividing by 2000 pounds per ton.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| Safety-Therm #1: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) and wet scrubber | | |

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 (P005) 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methylene chloride

TLV (mg/m³): 173

Maximum Hourly Emission Rate (lb/hr): 13.7 (uncontrolled - prior to BAT)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 3670

MAGLC (ug/m³): 4119

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

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Safety-Therm #2 (P006)
Activity Description: Safety-Therm #2 (Solids/sludge distillation 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|---|
| Safety-Therm #2: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-753) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | See A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | See A.I.2.a - A.I.2.d and A.II.2 below. Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements included in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P006 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

2.e This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P006 is 2.9 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 13.7 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
2. If the emissions unit is operated for more than 13.7 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. All emissions from the condenser must be vented to the RFO.
2. a. The permittee shall not operate this emissions unit for more than 13.7 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.

b. If this emissions unit is operated for more than 13.7 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P006:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (80%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is always recovered by the condenser and stored in overhead tanks shared by all four Safety-Therm cookers (P005, P006, P007 and P008).

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 13.7 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 13.7 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 13.7 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

- 1.a Emission Limitations:
Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance with the hourly limitation may be demonstrated based on the record keeping on term A.III.1.g. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

- 1.b Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---------------------------------------|--|
| Safety-Therm #2: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Safety-Therm #3 (P007)
Activity Description: Safety-Therm #3 (Solids/sludge distillation 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|---|
| Safety-Therm #3: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-1007) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | Organic compound emissions shall not exceed 4.5 tons per year. |
| | OAC rule 3745-21-07(G)(2) | See A.II.2 below. See A.I.2.a - A.I.2.d and A.II.3 below. Exempt, see A.II.1 below. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P007 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

2.e This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P007 is 2.5 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 16.3 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.

2. If the emissions unit is operated for more than 16.3 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

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

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

2. All emissions from the condenser must be vented to the RFO.

3. a. The permittee shall not operate this emissions unit for more than 16.3 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.

b. If this emissions unit is operated for more than 16.3 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P007:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (80%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the annual organic compound emission rate, calculated by summing the daily records (from A.III.1.f) for the calendar year.

Note: Desired liquid product from this emissions unit is always recovered by the condenser and stored in overhead tanks shared by all four Safety-Therm cookers (P005, P006, P007 and P008).

2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
3. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 16.3 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit.

These reports shall be submitted within 30 days after the occurrence.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 16.3 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 16.3 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

IV. Reporting Requirements (continued)

3. The permittee shall also submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

- 1.a Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:
See A.5.b and A.29.a of Part II - Specific Facility Terms and Conditions.

- 1.b Emission Limitation:
Organic compound emissions shall not exceed 4.5 tons per year.

Applicable Compliance Method:
Compliance with the annual limitation shall be demonstrated based on the record keeping in term A.III.1.g.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---------------------------------------|--|
| Safety-Therm #3: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Safety-Therm #4 (P008)
Activity Description: Safety-Therm #4 (Solids/sludge distillation 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|---|
| Safety-Therm #4: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-1007) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). Organic compound emissions shall not exceed 4.5 tons per year. |
| | 40 CFR 63, Subpart DD | See A.II.2 below. |
| | OAC rule 3745-21-07(G)(2) | See A.I.2.a - A.I.2.d and A.II.3 below. Exempt, see A.II.1 below. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements in Part II - Specific Facility Terms and Conditions.
- 2.c HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P008 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- 2.d The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).

2. Additional Terms and Conditions (continued)

2.e This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit can still comply with the emission limitations specified in OAC rule 3745-21-07(G)(2) using the following approaches:

1. Because the calculated, uncontrolled potential to emit for emissions unit P008 is 2.5 lbs OC/hr, this emissions unit can be operated without the RFO and/or condenser for up to 16.3 hours per day during periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation before the daily OC emission rate would exceed the OAC rule 3745-21-07(G)(2) emission limitation of 40 lbs OC/day.
2. If the emissions unit is operated for more than 16.3 hours on any day when the RFO is bypassed or when emissions are vented to the RFO while the RFO is not in operation, the condenser will allow this emissions unit to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

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

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

2. All emissions from the condenser must be vented to the RFO.
3.
 - a. The permittee shall not operate this emissions unit for more than 16.3 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation and the condenser temperature is not being monitored.
 - b. If this emissions unit is operated for more than 16.3 hours on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P008:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (80%) by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (80%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the annual organic compound emission rate, calculated by summing the daily records (from A.III.1.f) for the calendar year.

Note: Desired liquid product from this emissions unit is always recovered by the condenser and stored in overhead tanks shared by all four Safety-Therm cookers (P005, P006, P007 and P008).

2. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
3. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use, and if this period of time exceeds 16.3 hours the permittee shall also record the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit.

These reports shall be submitted within 30 days after the occurrence.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which this emissions unit was operated for more than 16.3 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser temperature was not being monitored.
 - b. An identification of each 3-hour block of time during which this emissions unit was operated for more than 16.3 hours when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

IV. Reporting Requirements (continued)

3. The permittee shall also submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

- 1.a Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:
See A.5.b and A.29.a of Part II - Specific Facility Terms and Conditions.

- 1.b Emission Limitation:
Organic compound emissions shall not exceed 4.5 tons per year.

Applicable Compliance Method:
Compliance with the annual limitation shall be demonstrated based on the record keeping in term A.III.1.g.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---------------------------------------|--|
| Safety-Therm #4: 200 gallon per hour rotary vacuum dryer with condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: LUWA #2 (P009)
Activity Description: LUWA #2 Thin-film evaporator

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|---|
| LUWA #2 7000 pound per hour thin-film evaporator, SK #E-17 with chilled water condenser located upstream of a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-1338) | The requirements in this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |
| | 40 CFR 63, Subpart DD | See A.I.2.a - A.I.2.d and A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable included in Part II - Specific Facility Terms and Conditions.
- HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P009 must be destroyed by 95 percent or more, on a total HAP weight-basis.
- The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3) (see Part II, A.30).
- This emissions unit is controlled with an RFO and a condenser. The permittee must employ the RFO to meet the applicable MACT emission limitation for this emissions unit. The applicable MACT regulation allows the RFO to be bypassed and the emission limitation to be exceeded for up to 240 hours per year for planned routine maintenance. During periods when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the emissions unit must be operated with the condenser to meet the emission limitations specified in OAC rule 3745-21-07(G)(2).

II. Operational Restrictions

1. If this emissions unit is operated on any day when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall operate the condenser at a temperature no greater than 70 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P009:
 - a. the total number of hours that emissions were vented to the RFO while the RFO was in operation;
 - b. the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation;
 - c. the material feed rates in pounds per hour for the day;
 - d. the controlled daily OC emission rate calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent of recoverable solvent (90%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered, the RFO destruction efficiency (1-0.95) and by the total number of hours that emissions were vented to the RFO while the RFO was in operation (from term A.III.1.a), and then dividing by 2000 lbs/ton and 100;
 - e. the daily emission rate from the condenser when bypassing the RFO calculated by multiplying the maximum material feed rate (highest hourly value from term A.III.1.c for the day), in pounds per hour, and the maximum percent recoverable solvent (90%) by the AP-42 (2/80) Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total number of hours that emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation (from term A.III.1.b), and then dividing by 2000 lbs/ton and 100;
 - f. the total daily OC emission rate calculated as the sum of the OC emission rates from terms A.III.1.d and A.III.1.e; and
 - g. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.f divided by the sum of A.III.1.a plus A.III.1.b.

Note: Desired liquid product from this emissions unit is always recovered by the condenser.

2. During each day when this emissions unit is operated when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation, the permittee shall maintain records of the hours of operation of this emissions unit while the RFO is not in use and the average temperature of the exhaust gases from the condenser during each 3-hour block of time until the RFO is again being used to control the emissions from this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emission rate for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each 3-hour block of time during which this emissions unit was operated when emissions bypassed the RFO or were vented to the RFO while the RFO was not in operation and the condenser was operated at a temperature greater than 70 degrees Fahrenheit.

These reports are due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

1.a Emission Limitations:

Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance with the hourly limitation may be demonstrated based on the record keeping on term A.III.1.g. If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.f.

2. Emission Limitation:

95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| LUWA #2 7000 pound per hour thin-film evaporator, SK #E-17 with chilled water condenser located upstream of a regenerative fume oxidizer (RFO) | none | none |

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: Filter Grinder (P010)
Activity Description: Filter shredder for drycleaning filters

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|--|
| filter grinder (drycleaning filters) with scrubber | OAC rule 3745-31-05(A)(3) (PTI 01-1932) | The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(1). |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule (see A.I.2.a below). |
| | OAC rule 3745-17-11(B)(1) | Particulate emissions shall not exceed 8.56 pounds per hour (see A.I.2.a below). |
| | OAC rule 3745-21-07(G)(2) | Exempt (See A.II.1 below). |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a scrubber to comply with the particulate emission limitations specified above. The monitoring, record keeping, and reporting requirements for the scrubber are included in Part II - Specific Facility Terms and Conditions.

II. Operational Restrictions

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

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day during which any photochemically reactive materials were employed in this emissions unit.

These reports shall be submitted within 30 days after the occurrence.

V. Testing Requirements

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

- 1.a Emission Limitation:

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

Applicable Compliance Method:

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

- 1.b Emission Limitation:

Particulate emissions shall not exceed 8.56 pounds per hour.

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum process weight rate (3 tons/hr) by the emission factor of 0.1 lb/ton crushed* from Table 2.18-1, RACM - Section 2.18 "Aggregate Processing Sections".

*RACM's emission factor assumes that sand and gravel operations are generally processed wet which is representative of the solvent-laden filters pulverized in this operation.

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| filter grinder (drycleaning filters) with scrubber | none | none |

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: Drying Beds (P011)

Activity Description: Solvent dewatering beds to remove moisture from chlorinated solvents

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|--|
| 250 gallon per hour drying beds with condenser | OAC rule 3745-31-05(A)(3) (PTI 01-1932) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). See A.I.2.a and A.II.1 below. |
| | OAC rule 3745-21-07(G)(2) | Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day. |

2. Additional Terms and Conditions

- 2.a The condenser used in P011 is not considered a control device because the condenser functions as part of the closed loop solvent recovery process. In this closed loop system, preheated air is used to evaporate solvent from a saturated resin bed. The organic compounds in the vapor are recovered by the condenser. Several solvent extraction cycles occur. Once the condenser cannot extract any measureable solvent vapor from the heated air, the condenser shuts off and the remaining organic compounds entrained in the heated air are vented to the RFO.

II. Operational Restrictions

1. The permittee shall operate the condenser during operation of this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for P011:
 - a. the total hours of operation;
 - b. the solvent recovery rates in pounds per hour for each hour of operation;
 - c. the daily OC emission rate calculated by multiplying the maximum solvent recovery rate in pounds per hour (from term A.III.1.b), by the AP-42 (2/80 Table 4.7-1 (Solvent Reclaiming) emission factor for a condenser vent of 3.3 lbs OC/ton solvent recovered and by the total hours of operation (from term A.III.1.a), and then dividing by 2000 lbs/ton; and
 - d. the average hourly OC emission rate, in pounds per hour, calculated as A.III.1.c divided by A.III.1.a.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions from the recovery of solvent exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitations:
Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Demonstration:

Compliance with the hourly limitation may be demonstrated based on the record keeping in term A.III.1.d. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 18, 25 or 25A, as appropriate.

Compliance with the daily limitation shall be demonstrated based on the record keeping in term A.III.1.c.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 250 gallon per hour drying beds with condenser | none | none |

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: Drum Receiving (P013)

Activity Description: Drum Receiving vat

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--|--|
| drum receiving station (jacuzzi) with a regenerative fume oxidizer (RFO) | OAC rule 3745-31-05(A)(3) (PTI 01-1932) | The requirements of this rule also include compliance with the requirements of OAC rule 21-07(G)(2). |
| | OAC rule 3745-21-07(G)(2) | Exempt (See A.II.1 below). |
| | 40 CFR 63, Subpart DD | See A.I.2.a - A.I.2.e and A.II.2 below. |

2. Additional Terms and Conditions

- 2.a The permittee shall operate this emissions unit with a regenerative fume oxidizer (RFO) to comply with 40 CFR 63, Subpart DD. The monitoring, record keeping, and reporting requirements for the RFO are included in Part II - Specific Facility Terms and Conditions.
- 2.b All closed-vent systems, equipment leaks, transfer systems and process vents associated with this emissions unit must comply with the applicable requirements in Part II - Specific Facility Terms and Conditions.
- 2.c P013 meets the definition of a transfer system given in 40 CFR 63.681 since it is a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within a waste management operation or recovery operation. Specifically, P013 is an open top tank with a screen on it that is used to separate liquid dry cleaning waste from solid dry cleaning waste. The liquid goes through the screen and into the tank which is then pumped from the jacuzzi to a storage tank. The solid material is scraped off the screen into drums.

P013 shall comply with the transfer system standards specified in 40 CFR 63.689(c)(3) as follows:

(c)(3)(i) the transfer system is designed and operated such that an internal pressure in the vapor headspace in the system is maintained at a level less than atmospheric pressure when the control device is operating; and

(c)(3)(ii) the closed vent system and control device are designed in accordance with the requirements of 40 CFR 63.693.

- 2.d HAP (see Table 1 of 40 CFR 63, Subpart DD) contained in the vent stream from P013 must be destroyed by 95 percent or more, on a total HAP weight-basis.

2. Additional Terms and Conditions (continued)

- 2.e** The MACT contains a provision that allows 240 hours of operation without the RFO during "planned routine maintenance" as defined under 40 CFR 63.693(b)(3)(i). During "planned routine maintenance", this emissions unit is subject to OAC rule 3745-15-06(A)(3).

Unlike P001 - P009, feasible interim control measures per OAC rule 3745-15-06(A)(3)(f) have not been established for this emissions unit. Therefore, the permittee shall strictly adhere to the requirements of OAC rule 3745-15-06(A)(3) while operating this emissions unit during "planned routine maintenance" when emissions bypass the RFO or are vented to the RFO while the RFO is not in operation.

II. Operational Restrictions

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

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

- 2.** All emissions must be vented to the RFO.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

- 1.** The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material was employed in this emissions unit.

These reports shall be submitted within 30 days after each occurrence.

V. Testing Requirements

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

- 1.a** Emission Limitation:
95 percent destruction efficiency for HAPs, on a total HAP weight-basis

Applicable Compliance Method:

See A.5.b and A.29.a of Part II - Specific Facility 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| drum receiving station (jacuzzi) with a regenerative fume oxidizer (RFO) | none | none |

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: Drum Washing (P016)

Activity Description: Drums and Lid Washing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|---|
| drum washing operation | OAC rule 3745-31-05(D) (PTI 01-7320) | The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). Methylene chloride emissions shall not exceed 0.133 pound per hour and 0.33 ton per year. Mineral spirit emissions shall not exceed 1.45 pounds per hour and 3.63 tons per year. Perchloroethylene emissions shall not exceed 14.0 pounds per hour and 35.0 tons per year. |
| | OAC rule 3745-21-07(G)(2) 40 CFR 63, Subpart DD | See A.II.2 below. Exempt, see A.II.1 below. Exempt, see A.I.2.a below. |

2. Additional Terms and Conditions

2.a P016, drum washing operation, does not perform any of the waste management operations or recovery operations as specified in 40 CFR 63.680(a)(2)(i) through (a)(2)(vi) -

(2)(i) A waste management operation that receives off-site material and the operation is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under either 40 CFR part 264 or part 265.

(2)(ii) A waste management operation that treats wastewater which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, storage, and disposal facility under 40 CFR 264.1(g)(6) or 40 CFR 265.1(c)(10).

(2)(iii) A waste management operation that treats wastewater which is an off-site material and the operation meets both of the following conditions:

(A) The operation is subject to regulation under either section 402 or 307(b) of the Clean Water Act but is not owned by a "state" or "municipality" as defined by section 502(3) and 502(4), respectively, of the Clean Water Act; and

(B) The treatment of wastewater received from off-site is the predominant activity performed at the plant site.

(2)(iv) A recovery operation that recycles or reprocesses hazardous waste which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, disposal, and storage facility under 40 CFR 264.1(g)(2) or 40 CFR 265.1(c)(6).

(2)(v) A recovery operation that recycles or reprocesses used solvent which is an off-site material and the operation is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR part 63 or 40 CFR part 61.

(2)(vi) A recovery operation that re-refines or reprocesses used oil which is an off-site material and the operation is regulated under 40 CFR 279 subpart F -- Standards for Used Oil Processors and Refiners.

2. Additional Terms and Conditions (continued)

- (a) Distillation process used for the treatment, recycling, or recovery of off-site material. Distillation means a process, either batch or continuous, separating one or more off-site material feed streams into two or more exit streams having different component concentrations from those in the feed stream or streams. The separation is achieved by the redistribution of the components between the liquid and vapor phases as they approach equilibrium within the distillation unit.
- (b) Fractionation process used for the treatment, recycling, or recovery of off-site material. Fractionation means a liquid mixture separation process or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.
- (c) Thin-film evaporation process used for the treatment, recycling, or recovery of off-site material. Thin-film evaporation means a liquid mixture separation process or method that uses a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.
- (d) Solvent extraction process used for the treatment, recycling, or recovery of off-site material. Solvent extraction means a separation process or method in which a solid or a solution is contacted with a liquid solvent (the material and the solvent being relatively insoluble in each other) to preferentially dissolve and transfer one or more components into the solvent.
- (e) Steam stripping process used for the treatment, recycling, or recovery of off-site material. Steam stripping means a liquid mixture separation process or method in which vaporization of the volatile components of a liquid mixture occurs by the introduction of steam directly into the process.
- (f) Gas stripping process used for the treatment, recycling, or recovery of off-site material. Gas stripping means a desorption process or method used to transfer one or more volatile components from a liquid mixture into a gas stream either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are examples of the process configurations used for contacting the gas and a liquid.

In fact, P016 is operated to meet the definition of "RCRA empty", and thus, it is not regulated as a hazardous waste treatment, storage, and disposal facility under either 40 CFR part 264 or part 265.

As a result of not performing any of the operations specified in 40 CFR 63.680(a)(2)(i) through (a)(2)(vi), it is not considered an affected source as defined in 40 CFR 63.680(c) which exempts it from the requirements of 40 CFR 63, Subpart DD.

40 CFR 63.680(c) identifies affected sources as follows:

(1) Off-site material management units. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of off-site material management units associated with the operation. An off-site material management unit is a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material. For the purpose of implementing the standards under this subpart, a unit that meets the definition of a tank or container but also is equipped with a vent that serves as a process vent for any of the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section is not an off-site material management unit but instead is a process vent and is to be included in the appropriate affected source group under paragraph (c)(2) of this section. Examples of such a unit may

2. Additional Terms and Conditions (continued)

include, but are not limited to, a distillate receiver vessel, a primary condenser, a bottoms receiver vessel, a surge control tank, a separator tank, and a hot well.

(2) Process vents. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of process equipment associated with the process vents for the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.

(3) Equipment leaks. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of equipment components for which each component meets all of the conditions specified in paragraphs (c)(3)(i) through (c)(3)(iii) of this section. If any one of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system;

(ii) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight; and

(iii) The equipment component is intended to operate for 300 hours or more during a calendar year in off-site material service, as defined in section 63.681 of 40 CFR 63, Subpart DD.

The terms and conditions in section A.1.2.a of this permit do not follow the standard STARS numbering format when referencing the requirements of 40 CFR 63, Subpart DD. The Ohio EPA deviated from the traditional format due to the length and complexity of this federal rule.

II. Operational Restrictions

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

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

2. The hours of operation for emissions unit P016 shall not exceed 5,000 hours per year, based upon a rolling, annual summation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record daily the hours of operation for this emissions unit.
2. The permittee shall collect and record the rolling, annual summation of the hours of operation calculated by summing of the daily hours of operation recorded in A.III.1 and the daily hours of operation for the previous 364 calendar days.
3. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time when a photochemically reactive material is employed in this emissions unit.

These reports shall be submitted within 30 days after each occurrence.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, annual hours of operation limitation.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

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

- 1.a Emission Limitations:

Methylene chloride emissions shall not exceed 0.133 lb/hr.

Mineral spirit emissions shall not exceed 1.45 lbs/hr.

Perchloroethylene emissions shall not exceed 14.0 lbs/hr.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted within 6 months prior to permit expiration.
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for methylene chloride, mineral spirits and perchloroethylene.
 - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 4 and 18 or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

- 1.b Emission Limitations:

Methylene chloride emissions shall not exceed 0.33 tpy.

Mineral spirit emissions shall not exceed 3.63 tpy.

Perchloroethylene emissions shall not exceed 35.00 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly emission rates from the emission tests required in A.V.1.a by the hours of operation (see A.III.3) and dividing by 2000 pounds per ton.

V. Testing Requirements (continued)

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|--|
| drum washing operation | | |

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 P016 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

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

Pollutant: perchloroethylene

TLV (mg/m³): 170

Maximum Hourly Emission Rate (lbs/hr): 16.6 lbs/hr

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 3853

MAGLC (ug/m³): 4048

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

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

Facility Name: **Safety-Kleen Systems, Inc. - Hebron Recycle Cente**
Facility ID: **01-45-02-0235**
Emissions Unit: **Drum Washing (P016)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank No. 127 (T095)

Activity Description: Tank No. 127

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|--|
| 15,000-gallon chlorinated solvent storage tank - SK#127 | OAC rule 3745-31-05(A)(3) (PTI 01-1100) | The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Kb. See A.II.1 below. |
| | 40 CFR 60, Subpart Kb | See A.III.1 below. |

2. Additional Terms and Conditions

- 2.a The material stored in this storage tank does not meet the definition of an "off-site waste material" since it does not meet all of the criteria specified in 40 CFR 63.680(b)(1)(i) through (b)(1)(iii). Therefore, this storage tank is not subject to the requirements of 40 CFR 63, Subpart DD.

II. Operational Restrictions

1. The permittee shall use submerged fill when loading this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. Per 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in section 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records will be kept for the life of the storage tank.

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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 15,000-gallon chlorinated solvent storage tank - SK#127 | none | none |

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: Tank No. 80 (T180)

Activity Description: Tank No. 80

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|---|
| 15,000-gallon chlorinated solvent storage tank - SK#80 | OAC rule 3745-31-05(A)(3) (PTI 01-1324) | The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Kb. |
| | 40 CFR 60, Subpart Kb | See A.II.1 below. |
| | 40 CFR 63, Subpart DD | See A.III.1 below. |
| | | See A.I.2.a, A.II.2 - 3 below. |

2. Additional Terms and Conditions

2. The terms and conditions in sections A.II.2-3, A.III.2-4, and A.V.2 of this permit do not follow the standard STARS numbering format when referencing the requirements of 40 CFR 63, Subpart OO. The Ohio EPA deviated from the traditional format due to the length and complexity of this federal rule.
- 2.a Per 40 CFR 63.685(c), the permittee controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:
 - i. The permittee shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in 40 CFR 63.694(j). Thereafter, the permittee shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.
 - ii. The permittee shall control air emissions from the tank using a fixed-roof in accordance with the provisions specified in 40 CFR Part 63, Subpart OO - National Emission Standards for Tanks - Level 1.

II. Operational Restrictions

1. The permittee shall use submerged fill when loading this tank.
2. 40 CFR 63.902 Standards -- Fixed Roof Tanks.

II. Operational Restrictions (continued)

- 2.a** This section applies to the permittee subject to 40 CFR 63, Subpart OO and controlling air emissions from a tank using a fixed roof. This section does not apply to a fixed-roof tank that is also equipped with an internal floating roof.
- 2.b** The tank shall be equipped with a fixed roof designed to meet the following specifications:
- i. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
 - ii. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
 - iii. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
 - (1) equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
 - (2) connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever regulated material is managed in the tank.
 - iv. The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid effects of outdoor exposure to the wind, moisture, and sunlight, and the operating practices used for the tank on which the fixed roof is installed.
- 2.c** Whenever a regulated-material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
- i. Opening of closure devices or removal of the fixed roof is allowed at the following times:
 - (1) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
 - (2) To remove accumulated sludge or other residues from the bottom of tank.
 - ii. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the permittee based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations

II. Operational Restrictions (continued)

or diurnal ambient temperature fluctuations.

iii. Opening of a safety device, as defined in section 63.901 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

- 2.d** The permittee shall inspect the air emission control equipment in accordance with the requirements specified in 40 CFR 63.906(a), as stated in A.III.2 below.
- 3.** Per the definitions in 40 CFR 63.901, Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

III. Monitoring and/or Record Keeping Requirements

- 1.** Per 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in section 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage tank.
- 2.** 40 CFR 63.906 Inspection and monitoring requirements.
- 2.a** The permittee that uses a tank equipped with a fixed roof in accordance with the provisions of 40 CFR 63.902 shall meet the following requirements:
- i. The fixed roof and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- ii. The permittee must perform an initial inspection following installation of the fixed roof. Thereafter, the permittee must perform the inspections at least once every calendar year except as provided for in paragraph (d) of this section.
- iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.
- iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.907(a).

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

2.b The permittee shall repair all detected defects as follows:

i. The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(2) of 40 CFR 63.907 (see A.III.3).

ii. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the permittee shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.

2.c The permittee shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.907(b) (see A.III.3).

2.d Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(i) and (d)(ii) of this section.

i. The permittee must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

ii. The permittee must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

3. 40 CFR 63.907 Recordkeeping requirements.

The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

3.a Each permittee shall prepare and maintain a record for each tank that includes the following information:

i. A tank identification number (or other unique identification description as selected by the permittee).

ii. A description of the tank dimensions and the tank design capacity.

iii. The date that each inspection required by 40 CFR 63.906 is performed.

3.b The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

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

4. The permittee shall keep a record of new determinations performed to determine if changes to the off-site material managed in the tank have potentially caused the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any determinations performed for changes to the off-site material managed in the tank that caused the maximum HAP vapor pressure to increase to a level equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Per 40 CFR 63.694(a)(9), the permittee shall determine the maximum organic HAP vapor pressure of off-site materials in this tank for compliance with the standards specified in 40 CFR 63.685 using the testing methods and procedures specified in 40 CFR 63.694(j).
- 1.a Per 40 CFR 63.694(j), the maximum HAP vapor pressure of the off-site material composition managed in this tank shall be determined using either direct measurement as specified in 40 CFR 63.694(j)(2) or by knowledge of the off-site material as specified by 40 CFR 63.694(j)(3).
- 1.b The permittee shall demonstrate compliance using 40 CFR 63.694(j)(3) which requires the permittee to determine the maximum HAP vapor pressure of the off-site material. Documentation shall be prepared and recorded that presents the information used as the basis for the permittee's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

If it is determined by the US Environmental Protection Agency that this option is not sufficient to meet the requirements of 40 CFR 63.694(a)(9), the permittee shall be required to comply by using direct measurement methods as specified in 40 CFR 63.694(j)(2).

2. 40 CFR 63.905 Test methods and procedures.

Procedure for determining no detectable organic emissions for the purpose of complying with the 40 CFR 63, Subpart OO.

V. Testing Requirements (continued)

- 2.a** (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

V. Testing Requirements (continued)

(8) The permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(1) or (a)(8)(2) of this section.

(i) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 15,000-gallon chlorinated solvent storage tank - SK#80 | none | none |

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: Tank No. 88 (T188)

Activity Description: Tank No. 88

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 15,000-gallon chlorinated solvent storage tank - SK#88 | OAC rule 3745-31-05(A)(3) (PTI 01-1324) | The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Kb. See A.II.1 below. |
| | 40 CFR 60, Subpart Kb | See A.III.1 below. |
| | 40 CFR 63, Subpart DD | See A.I.2.a, A.II.2 - 3 below. |

2. Additional Terms and Conditions

2. The terms and conditions in sections A.II.2-3, A.III.2-4, and A.V.2 of this permit do not follow the standard STARS numbering format when referencing the requirements of 40 CFR 63, Subpart OO. The Ohio EPA deviated from the traditional format due to the length and complexity of this federal rule.
- 2.a Per 40 CFR 63.685(c), the permittee controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:
 - i. The permittee shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in 40 CFR 63.694(j). Thereafter, the permittee shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.
 - ii. The permittee shall control air emissions from the tank using a fixed-roof in accordance with the provisions specified in 40 CFR Part 63, Subpart OO - National Emission Standards for Tanks - Level 1.

II. Operational Restrictions

1. The permittee shall use submerged fill when loading this tank.
2. 40 CFR 63.902 Standards -- Fixed Roof Tanks.

II. Operational Restrictions (continued)

- 2.a** This section applies to the permittee subject to 40 CFR 63, Subpart OO and controlling air emissions from a tank using a fixed roof. This section does not apply to a fixed-roof tank that is also equipped with an internal floating roof.
- 2.b** The tank shall be equipped with a fixed roof designed to meet the following specifications:
- i. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
 - ii. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
 - iii. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
 - (1) equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
 - (2) connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever regulated material is managed in the tank.
 - iv. The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid effects of outdoor exposure to the wind, moisture, and sunlight, and the operating practices used for the tank on which the fixed roof is installed.
- 2.c** Whenever a regulated-material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
- i. Opening of closure devices or removal of the fixed roof is allowed at the following times:
 - (1) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
 - (2) To remove accumulated sludge or other residues from the bottom of tank.
 - ii. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the permittee based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations

II. Operational Restrictions (continued)

or diurnal ambient temperature fluctuations.

iii. Opening of a safety device, as defined in section 63.901 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

- 2.d** The permittee shall inspect the air emission control equipment in accordance with the requirements specified in 40 CFR 63.906(a), as stated in A.III.2 below.
- 3.** Per the definitions in 40 CFR 63.901, Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

III. Monitoring and/or Record Keeping Requirements

- 1.** Per 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in section 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage tank.
- 2.** 40 CFR 63.906 Inspection and monitoring requirements.
- 2.a** The permittee that uses a tank equipped with a fixed roof in accordance with the provisions of 40 CFR 63.902 shall meet the following requirements:
- i. The fixed roof and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- ii. The permittee must perform an initial inspection following installation of the fixed roof. Thereafter, the permittee must perform the inspections at least once every calendar year except as provided for in paragraph (d) of this section.
- iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.
- iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.907(a).

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

2.b The permittee shall repair all detected defects as follows:

i. The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(2) of 40 CFR 63.907 (see A.III.3).

ii. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the permittee shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.

2.c The permittee shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.907(b) (see A.III.3).

2.d Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(i) and (d)(ii) of this section.

i. The permittee must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

ii. The permittee must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

3. 40 CFR 63.907 Recordkeeping requirements.

The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

3.a Each permittee shall prepare and maintain a record for each tank that includes the following information:

i. A tank identification number (or other unique identification description as selected by the permittee).

ii. A description of the tank dimensions and the tank design capacity.

iii. The date that each inspection required by 40 CFR 63.906 is performed.

3.b The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

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

4. The permittee shall keep a record of new determinations performed to determine if changes to the off-site material managed in the tank have potentially caused the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any determinations performed for changes to the off-site material managed in the tank that caused the maximum HAP vapor pressure to increase to a level equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Per 40 CFR 63.694(a)(9), the permittee shall determine the maximum organic HAP vapor pressure of off-site materials in this tank for compliance with the standards specified in 40 CFR 63.685 using the testing methods and procedures specified in 40 CFR 63.694(j).
- 1.a Per 40 CFR 63.694(j), the maximum HAP vapor pressure of the off-site material composition managed in this tank shall be determined using either direct measurement as specified in 40 CFR 63.694(j)(2) or by knowledge of the off-site material as specified by 40 CFR 63.694(j)(3).
- 1.b The permittee shall demonstrate compliance using 40 CFR 63.694(j)(3) which requires the permittee to determine the maximum HAP vapor pressure of the off-site material. Documentation shall be prepared and recorded that presents the information used as the basis for the permittee's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

If it is determined by the US Environmental Protection Agency that this option is not sufficient to meet the requirements of 40 CFR 63.694(a)(9), the permittee shall be required to comply by using direct measurement methods as specified in 40 CFR 63.694(j)(2).

2. 40 CFR 63.905 Test methods and procedures.

Procedure for determining no detectable organic emissions for the purpose of complying with the 40 CFR 63, Subpart OO.

V. Testing Requirements (continued)

- 2.a** (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

V. Testing Requirements (continued)

(8) The permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(1) or (a)(8)(2) of this section.

(i) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|---|--|
| 15,000-gallon chlorinated solvent storage tank - SK#88 | none | none |

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: Tank No. 113 (T213)

Activity Description: Tank No. 113

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| 15,000-gallon chlorinated solvent storage tank - SK#113 | OAC rule 3745-31-05(A)(3) (PTI 01-1324) | The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Kb. |
| | 40 CFR 60, Subpart Kb | See A.II.1 below. |
| | 40 CFR 63, Subpart DD | See A.III.1 below. |
| | | See A.I.2.a, A.II.2 - 3 below. |

2. Additional Terms and Conditions

2. The terms and conditions in sections A.II.2-3, A.III.2-4, and A.V.2 of this permit do not follow the standard STARS numbering format when referencing the requirements of 40 CFR 63, Subpart OO. The Ohio EPA deviated from the traditional format due to the length and complexity of this federal rule.
- 2.a Per 40 CFR 63.685(c), the permittee controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:
 - i. The permittee shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in 40 CFR 63.694(j). Thereafter, the permittee shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.
 - ii. The permittee shall control air emissions from the tank using a fixed-roof in accordance with the provisions specified in 40 CFR Part 63, Subpart OO - National Emission Standards for Tanks - Level 1.

II. Operational Restrictions

1. The permittee shall use submerged fill when loading this tank.
2. 40 CFR 63.902 Standards -- Fixed Roof Tanks.

II. Operational Restrictions (continued)

- 2.a** This section applies to the permittee subject to 40 CFR 63, Subpart OO and controlling air emissions from a tank using a fixed roof. This section does not apply to a fixed-roof tank that is also equipped with an internal floating roof.
- 2.b** The tank shall be equipped with a fixed roof designed to meet the following specifications:
- i. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
 - ii. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
 - iii. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
 - (1) equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
 - (2) connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever regulated material is managed in the tank.
 - iv. The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid effects of outdoor exposure to the wind, moisture, and sunlight, and the operating practices used for the tank on which the fixed roof is installed.
- 2.c** Whenever a regulated-material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
- i. Opening of closure devices or removal of the fixed roof is allowed at the following times:
 - (1) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
 - (2) To remove accumulated sludge or other residues from the bottom of tank.
 - ii. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the permittee based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations

II. Operational Restrictions (continued)

or diurnal ambient temperature fluctuations.

iii. Opening of a safety device, as defined in section 63.901 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

- 2.d** The permittee shall inspect the air emission control equipment in accordance with the requirements specified in 40 CFR 63.906(a), as stated in A.III.2 below.
- 3.** Per the definitions in 40 CFR 63.901, Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

III. Monitoring and/or Record Keeping Requirements

- 1.** Per 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in section 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage tank.
- 2.** 40 CFR 63.906 Inspection and monitoring requirements.
- 2.a** The permittee that uses a tank equipped with a fixed roof in accordance with the provisions of 40 CFR 63.902 shall meet the following requirements:
- i. The fixed roof and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- ii. The permittee must perform an initial inspection following installation of the fixed roof. Thereafter, the permittee must perform the inspections at least once every calendar year except as provided for in paragraph (d) of this section.
- iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.
- iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.907(a).

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

2.b The permittee shall repair all detected defects as follows:

i. The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(2) of 40 CFR 63.907 (see A.III.3).

ii. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the permittee shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.

2.c The permittee shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.907(b) (see A.III.3).

2.d Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(i) and (d)(ii) of this section.

i. The permittee must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

ii. The permittee must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

3. 40 CFR 63.907 Recordkeeping requirements.

The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

3.a Each permittee shall prepare and maintain a record for each tank that includes the following information:

i. A tank identification number (or other unique identification description as selected by the permittee).

ii. A description of the tank dimensions and the tank design capacity.

iii. The date that each inspection required by 40 CFR 63.906 is performed.

3.b The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

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

4. The permittee shall keep a record of new determinations performed to determine if changes to the off-site material managed in the tank have potentially caused the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any determinations performed for changes to the off-site material managed in the tank that caused the maximum HAP vapor pressure to increase to a level equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Per 40 CFR 63.694(a)(9), the permittee shall determine the maximum organic HAP vapor pressure of off-site materials in this tank for compliance with the standards specified in 40 CFR 63.685 using the testing methods and procedures specified in 40 CFR 63.694(j).
- 1.a Per 40 CFR 63.694(j), the maximum HAP vapor pressure of the off-site material composition managed in this tank shall be determined using either direct measurement as specified in 40 CFR 63.694(j)(2) or by knowledge of the off-site material as specified by 40 CFR 63.694(j)(3).
- 1.b The permittee shall demonstrate compliance using 40 CFR 63.694(j)(3) which requires the permittee to determine the maximum HAP vapor pressure of the off-site material. Documentation shall be prepared and recorded that presents the information used as the basis for the permittee's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

If it is determined by the US Environmental Protection Agency that this option is not sufficient to meet the requirements of 40 CFR 63.694(a)(9), the permittee shall be required to comply by using direct measurement methods as specified in 40 CFR 63.694(j)(2).

2. 40 CFR 63.905 Test methods and procedures.

Procedure for determining no detectable organic emissions for the purpose of complying with the 40 CFR 63, Subpart OO.

V. Testing Requirements (continued)

- 2.a** (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

V. Testing Requirements (continued)

(8) The permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(1) or (a)(8)(2) of this section.

(i) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
| 15,000-gallon chlorinated solvent storage tank - SK#113 | none | none |

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: Tank No. 114 (T214)

Activity Description: Tank No. 114

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|---|
| 15,000-gallon chlorinated solvent storage tank - SK#114 | OAC rule 3745-31-05(A)(3) (PTI 01-1324) | The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Kb. |
| | 40 CFR 60, Subpart Kb | See A.II.1 below. |
| | 40 CFR 63, Subpart DD | See A.III.1 below. |
| | | See A.I.2.a, A.II.2 - 3 below. |

2. Additional Terms and Conditions

2. The terms and conditions in sections A.II.2-3, A.III.2-4, and A.V.2 of this permit do not follow the standard STARS numbering format when referencing the requirements of 40 CFR 63, Subpart OO. The Ohio EPA deviated from the traditional format due to the length and complexity of this federal rule.
- 2.a Per 40 CFR 63.685(c), the permittee controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:
 - i. The permittee shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in 40 CFR 63.694(j). Thereafter, the permittee shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.
 - ii. The permittee shall control air emissions from the tank using a fixed-roof in accordance with the provisions specified in 40 CFR Part 63, Subpart OO - National Emission Standards for Tanks - Level 1.

II. Operational Restrictions

1. The permittee shall use submerged fill when loading this tank.
2. 40 CFR 63.902 Standards -- Fixed Roof Tanks.

II. Operational Restrictions (continued)

- 2.a** This section applies to the permittee subject to 40 CFR 63, Subpart OO and controlling air emissions from a tank using a fixed roof. This section does not apply to a fixed-roof tank that is also equipped with an internal floating roof.
- 2.b** The tank shall be equipped with a fixed roof designed to meet the following specifications:
- i. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
 - ii. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
 - iii. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
 - (1) equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
 - (2) connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever regulated material is managed in the tank.
 - iv. The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid effects of outdoor exposure to the wind, moisture, and sunlight, and the operating practices used for the tank on which the fixed roof is installed.
- 2.c** Whenever a regulated-material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
- i. Opening of closure devices or removal of the fixed roof is allowed at the following times:
 - (1) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
 - (2) To remove accumulated sludge or other residues from the bottom of tank.
 - ii. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the permittee based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations

II. Operational Restrictions (continued)

or diurnal ambient temperature fluctuations.

iii. Opening of a safety device, as defined in section 63.901 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

- 2.d** The permittee shall inspect the air emission control equipment in accordance with the requirements specified in 40 CFR 63.906(a), as stated in A.III.2 below.
- 3.** Per the definitions in 40 CFR 63.901, Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

III. Monitoring and/or Record Keeping Requirements

- 1.** Per 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in section 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage tank.
- 2.** 40 CFR 63.906 Inspection and monitoring requirements.
- 2.a** The permittee that uses a tank equipped with a fixed roof in accordance with the provisions of 40 CFR 63.902 shall meet the following requirements:
- i. The fixed roof and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- ii. The permittee must perform an initial inspection following installation of the fixed roof. Thereafter, the permittee must perform the inspections at least once every calendar year except as provided for in paragraph (d) of this section.
- iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.
- iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.907(a).

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

2.b The permittee shall repair all detected defects as follows:

i. The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(2) of 40 CFR 63.907 (see A.III.3).

ii. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the permittee shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.

2.c The permittee shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.907(b) (see A.III.3).

2.d Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(i) and (d)(ii) of this section.

i. The permittee must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

ii. The permittee must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

3. 40 CFR 63.907 Recordkeeping requirements.

The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

3.a Each permittee shall prepare and maintain a record for each tank that includes the following information:

i. A tank identification number (or other unique identification description as selected by the permittee).

ii. A description of the tank dimensions and the tank design capacity.

iii. The date that each inspection required by 40 CFR 63.906 is performed.

3.b The permittee shall record the following information for each defect detected during inspections required by 40 CFR 63.906: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of 40 CFR 63.907(b)(2), the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

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

4. The permittee shall keep a record of new determinations performed to determine if changes to the off-site material managed in the tank have potentially caused the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any determinations performed for changes to the off-site material managed in the tank that caused the maximum HAP vapor pressure to increase to a level equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.

These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.c.ii.

V. Testing Requirements

1. Per 40 CFR 63.694(a)(9), the permittee shall determine the maximum organic HAP vapor pressure of off-site materials in this tank for compliance with the standards specified in 40 CFR 63.685 using the testing methods and procedures specified in 40 CFR 63.694(j).
- 1.a Per 40 CFR 63.694(j), the maximum HAP vapor pressure of the off-site material composition managed in this tank shall be determined using either direct measurement as specified in 40 CFR 63.694(j)(2) or by knowledge of the off-site material as specified by 40 CFR 63.694(j)(3).
- 1.b The permittee shall demonstrate compliance using 40 CFR 63.694(j)(3) which requires the permittee to determine the maximum HAP vapor pressure of the off-site material. Documentation shall be prepared and recorded that presents the information used as the basis for the permittee's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

If it is determined by the US Environmental Protection Agency that this option is not sufficient to meet the requirements of 40 CFR 63.694(a)(9), the permittee shall be required to comply by using direct measurement methods as specified in 40 CFR 63.694(j)(2).

2. 40 CFR 63.905 Test methods and procedures.

Procedure for determining no detectable organic emissions for the purpose of complying with the 40 CFR 63, Subpart OO.

V. Testing Requirements (continued)

- 2.a** (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

V. Testing Requirements (continued)

(8) The permittee must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(1) or (a)(8)(2) of this section.

(i) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---------------------------------------|--|
| 15,000-gallon chlorinated solvent storage tank - SK#114 | none | none |

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

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