State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL** **CERTIFIED MAIL**
**LAKE COUNTY**

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

**Application No:** 02-17596

**DATE:** 6/5/2003

Arvesta Corporation
Jeff Coleman
3647 Shepard Road
Perry, OH 44081

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

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

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

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

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

CC: USEPA NEDO

# FINAL PERMIT TO INSTALL 02-17596

| | |
|---|---|
| Application Number: | 02-17596 |
| APS Premise Number: | 0243120034 |
| Permit Fee: | **$200** |
| Name of Facility: | Arvesta Corporation |
| Person to Contact: | Jeff Coleman |
| Address: | 3647 Shepard Road<br>Perry, OH 44081 |

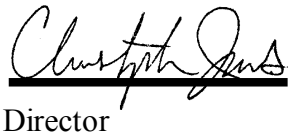
Location of proposed air contaminant source(s) [emissions unit(s)]:
**3647 Shepard Road**
**Perry, Ohio**

Description of proposed emissions unit(s):
**Methyl Iodide Process.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

**2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

**3. Risk Management Plans**

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

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

**6. General Requirements**

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

**8. 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.

**9. Compliance Requirements**

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.

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.

**10. Permit To Operate Application**

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

**11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**12. 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.

## B. State Only Enforceable Permit To Install General Terms and Conditions

### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### 3. Permit Transfers

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

### 4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**5. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**6. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**8. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. 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.

## C. Permit To Install Summary of Allowable Emissions

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

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

| Pollutant | Tons Per Year |
|---|---|
| PE | 0.75 |
| OC | 0.97 |

## Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

Note: In order to assist both the permittee and Ohio EPA in locating record keeping and reporting requirements to demonstrate compliance, (RK) will be inserted at the beginning of every term containing record keeping requirements and (RP) will be inserted at the beginning of every term containing reporting requirements.

1. For the purposes of 40 CFR, Part 63, Subpart MMM, the pesticide active ingredient (PAI) process unit (PU) is listed below:

   Methyl iodide manufacture process (P025)
   This PAI PU is regulated as part of an existing affected source pursuant to 40 CFR 63.1360(b)(2) and requirements A.1. through A.57. of these terms and conditions apply to this PAI PU.

2. 40 CFR 63.1362(b) - Process Vent Requirements

   The uncontrolled organic hazardous air pollutant (HAP) emissions from all process vents within the PAI PU shall be reduced by 90 weight percent or greater.
   [63.1362(b)(2)(iii)]

   The following process vents are within the PAI PU:
   -Process vent venting to the carbon adsorption system

3. 40 CFR 63.1362(c) - Storage Vessel Requirements

   The two storage vessels included in this PAI PU (for methanol and methyl iodide) have been determined to be Group 2 storage vessels. Therefore, there are no additional control requirements under these provisions. (The wastewater storage tank does not meet the definition of a storage vessel.)

4. 40 CFR 63.132(b) - General Process Wastewater Provisions

   Based on the information submitted by the permittee in the permit to install application, the PAI PU has the following Group 1 and Group 2 wastewater streams per 40 CFR, Part 63, Subpart G, Table 9:

   Group 1: wastewater stream from reactor 2
   Group 2: wastewater stream from reactor 1
   [63.132(b)(4)]

5. 40 CFR 63.132(f) - General Process Wastewater Provisions

The permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million (ppm) of compounds listed in 40 CFR, Part 63, Subpart G, Table 9 [as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)] from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the activities listed in A.5.a. through A.5.d. below.

a. Equipment leaks;

b. Activities included in maintenance or startup/shutdown/malfunction plans;

c. Spills; or

d. Samples of a size not greater than reasonably necessary for the method of analysis that is used. [63.132(f)]

6. 40 CFR 63.133 - Process Wastewater Provisions - Wastewater Tanks

a. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the following requirements:

The permittee shall operate and maintain a fixed roof; and the wastewater tank shall not be used for heating wastewater or treating by means of an exothermic reaction nor the contents of the tank sparged.
[63.133(a)(1)]

b. Each wastewater tank subject to A.6.a. shall be inspected initially, and semiannually thereafter, for improper work practices in accordance with A.10. of these terms and conditions. For wastewater tanks, improper work practice includes, but is not limited to, leaving open any access door or other opening when such door or opening is not in use.
[63.133(f)]

c. Except as provided in 40 CFR 63.140, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 45 days after identification.
[63.133(h)]

7. 40 CFR 63.136 - Process Wastewater Provisions - Individual drain systems

   a. For each individual drain system that receives or manages a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of A.7.b. through A.7.d. or with A.7.e. through A.7.g. below.

   b. If the permittee elects to comply with this paragraph, the permittee shall operate and maintain on each opening in the individual drain system a cover and if vented, route the vapors to a process or through a closed vent system to a control device. The permittee shall comply with the requirements of A.7.b.i. through A.7.b.v. below.

i. The cover and all openings shall meet the following requirements:

(a) Except as provided in A.7.b.iv., the cover and all openings (e.g., access hatches, sampling ports) shall be maintained in accordance with the requirements specified in 40 CFR 63.148.

(b) The cover and all openings shall be maintained in a closed position at all times that a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream is in the drain system except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

ii. The control device shall be designed, operated, and inspected in accordance with 40 CFR 63.139.

iii. Except as provided in A.7.b.iv., the closed-vent system shall be inspected in accordance with 40 CFR 63.148.

iv. For any cover and closed-vent system that is operated and maintained under negative pressure, the permittee is not required to comply with the requirements specified in 40 CFR 63.148.

v. The individual drain system shall be designed and operated to segregate the vapors within the system from the other drain systems and the atmosphere.

c. Each individual drain system shall be inspected initially, and semiannually thereafter, for improper work practices and control equipment failures, in accordance with the inspection requirements specified in Table 11 of 40 CFR, Part 63, Subpart G.

i. For individual drain systems, improper work practice includes, but is not limited to, leaving open any access hatch or other opening when such hatch or opening is not in use for sampling or removal, or for equipment inspection, maintenance, or repair.

ii. For individual drain systems, control equipment failure includes, but is not limited to, any time a joint, lid, cover, or door has a gap or crack, or is broken.

d. Except as provided in 40 CFR 63.140, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 15 calendar days after identification.

e. If the permittee elects to comply with this paragraph, the permittee shall comply with the requirements in A.7.e.i. through A.7.e.iii.

i. Each drain shall be equipped with water seal controls or a tightly fitting cap or plug. The permittee shall comply with A.7.e.i.(a) and A.7.e.i.(b).

(a) For each drain equipped with a water seal, the permittee shall ensure that the water seal is maintained. For example, a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap or water being continuously dripped into the trap by a hose could be used to verify flow of water to the trap. Visual observation is also an acceptable alternative.

(b) If a water seal is used on a drain receiving a Group 1 wastewater, the permittee shall either extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain, or install a flexible shield (or other enclosure which restricts wind motion across the open area between the pipe and the drain) that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater. (Water seals which are used on hubs receiving Group 2 wastewater for the purpose of eliminating cross ventilation to drains carrying Group 1 wastewater are not required to have a flexible cap or extended subsurface discharging pipe.)

ii. Each junction box shall be equipped with a tightly fitting solid cover (i.e., no visible gaps, cracks, or holes) which shall be kept in place at all times except during inspection and maintenance. If the junction box is vented, the permittee shall comply with the requirements in A.7.e.ii.(a) or (b).

(a) The junction box shall be vented to a process or through a closed vent system to a control device. The closed vent system shall be inspected in accordance with the requirements of 40 CFR 63.148 and the control device shall be designed, operated, and inspected in accordance with the requirements of 40 CFR 63.139.

(b) If the junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level, the permittee may vent the junction box to the atmosphere provided that the junction box complies with the requirements in A.7.e.ii.(b)(i) and (ii).

(i) The vent pipe shall be at least 90 centimeters in length and no greater than 10.2 centimeters in nominal inside diameter.

(ii) Water seals shall be installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system. The permittee shall demonstrate (e.g., by visual inspection or smoke test) upon request by the Director that the junction box water seal is properly designed and restricts ventilation.

(iii.) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces.

f. Equipment used to comply with A.7.e.i., ii., or iii. shall be inspected as follows:

i. Each drain using a tightly fitting cap or plug shall be visually inspected initially, and semiannually thereafter, to ensure caps or plugs are in place and that there are no gaps, cracks, or other holes in the cap or plug.

ii. Each junction box shall be visually inspected initially, and semiannually thereafter, to ensure that there are no gaps, cracks, or other holes in the cover.

iii. The unburied portion of each sewer line shall be visually inspected initially, and semiannually thereafter, for indication of cracks or gaps that could result in air emissions.

g. Except as provided in 40 CFR 63.140, when a gap, hole, or crack is identified in a joint or cover, first efforts at repair shall be made no later than 5 calendar days after identification, and repair shall be completed within 15 calendar days after identification.
[63.136]

8. 40 CFR 63.138 - Process Wastewater Provisions
Performance standards for treatment processes managing Group 1 wastewater streams and/or residuals removed from Group 1 wastewater streams.

The 40 CFR, Part 63, Subpart G, Table 9 Group 1 wastewater streams designated in A.4. of these terms and conditions or residual shall be discharged to an underground injection well for which the permittee has been issued a final permit under 40 CFR, Part 270 or 40 CFR, Part 144 and complies with the requirements of 40 CFR, Part 122. The permittee shall comply with all applicable requirements of Subpart G prior to the point where the wastewater enters the underground portion of the injection well.
[63.138(b)(2), 63.138(h)(3)]

9. 40 CFR 63.140 - Process Wastewater Provisions - Delay of Repair

a. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.101, or if the permittee determines that emissions of purged material from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of this equipment shall occur by the end of the next shutdown.

b. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the equipment is emptied or is no longer used to treat or manage Group 1 wastewater streams or residuals removed from Group 1 wastewater streams.

c. Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified is also allowed if additional time is necessary due to the unavailability of parts beyond the control of the permittee. Repair shall be completed as soon as practical. The permittee who uses this provision shall comply with the requirements of 40 CFR 63.147(c)(7) to document the reasons that the delay of repair was necessary.
[63.141]

10. 40 CFR 63.143 - Process Wastewater Provisions - Inspections and Monitoring of Operations

For each wastewater tank, surface impoundment, container, individual drain system, and oil-water separator that receives, manages, or treats a Group 1 wastewater stream, a residual removed from a Group 1 wastewater stream, a recycled Group 1 wastewater stream, or a recycled residual removed from a Group 1 wastewater stream, the permittee shall comply with the inspection requirements specified in Table 11 of 40 CFR, Part 63, Subpart G.
[63.143]

11. 40 CFR 63.144 - Process Wastewater Provisions
Test methods and procedures for determining applicability and Group 1/Group 2 determinations (determining which wastewater streams require control).

a. The permittee shall determine the annual average concentration for 40 CFR, Part 63, Subpart G, Table 9 compounds.
[63.144(b)]

Where knowledge is used to determine the annual average concentration, the permittee shall provide sufficient information to document the annual average concentration for wastewater streams determined to be Group 2 wastewater streams. Documentation to determine the annual average concentration is not required for Group 1 streams. Examples of acceptable documentation include material balances, records of chemical purchases, process stoichiometry, or previous test results. If test data are used, the permittee shall provide documentation describing the testing protocol and the means by which any losses of volatile compounds during sampling, and the bias and accuracy of the analytical method, were accounted for in the determination.
[63.144(b)(3)]

b. The permittee shall determine the annual average flow rate of the wastewater stream either at the point of determination for each wastewater stream, or downstream of the point of determination with adjustment for flow rate changes made according to A.11.d. These procedures may be used in combination for different wastewater streams at the source. The annual average flow rate for the wastewater stream shall be representative of actual or anticipated operation of the chemical manufacturing process unit generating the wastewater over a designated 12-month period. The permittee shall consider the total annual wastewater volume generated by the chemical manufacturing process unit. If the chemical manufacturing process unit is a flexible operation unit, the permittee shall consider all anticipated production in the process equipment over the designated 12-month period.
[63.144(c)]

c. The permittee may use knowledge of the wastewater stream and/or the process to determine the annual average flow rate. The permittee shall use the maximum expected annual average production capacity of the process unit, knowledge of the process, and/or mass balance information to either: estimate directly the annual average wastewater flow rate; or estimate the total annual wastewater volume and then divide total volume by 525,600 minutes in a year.

Where knowledge is used to determine the annual average flow rate, the permittee shall provide sufficient information to document the flow rate for wastewater streams determined to be Group 2 wastewater streams. Documentation to determine the annual average flow rate is not required for Group 1 streams.
[63.144(c)(2)]

d. The permittee shall make corrections to the annual average flow rate of a wastewater stream when it is determined downstream of the point of determination at a location where two or more wastewater streams have been mixed or one or more wastewater streams have been treated. The permittee shall make corrections for such changes in the annual average flow rate.
[63.144(c)(4)]

12. 40 CFR 63.147 - Process Wastewater Provisions - Record Keeping

(RK) The permittee shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater streams.
[63.147(f)]

13. 40 CFR 63.1362(e) - Bag Dump and Product Dryer Requirements

The permittee shall reduce particulate matter from the affected bag dumps and product dryers included in PAI PU to a concentration not to exceed 0.01 gr/dscf.
[63.1362(e)(2)]

The following bag dumps and product dryers are affected by this requirement:
The addition of phosphorous to the process.

14. 40 CFR 63.1362(i) - Opening of a Safety Device

Opening of a safety device, as defined in 40 CFR 63.1361, is allowed at any time conditions require it to avoid unsafe conditions.

15. 40 CFR 63.1362(j) - Closed Vent System Requirements

If the PAI PU includes a closed-vent system that contains bypass lines that could divert a vent stream away from a control device used to comply with the requirements in A.2. through A.12. of these terms and conditions, the permittee shall comply with the requirements of Table 3 of 40 CFR, Part 63, Subpart MMM and A.15.a. or A.15.b. below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, rupture disks and pressure relief valves needed for safety purposes are not subject to this paragraph.

a. Install, calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every 15 minutes. Records shall be maintained as specified in 40 CFR 63.1367(f)(1). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

b. Secure the bypass line valve in the closed position with a car seal or lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Records shall be maintained as specified in 40 CFR 63.1367(f)(2).
[63.1362(j)]

16. 40 CFR 63.1362(k) - Liquid Streams in Open Systems Requirements

If the PAI PU includes liquid streams in open systems, the permittee shall comply with the provisions of Table 4 of 40 CFR, Part 63 for each item of equipment meeting all the criteria specified in terms A.16.a. through A.16.c. and either A.16.d.i. or A.16.d.ii.

a. The item of equipment is of a type identified in Table 4 of 40 CFR, Part 63, Subpart MMM.

b. The item of equipment is part of a PAI process unit as defined in 40 CFR 63.1361.

c. The item of equipment is controlled less stringently than in Table 4 of 40 CFR, Part 63, Subpart MMM, and the item of equipment is not otherwise exempt from controls by the provisions of 40 CFR, Part 63, Subpart MMM or 40 CFR, Part 63, Subpart A.

d. The item of equipment:

i. Is a drain, drain hub, manhole, lift station, trench, pipe, or oil/water separator that conveys water with a total annual average concentration greater than or equal to 10,000 ppm by weight of compounds in Table 9 of 40 CFR, Part 63, Subpart G at any flow rate; or a total annual average concentration greater than or equal to 1,000 ppm by weight of compounds in Table 9 of 40 CFR, Part 63, Subpart G at an annual average flow rate greater than or equal to 10 liters per minute; or

ii. Is a tank that receives one or more streams that contain water with a total annual average concentration greater than or equal to 1,000 ppm by weight of compounds in Table 9 of 40 CFR, Part 63, Subpart G at an annual average flow rate greater than or equal to 10 liters per minute. The permittee of the source shall determine the characteristics of the

stream as specified in A.16.d.ii.(a) and (b) below.

(a) The characteristics of the stream being received shall be determined at the inlet to the tank.

(b) The characteristics shall be determined according to the procedures in 40 CFR 63.144(b) and (c).
[63.1362(k)]

17. 40 CFR 63.1363(a) - Standards: General Requirements for Equipment Leaks

a. The Requirements for Equipment Leaks specified in A.17. through A.31. of these terms and conditions shall apply to "equipment" as defined in 40 CFR 63.1361 and any closed-vent systems and control devices required by 40 CFR, Part 63, Subpart MMM.
[63.1363(a)(1)]

b. Each piece of equipment in the PAI PU that is subject to the leak detection monitoring requirements of this permit shall be identified such that it can be distinguished readily from equipment that is not subject to leak detection monitoring requirements. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process boundaries by some form of weatherproof identification. If changes are made to the affected source subject to the leak detection requirements, equipment identification for each type of component shall be updated, if needed, within 15 calendar days of the end of each monitoring period for that component.
[63.1363(a)(7)]

c. Equipment that is in vacuum service is excluded from the requirements of this section.
[63.1363(a)(8)]

d. Lines and equipment not containing process fluids are not subject to the provisions of this section. Utilities, and other nonprocess lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not considered to be part of a process.
[63.1363(a)(5)]

e. Equipment that is in organic HAP service, but is in such service less than 300 hours per calendar year, is excluded from the requirements for equipment leaks, except for the record keeping requirements in A.30.i. of these terms and conditions.
[63.1363(a)(9)]

f. When each leak is detected by visual, audible, or olfactory means, or by monitoring as described in term A.28. of these terms and conditions, the following requirements apply:

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

ii. The identification on a valve or connector in light liquid or gas/vapor service may be removed after it has been monitored as specified in A.23.g.iii. of these terms and conditions, and no leak has been detected during the follow-up monitoring.

iii. The identification on equipment, except on a valve or connector in light liquid or gas/vapor service, may be removed after it has been repaired. [63.1363(a)(10)]

18. 40 CFR 63.1363(c) - Standards:
pumps in light liquid service and agitators in gas/vapor service and in light liquid service.

a. The permittee shall monitor each pump and agitator subject to the standards for equipment leaks quarterly to detect leaks by the method specified by A.28. of these terms and conditions.

b. The instrument reading that defines a leak is:

i. For agitators, an instrument reading of 10,000 ppm or greater.

ii. For pumps, an instrument reading of 2,000 ppm or greater.

c. Each pump and agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump or agitator seal. If there are indications of liquids dripping from the seal, a leak is detected.

d. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in A.25.a. of these terms and conditions.

e. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

i. Tightening of packing gland nuts.

ii. Ensuring that the seal flush is operating at design pressure and temperature.

f. Calculation of percent leakers.
The permittee shall decide no later than the end of the first monitoring period what groups of processes will be developed. Once the permittee has decided, all subsequent percent calculations shall be made on the same basis.

If, calculated on a 1 year rolling average, the greater of either 10 percent or three of the pumps in a group of processes leak, the permittee shall monitor each pump once per month.

The number of pumps in a group of processes shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process within 1 quarter after startup of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.

g. Percent leaking pumps shall be determined by the following equation:

%PL = [(PL-PS)/(PT-PS)] x 100

where:

%PL = percent leaking pumps
PL = number of pumps found leaking as determined through quarterly monitoring as required in A.18.a. and b.
PT = total pumps in organic HAP service, including those meeting the criteria in A.18.h. and i.
PS = number of pumps in a continuous process leaking within 1 quarter of startup during the current monitoring period

h. Each pump or agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of A.18.a. through g., provided the following requirements are met:

i. Each dual mechanical seal system is:

(a) Operated with the barrier fluid at a pressure that is at all times greater than the pump/agitator stuffing box pressure; or

(b) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of A.26. of these terms and conditions ; or

(c) Equipped with a closed-loop system that purges the barrier fluid into a process stream.

ii. The barrier fluid is not in light liquid service.

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

iv Each pump/agitator is checked by visual inspection each calendar week for indications of liquids dripping from the pump/agitator seal.

(a) If there are indications of liquids dripping from the pump/agitator seal at the time of the weekly inspection, the pump/agitator shall be monitored as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid.

(b) If an instrument reading of 2,000 ppm or greater is measured for pumps, or 10,000 ppm or greater is measured for agitators, a leak is detected.

v. Each sensor as described in A.18.h.iii. is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.

vi. (a) The permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicate failure of the seal system, the barrier fluid system, or both.

(b) If indications of liquids dripping from the pump/agitator seal exceed the criteria established in A.18.h.vi.(a), or if, based on the criteria established in A.18.h.vi.(a), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in A.25.a. of these terms and conditions.

(d) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

i. Any pump/agitator that is designed with no externally actuated shaft penetrating the pump/agitator housing is exempt from the requirements of A.18.a. through g., except for the requirements of A.18.c. and, for pumps, A.18.g.

j. Any pump/agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals back to the process or to a control device that complies with the requirements of A.26. of these terms and conditions is exempt from the requirements of A.18.c. through h.

k. If more than 90 percent of the pumps in a group of processes meet the criteria in either A.18.h. or i., the process is exempt from the requirements of A.18.f. and g.
[63.1363(c)]

19. 40 CFR 63.164 - Standards: compressors

a. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in A.19.h. and i.

b. Each compressor seal system as required in a. shall be:

i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

ii. Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of A.26. of these terms and conditions; or

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

stream.

c. The barrier fluid shall not be in light liquid service.

d. Each barrier fluid system as described in A.19.a. through c. shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

e. i. Each sensor as required in A.19.d. shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

ii. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

f. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under A.19.e.ii., a leak is detected.

g. i. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in A.25. of these terms and conditions.

ii. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

h. A compressor is exempt from the requirements of A.19.a. through f. if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with the requirements of A.26. of these terms and conditions.

i. Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii), to operate with an instrument reading of less than 500 ppm above background, is exempt from the requirements of A.19.a. through h. if the compressor:

i. Is demonstrated to be operating with an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c); and

ii. Is tested for compliance with A.19.i.i. of this section initially upon designation, annually, and at other times requested by the Director.
[63.164]

20. 40 CFR 63.165 - Standards: pressure relief devices in gas/vapor service

a. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 ppm above background except as provided in A.20.b., as measured by A.28.c. of these terms and conditions.

b. After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later

than 5 calendar days after each pressure release, except as provided in A.25. of these terms and conditions.

c. No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by term A.28.c. of these terms and conditions.

d. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the requirements of A.20.a. through c.

e. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of A.20.a. through c., provided the permittee complies with the requirements in A.20.f.

f. After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171.
[63.165]

21. 40 CFR 63.166 - Standards:
sampling connection systems

a. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system.

b. Each closed-purge, closed-loop, or closed vent system as required in A.21.a. shall:

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

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

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

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

c. In-situ sampling systems and sampling systems without purges are exempt from the requirements of A.21.a. and b.
[63.166]

22. 40 CFR 63.1363(d) - Standards:
open-ended valves or lines

a. i. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.177 and A.22.d. through f.

ii. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. The cap, blind flange, plug, or second valve shall be in place within 1 hour of cessation of operations requiring process fluid flow through the open-ended valve or line, or within 1 hour of cessation of maintenance or repair.

b. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

c. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with A.22.a. at all other times.

d. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of A.22.a. through c.

e. Open-ended valves or lines containing materials which would autocatalytically polymerize are exempt from the requirements of A.22.a. through c.

f. Open-ended valves or lines containing materials which could cause an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in A.22.c. through e. are exempt from the requirements of A.22.a. through c. [63.1363(d)]

23. 40 CFR 63.1363(e) - Standards:
valves in gas/vapor service and in light liquid service

a. The provisions of this section apply to valves that are either in gas/vapor service or in light liquid service.

b. All valves subject to this section shall be monitored, except as provided in A.29. of these terms and conditions and in 40 CFR 63.177, by no later than 1 year after the compliance date.

c. The permittee shall monitor all valves, except as provided in A.29. of these terms and conditions and in 40 CFR 63.177, at the intervals specified in A.22. of these terms and conditions and shall comply with all other provisions, except as provided in A.25. of these terms and conditions, 40 CFR 63.178 and 40 CFR 63.179.

i. The valves shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).

ii. An instrument reading of 500 ppm or greater defines a leak.

d. After conducting the initial survey required in A.23.b., the permittee shall monitor valves for leaks at the intervals specified below:

i. For a group of processes with 2 percent or greater leaking valves, calculated according to A.23.f., the permittee shall monitor each valve once per month, except as specified in A.23.i.

ii. For a group of processes with less than 2 percent leaking valves, the permittee shall monitor each valve once each quarter, except as provided in A.23.d.iii. through d.v.

iii. For a group of processes with less than 1 percent leaking valves, the permittee may elect to monitor each valve once every 2 quarters.

iv. For a group of processes with less than 0.5 percent leaking valves, the permittee may elect to monitor each valve once every 4 quarters.

v. For a group of processes with less than 0.25 percent leaking valves, the permittee may elect to monitor each valve once every 2 years.

e. For a group of processes to which this subpart applies, the permittee may choose to subdivide the valves in the applicable group of processes and apply the provisions of A.23.d. to each subgroup. If the permittee elects to subdivide the valves in the applicable group of processes, then the provisions of A.23.e.i. through e.viii. apply.

i. The overall performance of total valves in the applicable group of processes must be less than 2 percent leaking valves, as detected according to A.23.c.i. and ii. and as calculated according to A.23.f.ii. and f.iii.

ii. The initial assignment or subsequent reassignment of valves to subgroups shall be

governed by the provisions of A.23.e.ii.a. through e.ii.c.

(a) The permittee shall determine which valves are assigned to each subgroup. Valves with less than 1 year of monitoring data or valves not monitored within the last 12 months must be placed initially into the most frequently monitored subgroup until at least 1 year of monitoring data have been obtained.

(b) Any valve or group of valves can be reassigned from a less frequently monitored subgroup to a more frequently monitored subgroup provided that the valves to be reassigned were monitored during the most recent monitoring period for the less frequently monitored subgroup. The monitoring results must be included with the less frequently monitored subgroup's monitoring event and associated next percent leaking valves calculation for that group.

(c) Any valve or group of valves can be reassigned from a more frequently monitored subgroup to a less frequently monitored subgroup provided that the valves to be reassigned have not leaked for the period of the less frequently monitored

subgroup (e.g., for the last 12 months, if the valve or group of valves is to be reassigned to a subgroup being monitored annually). Nonrepairable valves may not be reassigned to a less frequently monitored subgroup.

iii. The permittee shall determine every 6 months if the overall performance of total valves in the applicable group of processes is less than 2 percent leaking valves and so indicate the performance in the next Periodic Report. If the overall performance of total valves in the applicable group of processes is 2 percent leaking valves or greater, the permittee shall revert to the program required in A.23.b. through d. The overall performance of total valves in the applicable group of processes shall be calculated as a weighted average of the percent leaking valves of each subgroup according to the following equation:

%VLO = [ summation i=1,n (%VLi x Vi)] / [summation i=1,n (Vi)]
where:
%VLO = overall performance of total valves in the applicable group of processes
%VLi = percent leaking valves in subgroup i, most recent value calculated according to the procedures in A.23.e.6.ii. and iii.
Vi = number of valves in subgroup i
n = number of subgroups

iv. In addition to records required by A.30. of these terms and conditions, the permittee shall maintain records specified in A.23.e.iv.a. through d.

(a). Which valves are assigned to each subgroup;

(b) Monitoring results and calculations made for each subgroup for each monitoring period;

(c) Which valves are reassigned and when they were reassigned; and

(d) The results of the semiannual overall performance calculation required in A.23.e.iii.

v. The permittee shall notify the Director no later than 30 days prior to the beginning of the next monitoring period of the decision to subgroup valves. The notification shall identify the participating processes and the valves assigned to each subgroup.

vi. Semiannual reports. In addition to the information required by A.31.c., the permittee shall submit in the Periodic reports the information specified in A.23.e.vi.a. and b.

(a) Valve reassignments occurring during the reporting period, and

(b) Results of the semiannual overall performance calculation required by A.23.e.iii.

vii. To determine the monitoring frequency for each subgroup, the calculation procedures of A.23.f.iii. shall be used.

viii. Except for the overall performance calculations required by A.23.e.i. and iii., each subgroup shall be treated as if it were a process.

f. i. The permittee shall decide no later than the implementation date of 40 CFR, Part 63, Subpart MMM or upon revision of an operating permit how to group the processes. Once the permittee has decided, all subsequent percentage calculations shall be made on the same basis.

ii. Percent leaking valves for each group of processes or subgroup shall be determined using the following equation:

%VL = [ VL /VT] x 100

where:
%VL = percent leaking valves
VL = number of valves found leaking excluding non-repairable as provided in A.23.f.iv.a.
VT = total valves monitored, in a monitoring period excluding valves monitored as required by A.23.g.iii.

iii. When determining monitoring frequency for each group of processes or subgroup subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each group of processes or subgroup subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last three monitoring periods.

iv. (a) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with A.23.f.iv.b. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

(b) If the number of nonrepairable valves exceeds 1 percent of the total number of

valves in organic HAP service at a process, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.

g. Repair provisions.

i. 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 A.25. of these terms and conditions.

ii. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iii. When a leak is repaired, the valve shall be monitored at least once within the first 3 months after its repair. Days that the valve is not in organic HAP service shall not be considered part of this 3-month period.

h. First attempts at repair include, but are not limited to, the following practices where practicable:

i. Tightening of bonnet bolts,

ii. Replacement of bonnet bolts,

iii. Tightening of packing gland nuts, and

iv. Injection of lubricant into lubricated packing.

i. Any equipment located at a plant site with fewer than 250 valves in organic HAP service in the affected source is exempt from the requirements for monthly monitoring specified in A.23.d.i. Instead, the permittee shall monitor each valve in organic HAP service for leaks once each quarter, or comply with A.23.d.iii. or iv.
[63.1363(e)]

24. 40 CFR 63.169 - Standards:
Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.

a. Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in A.24.c. and d., it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b).

b. If an instrument reading of 10,000 ppm or greater for agitators, 5,000 ppm or greater for pumps

handling polymerizing monomers, 2,000 ppm or greater for pumps in food/medical service or pumps subject to 40 CFR 63.163(b)(iii)(C), or 500 ppm or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.

c. i. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

ii. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iii. For equipment identified in A.24.a. that is not monitored by the method specified in 40 CFR 63.180(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

d. First attempts at repair include, but are not limited to, the practices described under 40 CFR 63.163(c)(2) and 40 CFR 63.168(g), for pumps and valves, respectively.
[63.169]

25. 40 CFR 63.171 - Standards:
Delay of repair

a. Delay of repair of equipment for which leaks have been detected is allowed if one of the following conditions exist:

i. The repair is technically infeasible without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.

ii. The permittee determines that repair personnel would be exposed to an immediate danger if attempting to repair without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.
[63.1363(b)(3)(i)]

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

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

i. The permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and;

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

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

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

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

(b) A pump that meets the requirements of 40 CFR 63.163(f), or

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

ii. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [63.171]

26. 40 CFR 63.172 - Standards:
Closed-vent systems and control devices

a. If the emissions units include closed-vent systems, and control devices , then the permittee shall comply with the provisions of this section, except as provided in 40 CFR 63.162(b).

b. Recovery or recapture devices (e.g., condensers and absorbers) shall be designed and operated to recover the organic HAP emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppm by volume, whichever is less stringent. The 20 ppm by volume performance standard is not applicable to the provisions of 40 CFR 63.179.

c. Enclosed combustion devices shall be designed and operated to reduce the organic HAP emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppm by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C.

d. If the emissions units include control devices that are used to comply with these provisions, then the permittee shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. NOTE: The intent of this provision is to ensure proper operation and maintenance of the control device.

e. Each closed-vent system shall be inspected according to the procedures and schedule specified in A.26.e.i. and e.ii.

i. If the closed-vent system is constructed of hard-piping, the permittee shall:

(a) Conduct an initial inspection according to the procedures in A.26.f., and

(b) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

ii. If the vapor collection system or closed-vent system is constructed of duct work, the permittee shall:

(a) Conduct an initial inspection according to the procedures in A.26.f., and

(b) Conduct annual inspections according to the procedures in A.26.f.

f. Each closed-vent system shall be inspected according to the procedures in 40 CFR 63.180(b).

g. Leaks, as indicated by an instrument reading greater than 500 ppm above background or by visual inspections, shall be repaired as soon as practicable, except as provided in A.26.h.

i. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

ii. Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in h.

h. Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

i. For each closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee shall comply with the provisions of either A.26.i.i. or i.ii., except as provided in A.26.i.iii.

i. Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line; or

ii. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

iii. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph.

j. Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with these provisions, such system or control device shall be operating. [63.172]

27. 40 CFR 63.174 - Standards:
Connectors in gas/vapor service and in light liquid service

a. The permittee of a process unit subject to this standard shall monitor all connectors in gas/vapor and light liquid service, except as provided in A.27.e., at the intervals specified in A.27.b.

i. The connectors shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).

ii. If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. [63.174(a)]

b. The permittee shall monitor for leaks at the intervals specified below:

i. Within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references this subpart, whichever is later, the permittee shall monitor all connectors, except as provided in A.27.e. [63.174(b)(2)]

ii. After conducting the initial survey required in A.27.b.i., the permittee shall perform all subsequent monitoring of connectors at the frequencies specified in A.27.b.ii.a. through e., except as provided in A.27.c.ii.:

(a) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period. [63.174(b)(3)(i)]

(b) If the percent leaking connectors in the group of process units was less than 0.5 percent, but equal to or greater than 0.25 percent, during the last required monitoring period, monitoring shall be performed once every 4 years. The permittee may comply with the requirements of this paragraph by monitoring at

least 40 percent of the connectors in the first 2 years and the remainder of the connectors within the next 2 years. The percent leaking connectors will be calculated for the total of all monitoring performed during the 4-year period. [63.1363(b)(3)(iii)(C)]

(c) The permittee shall monitor once every 8 years, if the percent leaking connectors in the group of process units was less than 0.25 percent during the last required monitoring period. An permittee shall monitor at least 50 percent of the connectors in the first 4 years and the remainder of the connectors within the next 4 years. If the percent leaking connectors in the first 4 years is equal to or greater than 0.35 percent, the monitoring program shall revert at that time to the appropriate monitoring frequency specified in A.27.b.ii.(b), (d), or (e). [63.1363(b)(3)(iii)(F)]

(d) The permittee shall increase the monitoring frequency to once every 2 years for the next monitoring period if leaking connectors comprise at least 0.5 percent but less than 1.0 percent of the connectors monitored within the 4 years specified in A.27.b.ii.(b), or the first 4 years specified in 40 CFR 63.174(b)(3)(iii). At the end of that 2-year monitoring period, the permittee shall monitor once per year while the percent leaking connectors is greater than or equal to 0.5 percent; if the percent leaking connectors is less than 0.5 percent, the permittee may return to monitoring once every 4 years or may monitor in accordance with 40 CFR 63.174(b)(3)(iii), if appropriate.
[63.1363(b)(3)(iii)(D)]

(e) If the permittee complying with the requirements of A.27.b.ii.(c) and (d) or 40 CFR 63.174(b)(3)(iii) for a group of process units determines that 1 percent or greater of the connectors are leaking, the permittee shall increase the monitoring frequency to one time per year. The permittee may again elect to use the provisions of A.27.b.ii.(b) or (d) after a monitoring period in which less than 0.5 percent of the connectors are determined to be leaking.
[63.1363(b)(3)(iii)(E)]

c. i. Except as provided in A.27.b.ii., each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic HAP service. If the monitoring detects a leak, it shall be repaired according to the provisions of A.27.d., unless it is determined to be non-repairable, in which case it is counted as a non-repairable connector for the purposes of A.27.f.ii.

ii. As an alternative to the requirements in A.27.c.i., the permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the permittee may not count non-repairable connectors for the purposes of A.27.f.ii. The permittee shall calculate the percent leaking connectors for the monitoring periods described in A.27.b., by setting the non-repairable component, CAN, in the equation in

A.27.f.ii. to zero for all monitoring periods.

iii. The permittee may switch alternatives described in A.27.c.i. and ii. at the end of the current monitoring period he is in, provided that it is reported as required in 40 CFR 63.182 and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch. [63.174(c)(1)]

d. 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 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

e. i. Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of A.27.a. and c. and from the record keeping and reporting requirements of 40 CFR 63.181 and 40 CFR 63.182. An inaccessible connector is one that is:

(a) Buried;

(b) Insulated in a manner that prevents access to the connector by a monitor probe;

(c) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(d) Unable to be reached from a wheeled scissor- lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(e) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or

(f) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

ii. If any inaccessible or ceramic or ceramic lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171.

iii. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

f. For use in determining the monitoring frequency, as specified in A.27.b., the percent leaking

connectors shall be calculated as specified in A.27.f.i. and f.ii.

i. For the first monitoring period, use the following equation:

% CL = CL/(Ct + CC) x 100

where:
% CL = Percent leaking connectors as determined through periodic monitoring required in A.27.a. and b.
CL = Number of connectors measured at 500 ppm or greater, by the method specified in 40 CFR 63.180(b).
Ct = Total number of monitored connectors in the process unit.
CC = Optional credit for removed connectors = 0.67 x net (i.e., total removed—total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then CC = 0.

ii. For subsequent monitoring periods, use the following equation:

% CL = [(CL · CAN)/(Ct + CC)] x 100

where:
% CL = Percent leaking connectors as determined through periodic monitoring required in A.27.a. and b.
CL = Number of connectors, including nonrepairables, measured at 500 ppm or greater, by the method specified in 40 CFR 63.180(b).
CAN = Number of allowable nonrepairable connectors, as determined by monitoring required in A.27.b.ii. and c., not to exceed 2 percent of the total connector population, Ct.
Ct = Total number of monitored connectors, including nonrepairables, in the process unit.
CC = Optional credit for removed connectors = 0.67 x net number (i.e., total removed—total added) of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then CC = 0.

g. Optional credit for removed connectors. If the permittee eliminates a connector subject to monitoring under A.27.b., the permittee may receive credit for elimination of the connector, as described in A.27.f., provided the requirements in A.27.g.i. through g.iv. are met.

i. The connector was welded after the date of proposal of the specific subpart that references this subpart.

ii. The integrity of the weld is demonstrated by monitoring it according to the procedures in 40 CFR 63.180(b) or by testing using Xray, acoustic monitoring, hydrotesting, or other applicable method.

iii. Welds created after the date of proposal but before the date of promulgation of a specific subpart that references this subpart are monitored or tested by 3 months after the compliance date specified in the applicable subpart.

iv. Welds created after promulgation of the subpart that references this subpart are monitored or tested within 3 months after being welded.

v. If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of this subpart.
[63.174]

28. 40 CFR 63.180 - Test Methods and Procedures

a. Each permittee subject to these provisions shall comply with the test methods and procedures requirements provided in this section.

b. Monitoring shall comply with the following requirements:

i. Monitoring shall comply with Method 21 of 40 CFR, Part 60, Appendix A.

ii. (a) Except as provided for in A.28.b.ii.(b), 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 process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP's or VOC's, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.

(b) If no instrument is available at the plant site that will meet the performance criteria specified in A.28b.ii.(a), the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in A.28.b.ii.(a).

iii. The 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.

iv. Calibration gases shall be:

(a) Zero air (less than 10 ppm of hydrocarbon in air); and

(b) Calibration gases shall be a mixture of methane and air at a concentration of approximately, but less than, 10,000 ppm methane for agitators, 2,000 ppm for pumps, and 500 ppm for all other equipment, except as provided in 40 CFR 63.180(b)(4)(iii).

(c) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 ppm. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

v. Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

c. When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by this subpart, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in A.28.b.i. through b.iv. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in A.28.c.i. through c.iv.

i. The requirements of A.28.b.i. through iv. shall apply.

ii. The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

iii. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR, Part 60, Appendix A.

iv. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d. i. Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR, Part 60, Appendix A shall be used.

ii. (a) The permittee may use good engineering judgment rather than the procedures in A.28.d.i. to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Director do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in A.28.d.ii. shall be used to resolve the disagreement.

(b) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.

iii. If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in A.28.d.i., or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

iv. Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

e. The following procedures shall be used to pressure test batch product-process equipment for pressure or vacuum loss to demonstrate compliance with the requirements of 40 CFR 63.178(b)(3)(i).

i. The batch product-process equipment train shall be pressurized with a gas to a pressure less than the set pressure of any safety relief devices or valves or to a pressure slightly above the operating pressure of the equipment, or alternatively, the equipment shall be placed under a vacuum.

ii. Once the test pressure is obtained, the gas source or vacuum source shall be shut off.

iii. The test shall continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop or of pressure rise was exceeded. The pressure in the batch product-process equipment shall be measured after the gas or vacuum source is shut off and at the end of the test period. The rate of change in pressure in the batch product-process equipment shall be calculated using the following equation:

delta P/t = (absolute[Pf-Pi]) / (tf-ti)

where:

delta P/t = Change in pressure, psig/hr.
Pf = Final pressure, psig.
Pi = Initial pressure, psig.
tf-ti = Elapsed time, hours.

iv. The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeters of mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device. If such a pressure measurement device is not reasonably available, the permittee shall use a pressure measurement device with a precision of at least +10 percent of the test pressure of the equipment and shall extend the duration of the test for the time necessary to detect a pressure loss or rise that equals a rate of one psig per hour.

v. An alternative procedure may be used for leak testing the equipment if the permittee demonstrates the alternative procedure is capable of detecting a pressure loss or rise.

f. The following procedures shall be used to pressure-test batch product-process equipment using a liquid to demonstrate compliance with the requirements of 40 CFR 63.178(b)(3)(ii).

i. The batch product-process equipment train, or section of the train, shall be filled with the test liquid (e.g., water, alcohol) until normal operating pressure is obtained. Once the equipment is filled, the liquid source shall be shut off.

ii. The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure.

iii. Each seal in the equipment being tested shall be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected.

iv. An alternative procedure may be used for leak testing the equipment, if the permittee demonstrates the alternative procedure is capable of detecting losses of fluid. [63.180]

29. 40 CFR 63.1363(f) - Unsafe to Monitor, Difficult to Monitor and Inaccessible Equipment

a. Equipment that is designated as unsafe to monitor, difficult to monitor, or inaccessible is exempt from the requirements as specified in A.29.a.i. through iv. provided the permittee meets the requirements specified in A.29.b., c., or d., as applicable. Ceramic or ceramic-lined connectors are subject to the same requirements as inaccessible connectors.

i. For pumps and agitators, A.18.c. through A.18.g. of these terms and conditions do not apply.

ii. For valves, A.23.b. through A.23.g. of these terms and conditions section do not apply.

iii. For closed-vent systems, 40 CFR 63.172(f)(1), (f)(2), and (g) do not apply.

iv. For connectors, 40 CFR 63.174(b) through (e) do not apply.

b. Equipment that is unsafe to monitor.

i. Equipment may be designated as unsafe to monitor if the permittee determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements identified in A.29.a.i. through iv.

ii. The permittee of equipment that is designated as unsafe to monitor must have a written plan that requires monitoring of the equipment as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

c. Equipment that is difficult to monitor.

i. Equipment may be designated as difficult to monitor if the permittee determines that the equipment cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or the equipment is not accessible at anytime in a safe manner;

ii. At an existing source, any equipment within a group of processes that meets the criteria of A.29.c.i. may be designated as difficult to monitor. At a new affected source, the permittee may designate no more than 3 percent of each type of equipment as difficult to monitor.

iii. The permittee of equipment designated as difficult to monitor must follow a written plan that requires monitoring of the equipment at least once per calendar year.

d. Inaccessible equipment and ceramic or ceramic-lined connectors.

i. A connector, agitator, or valve may be designated as inaccessible if it is:

(a) Buried;

(b) Insulated in a manner that prevents access to the equipment by a monitor probe;

(c) Obstructed by equipment or piping that prevents access to the equipment by a monitor probe;

(d) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to equipment up to 7.6 meters above the ground; or

(e) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

ii. The permittee may designate no more than 3 percent of each type of equipment as inaccessible.

iii. If any inaccessible equipment or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in A.25. of these terms and conditions.
[63.1363(f)]

30. 40 CFR 63.1363(g) - Record Keeping Requirements

a. (RK) The permittee of more than one group of processes subject to the provisions of this section

may comply with the record keeping requirements for the groups of processes in one record keeping system if the system identifies with each record the program being implemented (e.g., quarterly monitoring) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.

b. (RK) General Record Keeping. Except as provided in A.30.e., the following information pertaining to all equipment subject to the requirements in this section shall be recorded:

i. (a) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this section. Connectors, except those subject to A.29. of these terms and conditions, need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this section are identified as a group, and the number of subject connectors is indicated. The list for each type of equipment shall be completed no later than the completion of the initial survey required for that component. The list of identification numbers shall be updated, if needed, to incorporate equipment changes within 15 calendar days of the completion of each monitoring survey for the type of equipment component monitored.

(b) A schedule for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of A.23.d. of these terms and conditions.

(c) Physical tagging of the equipment is not required to indicate that it is in organic HAP service. Equipment subject to the provisions of this section may be identified on a plant site plan, in log entries, or by other appropriate methods.

ii. (a) A list of identification numbers for equipment that the permittee elects to equip with a closed vent system and control device, under the provisions of A.18.j. of these terms and conditions or 40 CFR 63.164(h) or 40 CFR 63.165(c).

(b) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 ppm above background, under the provisions of 40 CFR 63.164(i).

iii (a) A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a).

(b) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d).

iv. Identification of instrumentation systems subject to the provisions of this section. Individual components in an instrumentation system need not be identified.

v. The permittee shall record the following information for each dual mechanical seal system:

(a) Design criteria required by A.18.h.vi.(a) of these terms and conditions and 40 CFR 63.164(e)(2) and an explanation of the design criteria; and

(b) Any changes to these criteria and the reasons for the changes.

vi. A list of equipment designated as unsafe to monitor, difficult to monitor, or inaccessible under A.29. or A.25.a.ii. of these terms and conditions and a copy of the plan for monitoring or inspecting this equipment.

vii. A list of connectors removed from and added to the process, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

viii. For batch processes that the permittee elects to monitor as provided under 40 CFR 63.178(c), a list of equipment added to batch product processes since the last monitoring period required in 40 CFR 63.178(c)(3)(ii) and (iii). This list must be completed for each type of equipment within 15 calendar days of the completion of each monitoring survey for the type of equipment monitored.

c. (RK) Records of Visual Inspections. For visual inspections of equipment subject to the provisions of A.18.c. and A.18.h.iv. of these terms and conditions, the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in A.30.d. for leaking equipment identified in this inspection, except as provided in A.30.e. These records shall be retained for 5 years.

d. (RK) Monitoring Records. When each leak is detected as specified in A.18. and A.23. of these terms and conditions and 40 CFR 63.164, 40 CFR 63.169, 40 CFR 63.172, and 40 CFR 63.174, the permittee shall record the information specified in A.30.d.i. through ix. below. All records shall be retained for 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1).

i. The instrument and the equipment identification number and the operator name, initials, or identification number.

ii. The date the leak was detected and the date of first attempt to repair the leak.

iii. The date of successful repair of the leak.

iv. If postrepair monitoring is required, maximum instrument reading measured by Method 21 of 40 CFR, Part 60, Appendix A, after it is successfully repaired or determined to be nonrepairable.

v "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(a) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.1367(a), for the source or may be part of a separate document that is maintained at the plant site. Reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

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

vi If repairs were delayed, dates of process shutdowns that occur while the equipment is unrepaired.

vii. (a) If the alternative in 40 CFR 63.174(c)(1)(ii) is not in use for the monitoring period, identification, either by list, location (area or grouping), or tagging of connectors disturbed since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1).

(b) The date and results of follow-up monitoring as required in 40 CFR 63.174(c). If identification of disturbed connectors is made by location, then all connectors within the designated location shall be monitored.

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

ix. Copies of the periodic reports as specified in A.31.c. of these terms and conditions, if records are not maintained on a computerized database capable of generating summary reports from the records.

e. (RK) Records of Pressure Tests. The permittee who elects to pressure test a process equipment train and supply lines between storage and processing areas to demonstrate compliance with this section is exempt from the requirements of A.30.b., c., d., and f. Instead, the permittee shall maintain records of the following information:

i. The identification of each product, or product code, produced during the calendar year. It

is not necessary to identify individual items of equipment in the process equipment train.

ii. Records demonstrating the proportion of the time during the calendar year the equipment is in use in the process that is subject to the provisions of this subpart. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the permittee does not adjust monitoring frequency by the time in use, as provided in 40 CFR 63.178(c)(3)(iii).

iii. Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this section is not required. Equipment in a process subject to the provisions of this section may be identified on a plant site plan, in log entries, or by other appropriate methods.

iv. The dates of each pressure test required in 40 CFR 63.178(b), the test pressure, and the pressure drop observed during the test.

v. Records of any visible, audible, or olfactory evidence of fluid loss.

vi. When a process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(a) The date of each pressure test and the date of each leak repair attempt.

(b) Repair methods applied in each attempt to repair the leak.

(c) The reason for the delay of repair.

(d) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(e) The date of successful repair.

f. (RK) Records of Compressor and Pressure Relief Valve Compliance Tests. The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165(a) and (b). The results shall include:

i. The background level measured during each compliance test.

ii. The maximum instrument reading measured at each piece of equipment during each compliance test.

g. (RK) Records for Closed-vent Systems. The permittee shall maintain records of the information specified in A.30.g.i. through iii. below for closed-vent systems and control devices subject to the provisions of A.26. of these terms and conditions. The records specified in A.30.g.i. shall be retained for the life of the equipment. The records specified in A.30.g.ii. and iii. shall be retained for 5 years.

i. The design specifications and performance demonstrations specified in A.30.g.i.(a) through (d).

(a) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

(b) The dates and descriptions of any changes in the design specifications.

(c) The flare design (i.e., steam assisted, air assisted, or nonassisted) and the results of the compliance demonstration required by 40 CFR 63.11(b).

(d) A description of the parameter or parameters monitored, as required in A.26. of these terms and conditions, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

ii. Records of operation of closed vent systems and control devices.

(a) Dates and durations when the closed-vent systems and control devices required in A.18. of these terms and conditions and 40 CFR 63.164 through 40 CFR 63.166 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(b) Dates and durations during which the monitoring system or monitoring device is inoperative.

(c) Dates and durations of startups and shutdowns of control devices required in A.18. of these terms and conditions and 40 CFR 63.164 through 40 CFR 63.166.

iii. Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172.

(a) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(b) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in A.30.d. shall be recorded.

h. (RK) Records for Components in Heavy Liquid Service. Information, data, and analysis used to determine that a piece of equipment or process is in heavy liquid service shall be recorded. Such a determination shall include an analysis or demonstration that the process fluids do not meet the criteria of "in light liquid or gas/vapor service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

i. (RK) Records of Exempt Components. Identification, either by list, location (area or group), or other method of equipment in organic HAP service less than 300 hr/yr subject to the provisions of this section.

j. (RK) Records of Alternative Means of Compliance Determination. Owners and operators choosing to comply with the requirements of 40 CFR 63.179 shall maintain the following records:

i. Identification of the process(es) and the organic HAP they handle.

ii. A schematic of the process, enclosure, and closed-vent system.

iii. A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.
[63.1363(g)]

31. 40 CFR 63.1363(h) - Reporting Requirements

a. (RP) Each permittee of a source subject to this section shall submit the reports listed in A.31.a.i. and ii.

i. A Notification of Compliance Status report described in A.31.b., and

ii. Periodic reports described in A.31.c.

b. (RP) Notification of compliance status report. Each permittee of a source subject to this section shall submit the information specified in A.31.b.i. through iii. in the Notification of Compliance Status report described in 40 CFR 63.1368(f). 40 CFR 63.9(j) shall not apply to the Notification of Compliance Status report.

i. The notification shall provide the information listed in A.31.b.i.(a) through (c) for each group of processes subject to the requirements of A.17. through A.30. of these terms and conditions.

(a) Identification of the group of processes.

(b) Approximate number of each equipment type (e.g., valves, pumps) in organic HAP service, excluding equipment in vacuum service.

(c) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

ii. The notification shall provide the information listed in A.31.b.ii.(a) and (b) for each process subject to the requirements of 40 CFR 63.178(b).

(a) Products or product codes subject to the provisions of this section, and

(b) Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of this section.

iii. The notification shall provide the information listed in A.31.b.iii.(a) and (b) for each

process subject to the requirements in 40 CFR 63.179.

(a) Process identification.

(b) A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of 40 CFR 63.1363(b)(3)(ii).

c. (RP) Periodic reports. The permittee of a source subject to this section shall submit Periodic reports.

i. A report containing the information in A.31.c.ii., iii., and iv. below shall be submitted semiannually. The first Periodic report shall be submitted no later than 240 days after the date the Notification of Compliance Status report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status report is due. Each subsequent Periodic report shall cover the 6-month period following the preceding period.

ii. For equipment complying with the provisions of A.17. through A.30. of these terms and conditions, the Periodic report shall contain the summary information listed in A.31.c.ii.(a) through (l) below for each monitoring period during the 6-month period.

(a) The number of valves for which leaks were detected as described in A.23.b. of these terms and conditions, the percent leakers, and the total number of valves monitored;

(b) The number of valves for which leaks were not repaired as required in A.23.g. of these terms and conditions, identifying the number of those that are determined nonrepairable;

(c) The number of pumps and agitators for which leaks were detected as described in A.18.c. of these terms and conditions, the percent leakers, and the total number of pumps and agitators monitored;

(d) The number of pumps and agitators for which leaks were not repaired as required in A.18.d. through e. of these terms and conditions;

(e) The number of compressors for which leaks were detected as described in 40 CFR 63.164(f);

(f) The number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g);

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

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

(i) The facts that explain any delay of repairs and, where appropriate, why a process shutdown was technically infeasible;

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

(k) If applicable, the initiation of a monthly monitoring program under either A.18.f. or A.23.d.i. of these terms and conditions; and

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

iii. For owners or operators electing to meet the requirements of 40 CFR 63.178(b), the Periodic report shall include the information listed in A.31.c.iii.(a) through (e) below for each process.

(a) Product process equipment train identification;

(b) The number of pressure tests conducted;

(c) The number of pressure tests where the equipment train failed either the retest or two consecutive pressure tests;

(d) The facts that explain any delay of repairs; and

(e) The results of all monitoring to determine compliance with 40 CFR 63.172(f).

iv. Any change in the information submitted under A.31.b. shall be provided in the next Periodic report.
[63.1363(h)]

32. 40 CFR 63.1366(a) - General Monitoring Requirements

To provide evidence of continued compliance with the requirements of 40 CFR, Part 63, Subpart MMM, the permittee shall install, operate, and maintain monitoring devices as specified in this permit. During the initial compliance demonstration, maximum or minimum operating parameter levels, or other design and operating characteristics, as appropriate, shall be established for the PAI PU that will indicate the source is

in compliance. Test data, calculations, or information from the evaluation of the control device design, as applicable, shall be used to establish the operating parameter level or characteristic. [63.1366(a)]

33. 40 CFR 63.1366(b)(1) - General Monitoring Requirements

If the permittee operates a process vent as a part of the PAI PU that uses a control device to comply with the requirements of 40 CFR 63.1362 shall install and operate monitoring devices and operate within the established parameter levels to ensure continued compliance with the standard. [63.1366(b)(1)]

34. 40 CFR 63.1366(b)(1)(ii) - Scrubber Monitoring Requirements

The permittee shall establish a minimum scrubber liquid flow rate or pressure drop as a site-specific operating parameter which must be measured and recorded at least once every 15 minutes during the period in which the scrubber is controlling HAP from an emission stream as required by the standards in

40 CFR 63.1362. If the scrubber uses a caustic solution to remove acid emissions, the pH of the effluent scrubber liquid shall also be monitored once a day. The minimum scrubber liquid flow rate or pressure drop shall be based on the conditions under which the initial compliance demonstration was conducted.

a. The monitoring device used to determine the pressure drop shall be certified by the manufacturer to be accurate to within a gage pressure of ±10 percent of the maximum pressure drop measured.

b. The monitoring device used for measurement of scrubber liquid flow rate shall be certified by the manufacturer to be accurate to within ±10 percent of the design scrubber liquid flow rate.

c. The monitoring device shall be calibrated annually.
[63.1366(b)(1)(ii)]

35. 40 CFR 63.1366(b)(1)(v) - Non-regenerative Carbon Adsorption Monitoring Requirements

The permittee shall replace the existing carbon bed in the control device with fresh carbon on a regular schedule based on one of the following procedures:

a. Monitor the TOC concentration level in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity under absolute or hypothetical peak-case conditions as defined in 40 CFR 63.1365(b)(11)(i) or (ii), whichever is longer.

b. Establish the maximum time interval between replacements, and replace the existing carbon before this time interval elapses. The time interval shall be established based on the conditions anticipated under absolute or hypothetical peak-case, as defined in 40 CFR 63.1365(b)(11)(i) or (ii).
[63.1366(b)(1)(v)]

36. 40 CFR 63.1366(b)(1)(xii) - Wastewater Monitoring Requirements

For each waste management unit, treatment process, or control device used to comply with 40 CFR 63.1362(d), the permittee shall comply with the procedures specified in 40 CFR 63.143, except that when the procedures to request approval to monitor alternative parameters according to the procedures in 40 CFR 63.151(f) are referred to in 40 CFR 63.143(d)(3), the procedures in 40 CFR 63.1366(b)(4) shall apply for the purposes.
[63.1366(b)(1)(xii)]

37. 40 CFR 63.1366(b)(1)(xiii) - Closed-vent System Visual Inspection Requirements

The permittee shall perform monthly visual inspections of each closed vent system bypass line as specified in 40 CFR 63.1362(j).
[63.1366(b)(1)(xiii)]

38. 40 CFR 63.1366(b)(2) - Averaging Periods.

Averaging periods for parametric monitoring levels shall be established according to A.38.a. through c.

a. Except as provided in A.38.c., a daily (24-hour) or block average shall be calculated as the average of all values for a monitored parameter level set according to the procedures in A.38.c. recorded during the operating day or block.

b. The operating day or block shall be defined in the Notification of Compliance Status report. The operating day may be from midnight to midnight or another continuous 24-hour period. The operating block may be used as an averaging period only for vents from batch operations, and is limited to a period of time that is, at a maximum, equal to the time from the beginning to end of a series of consecutive batch operations.

c. Monitoring values taken during periods in which the control devices are not controlling HAP from an emission stream subject to the standards in 40 CFR 63.1362, as indicated by periods of no flow or periods when only streams that are not subject to the standards in 40 CFR 63.1362 are controlled, shall not be considered in the averages. Where flow to the device could be intermittent, the permittee shall install, calibrate and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.
[63.1366(b)(2)]

39. 40 CFR 63.1366(b)(3) - Procedures for Setting Parameter Levels for Control Devices

a. Small control devices: except as provided in 40 CFR 63.1363(b)(1)(i), for devices controlling less than 10 tons/yr of HAP for which a performance test is not required, the parametric levels shall be set based on the design evaluation required in 40 CFR 63.1365(c)(3)(i)(A). If a performance test is conducted, the monitoring parameter level shall be established according to the procedures in A.39.b.ii.

b. Large control devices: for devices controlling greater than or equal to 10 tons/yr of HAP for which a performance test is required, the parameter level must be established as follows:

i. If the operating parameter level to be established is a maximum or minimum, it must be based on the average of the average values from each of the three test runs.

ii. The permittee may establish the parametric monitoring level(s) based on the performance test supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values. The rationale for the specific level for each parameter, including any

data and calculations used to develop the level(s) and a description of why the level indicates proper operation of the control device shall be provided in the Precompliance plan. Determination of the parametric monitoring level using these procedures is subject to review and approval by the Director.

c. Parameter levels for control devices controlling batch process vents: for devices controlling batch process vents alone or in combination with other streams, the level(s) shall be established in accordance with A.39.c.i. or c.ii.

i. A single level for the batch process(es) shall be calculated from the initial compliance demonstration.

ii. The permittee may establish separate levels for each batch emission episode or combination of emission episodes selected to be controlled. If separate monitoring levels are established, the permittee must provide a record indicating at what point in the daily schedule or log of processes required to be recorded per the requirements of 40 CFR 63.1367(b)(7), the parameter being monitored changes levels and must record at least one reading of the new parameter level, even if the duration of monitoring for the new parameter level is less than 15 minutes.

40. 40 CFR 63.1366(b)(4) - Requesting Approval to Monitor Alternative Parameters.

The permittee may request approval to monitor parameters other than those required by 40 CFR, Part 63, Subpart MMM. The request shall be submitted according to the procedures specified in 40 CFR 63.8(f) or in the Precompliance report (as specified in 40 CFR 63.1368(e)).

41. 40 CFR 63.1366(b)(6) - Exceedances of Operating Parameters

An exceedance of an operating parameter is defined as one of the following:

a. If the parameter level, averaged over the operating day or block, is below a minimum value established during the initial compliance demonstration.

b. If the parameter level, averaged over the operating day or block, is above the maximum value established during the initial compliance demonstration.

c. Each operating day or block for which the time interval between replacement of a nonregenerative carbon adsorber exceeds the interval established in A.35.b.

42. 40 CFR 63.1366(b)(7) - Excursions

Excursions are defined by either of the two cases listed in A.42.a. or b.

a. When the period of control device operation is 4 hours or greater in an operating day or block and monitoring data are insufficient to constitute a valid hour of data, as defined in A.42.c., for at least

75 percent of the operating hours.

b. When the period of control device operation is less than 4 hours in an operating day or block and more than 1 of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data.

c. Monitoring data are insufficient to constitute a valid hour of data, as used in A.42.a. and b., if measured values are unavailable for any of the required 15-minute periods within the hour.

43. 40 CFR 63.1366(b)(8) - Violations

Exceedances of parameters monitored according to the provisions of A.13. and A.14. of these terms and conditions or excursions as defined in A.21. of these terms and conditions constitute violations of the operating limit according to A.43.a., b. or c.

a. Except as provided in 40 CFR 63.1366(b)(8)(iv), for episodes occurring more than once per day, exceedances of established parameter limits or excursions will result in no more than one violation per operating day for each monitored item of equipment utilized in the process.

b. Except as provided in 40 CFR 63.1366(b)(8)(iv), for control devices used for more than one process in the course of an operating day, exceedances or excursions will result in no more than one violation per operating day, per control device, for each process for which the control device is in service.

c. Periods of time when monitoring measurements exceed the parameter values as well as periods of inadequate monitoring data do not constitute a violation if they occur during a startup, shutdown, or malfunction, and the facility follows its SSMP.

44. 40 CFR 63.1366(b)(8) - Monitoring for equipment leaks.

The standard for equipment leaks is based on monitoring. All monitoring requirements for equipment leaks are specified in 40 CFR 63.1363.

45. 40 CFR 63.1367(a)(1) - General Record Keeping Requirements

(RK) The permittee 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.
[63.10(b)(1), 63.1367(a)(1)]

46. 40 CFR 63.1367 (a)(3) - Startup, Shutdown, and Malfunction Plan Requirements

a. The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) that describes, in detail, procedures for operating and maintaining the PAI PU during periods of startup, shutdown, and malfunction and a program for corrective action for a malfunctioning process, air pollution control, and monitoring equipment used to comply with 40 CFR, Part 63, Subpart MMM.
[63.1367 (a)(3)]

The purpose of the startup, shutdown, and malfunction plan is to:

i. Ensure that, at all times, owners or operators operate and maintain the PAI PU, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;

ii. Ensure that owners or operators are prepared to correct malfunctions as soon as practicable
after their occurrence in order to minimize excess emissions of HAPs; and

iii. Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation). [63.6(e)(3)(i)]

[In order to satisfy the requirements of aforementioned SSMP requirements, the permittee may use the PAI PU's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Director.]
[63.6(e)(3)(vi)]

b. During periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the PAI PU (including associated air pollution control equipment) in accordance with the procedures specified in the SSMP.
[63.6(e)(3)(ii)]

c. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the SSMP required by this permit), review of operation and maintenance records, and inspection of the PAI PU.
[63.6(e)(2)]

d. Based on the results of the aforementioned determination, the Director may require that the permittee make changes to the SSMP for the PAI PU. The Director may require reasonable revisions to a SSMP, if the Director finds that the plan:

i. Does not address a startup, shutdown, or malfunction event that has occurred;

ii. Fails to provide for the operation of the PAI PU (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with

good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;

iii. Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
[63.6(e)(3)(vii)]

e. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the SSMP at the time the permittee developed the plan, the permittee shall revise the SSMP within 45 days after the event to include detailed procedures for operating and maintaining the PAI PU during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment.
[63.6(e)(3)(viii)]

f. The permittee shall keep the written SSMP on record after it is developed to be made available for inspection, upon request, by the Director for the life of the PAI PU or until the PAI PU is no longer subject to the provisions of 40 CFR, Part 63, Subpart MMM. In addition, if the SSMP is revised, the permittee shall keep previous (i.e., superseded) versions of the SSMP on record, to be made available for inspection, upon request, by the Director, for a period of 5 years after each revision to the plan.
[63.6(e)(3)(v)]

47. 40 CFR 63.1367 (a)(3) - Startup, Shutdown, and Malfunction Plan Record Keeping Requirements

(RP) The permittee shall keep the startup, shutdown, and malfunction records specified below:

a. The permittee shall record the occurrence and duration of each malfunction of air pollution control equipment used to comply with this subpart, as specified in 40 CFR 63.6(e)(3)(iii).

b. The permittee shall record the occurrence and duration of each malfunction of continuous monitoring systems used to comply with this subpart.

c. For each startup, shutdown, or malfunction, the permittee shall record all information necessary to demonstrate that the procedures specified in the PAI PU's SSMP were followed, as specified in 40 CFR 63.6(e)(3)(iii); alternatively, the permittee shall record any actions taken that are not consistent with the plan, as specified in 40 CFR 63.6(e)(3)(iv).
[63.1367(a)(3)]

48. 40 CFR 63.1367 (b) Equipment Operation Record Keeping Requirements

(RK) The permittee shall keep the following records up-to-date and readily accessible:

a. Each measurement of a control device operating parameter monitored in accordance with 40 CFR 63.1366 and each measurement of a treatment process parameter monitored in accordance with the provisions of 40 CFR 63.1362(d).

b. The permittee shall maintain up-to-date, readily accessible records of the following information to document that HAP emissions or HAP loadings (for wastewater) are below the limits specified in 40 CFR 63.1362 for process vents, storage tanks, and wastewater systems:

i The initial calculations of uncontrolled and controlled emissions of gaseous organic HAP and HCl per batch for each process.

ii The wastewater concentrations and flow rates per POD and process.

iii The number of batches per year for each batch process.

iv A description of absolute or hypothetical peak-case operating conditions as determined using the procedures in 40 CFR 63.1365(b)(11).

v Periods of planned routine maintenance as described in 40 CFR 63.1362(c)(5).

c. Daily schedule or log of each operating scenario prior to its operation. [63.1367(b)]

49. 40 CFR 63.1367(c) - Equipment LDAR Record Keeping Requirements

(RK) The permittee of an affected source subject to the equipment leak standards in 40 CFR 63.1363 shall implement the record keeping requirements specified in 40 CFR 63.1363(g). All records shall be retained for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1). [63.1367(c)]

50. 40 CFR 63.1367(f) - Bypass Lines Record Keeping Requirements

(RK) For each vapor collection system or closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee shall keep a record of the information specified in either A.50.a. or b. below.

a. Hourly records of whether the flow indicator specified under 40 CFR 63.1362(j)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.

b. Where a seal mechanism is used to comply with 40 CFR 63.1362(j)(2), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the

seals or closure mechanism has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any carseal that has broken.
[63.1367(f)]

51. 40 CFR 63.1368(b) - Initial Notification Requirements

(RP) The permittee shall submit the applicable initial notification in accordance with 40 CFR 63.9(b) or (d).
[63.1368(b)]

The permittee 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 40 CFR 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.
[63.9(b)(5)]

Note: The applicant has fulfilled the Initial Notification Requirement by submitting a complete Permit to Install application for the approval of construction of this PAI PU.

52. 40 CFR 63.1368(f) - Notification of Compliance Status Requirements

(RP) The Notification of Compliance Status report required under 40 CFR 63.9(h) shall be submitted no later than 150 calendar days after the compliance date and shall include the following information:

a. The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP emissions from the PAI PU.

b. The results of emissions profiles, performance tests, engineering analyses, design evaluations, or calculations used to demonstrate compliance. For performance tests, results should include descriptions of sampling and analysis procedures and quality assurance procedures.

c. Descriptions of monitoring devices, monitoring frequencies, and the values of monitored parameters established during the initial compliance determinations, including data and calculations to support the levels established.

d. Operating scenarios.

e. Descriptions of absolute or hypothetical peak-case operating and/or testing conditions for control devices.

[63.1368(f)]

53. 40 CFR 63.1368(g) - Periodic Reporting Requirements

(RP) Except as provided in A.53.a. and b. below, the permittee shall submit Periodic reports semiannually, beginning 60 operating days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status report is due. The Director may determine on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the affected source.

The report shall include the following information, as applicable:

a. Each Periodic report must include the information in accordance with 40 CFR 63.10(e)(3)(vi)(A) through (M).

i. The company name and address of the affected source;

ii. An identification of each HAP monitored at the affected source;

iii. The beginning and ending dates of the reporting period;

iv. A brief description of the process units;

v. The emission and operating parameter limitations specified in the relevant standard(s);

vi. The monitoring equipment manufacturer(s) and model number(s);

vii. The date of the latest CMS certification or audit;

viii. The total operating time of the affected source during the reporting period;

ix. An emission data summary (or similar summary if the permittee monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

x. A CMS performance summary (or similar summary if the permittee monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/ quality control calibrations, other known causes, and other unknown causes;

xi. A description of any changes in CMS, processes, or controls since the last reporting period;

xii. The name, title, and signature of the responsible official who is certifying the accuracy of

the report; and

xiii. The date of the report.

b. If the total duration of excess emissions, parameter exceedances, or excursions for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total continuous monitoring system downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the Periodic report must include the information in A.53.b.i. through iv. below.

i. Monitoring data, including 15-minute monitoring values as well as daily average values of monitored parameters, for all operating days when the average values were outside the ranges established in the Notification of Compliance Status report or operating permit.

ii. Duration of excursions, as defined in 40 CFR 63.1366(b)(7).

iii. Operating logs and operating scenarios for all operating days when the values are outside the levels established in the Notification of Compliance Status report or operating permit.

iv. When a continuous monitoring system is used, the information required in 40 CFR 63.10(c)(5) through (13).

c. For each vapor collection system or closed vent system with a bypass line subject to 40 CFR 63.1362(j)(1), records required under 40 CFR 63.1366(f) of all periods when the vent stream is diverted from the control device through a bypass line. For each vapor collection system or closed vent system with a bypass line subject to 40 CFR 63.1362(j)(2), records required under 40 CFR 63.1366(f) of all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.

d. The information in A.53.d.i. through iv. below shall be stated in the periodic report, when applicable.

i. No excess emissions.

ii. No exceedances of a parameter.

iii. No excursions.

iv. No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.

e. Updates to the corrective action plan.
[63.1368(g), 63.10(e)(3)(vi)]

54. 40 CFR 63.1368(h) - Process Change Reporting Requirements

a. Except as specified in A.54.b., whenever a process change is made, or any of the information submitted in the Notification of Compliance Status report changes, the permittee shall submit a report quarterly. The report may be submitted as part of the next periodic report required under A.53. of these terms and conditions. The report shall include:

i. A brief description of the process change;

ii. A description of any modifications to standard procedures or quality assurance procedures;

iii. Revisions to any of the information reported in the original Notification of Compliance Status report under A.52. of these terms and conditions; and

iv. Information required by the Notification of Compliance Status report under A.52. of these terms and conditions for changes involving the addition of processes or equipment.

b. The permittee must submit a report 60 days before the scheduled implementation date of either of the following:

i. Any change in the activity covered by the Precompliance report.

ii. A change in the status of a control device from small to large.
[63.1368(h)]

55. 40 CFR 63.1368(i) - SSMP Reporting Requirements

(RP) The SSMP reports shall be submitted on the same schedule as the periodic reports required under A.53. of these terms and conditions. These reports shall include the information specified in A.47.a. through A.47.c. of these terms and conditions and shall contain the name, title, and signature of the permittee or other responsible official who is certifying its accuracy. Reports are only required if a startup, shutdown, or malfunction occurred during the reporting period. Any time the permittee takes an action that is not consistent with the procedures specified in the PAI PU's SSMP, the permittee shall submit an immediate startup, shutdown, and malfunction report as specified in 40 CFR 63.10(d)(5)(ii).
[63.1368(i)]

56. 40 CFR 63.1368(j) - Equipment Leak Reporting Requirements

(RP) The permittee shall implement the reporting requirements specified in 40 CFR 63.1363(h). Copies of all reports shall be retained as records for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1).
[63.1368(j)]

57. 40 CFR 63.1368(m) - Performance Test and Test Plan Notification Requirements

(RP) The permittee shall notify the Director of the planned date of a performance test at least 60 days

before the test in accordance with 40 CFR 63.7(b). The permittee also must submit the test plan required by 40 CFR 63.7(c) and the emission profile required by 40 CFR 63.1365(b)(10)(ii) with the notification of the performance test.
[63.1368(m)]

## B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | | Applicable Rules/Requirements |
|---|---|---|
| P025 - methyl iodide pesticide active ingredient (PAI) process unit (PU), consisting of 2 reactors, a rotary dryer, an integral process condenser, a metering tank, a mix tank (for adding sodium bicarbonate and sodium thiosulfate), a 10,000 gal wastewater storage tank, a 10,000 gal methanol storage tank, a 10,000 gal methyl iodide storage tank, and a 2,000 gal methyl iodide storage tank<br><br>Organic compound emissions from the entire source are controlled by a carbon adsorber and particulate matter emissions are controlled by a wet scrubber. The adsorber and scrubber are in series although the particulate emission streams | exhaust only to the scrubber. | OAC rule 3745-31-05(A)(3) |

| | Applicable Emissions Limitations/Control Measures | |
|---|---|---|
| | | The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subpart MMM. |
| | Particulate emissions (PE) from the scrubber serving this emissions unit shall not exceed 0.01 gr/dscf (0.17 lb/hr) and 0.75 TPY. | The emission limitation established in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11(B)(1) | Emissions of organic compounds (OC) from the stack serving this emissions unit shall not exceed 0.50 lb/hr and 0.97 TPY. | The visible emission limitation specified in this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).<br><br>The requirements established pursuant to this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-07(A)(1) | Uncontrolled OC emissions from this emissions unit shall be reduced by at least 90% by weight. | The visible emission limitation specified in this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-08(B) | Visible emissions from the scrubber stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average. | This emissions unit is exempt from the requirements of this rule as no photochemically reactive materials are employed in this process. |
| OAC rule 3745-17-07(B)(1) | Fugitive particulate emissions from the loading of solids into the mixing tanks shall not exceed 0.16 TPY. | See sections A.1. through A.57. of Part II - Facility Specific Terms and Conditions. |
| OAC rule 3745-21-07(G)(2) | Visible emissions of fugitive dust from the loading of solids into the mixing tank shall not exceed 10 % opacity, as a three-minute average. | |
| 40 CFR, Part 63, Subpart MMM | The permittee shall employ best available control measures when loading solid materials into the mixing tank in order to minimize or eliminate visible emissions of fugitive dust. This shall include enclosing the loading area. | |

**2. Additional Terms and Conditions**

**2.a** The annual emission limitations above are based upon this emissions unit's potential to emit (122 batches/yr, 72 hours/batch). Therefore, no annual record keeping or reporting are required to demonstrate compliance with these limitations.

## II. Operational Restrictions

(Restrictions on control equipment parameters are specified in Part II - Facility Specific Terms and Conditions.)

## III. Monitoring and/or Record Keeping Requirements

(Parametric monitoring for the control equipment is specified in Part II - Facility Specific Terms and Conditions.)

## IV. Reporting Requirements

(Reporting requirements are specified in Part II - Facility Specific Terms and Conditions as well as in the General Terms and Conditions of this permit.)

## V. Testing Requirements

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

1.a Emission Limitation:
Visible emissions from the scrubber stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the visible emission limitation shall be determined by Method 9 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitation:
0.01 gr of PE/dscf (0.17 lb of PE/hr) and 0.75 TPY of PE

Applicable Compliance Method:
Compliance with the hourly PE limitation specified above shall be determined by the stack testing required in section V.2. of these terms and conditions. The annual emission

limitation was created by multiplying the hourly emission limitation by 8,760 hours and dividing by 2,000 lbs/ton.

1.c Emission Limitation:
0.50 lb of OC/hr and 0.97 TPY of OC

Applicable Compliance Method:
Compliance with the hourly OC emission limitation specified above shall be determined by the stack testing required in section V.2. of these terms and conditions. The annual emission limitation was created by multiplying an emission factor of 15.9 lbs of OC/batch by the maximum number of batches per year (122). The emission factor is the sum of all emissions from all egress points leading to the control equipment using a control efficiency of 90%, on a per-batch basis. The factor is based on the equations for each egress point provided in 40 CFR, Part 63, Subpart MMM.

1.d Emission Limitation:
Fugitive particulate emissions from the loading of solids into the mixing tanks shall not exceed 0.16 TPY.

Applicable Compliance Method:
Compliance with the annual fugitive emission limitation shall be determined by multiplying the number of batches per year by an emission factor of 2.48 lbs/batch and dividing by 2,000 lbs/ton. The emission factor is mutually agreed upon between the permittee and Ohio EPA and is considered to be conservatively high.

1.e Emission Limitation:
Visible emissions of fugitive dust from the loading of solids into the mixing tank shall not exceed 10% opacity, as a three-minute average.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined by Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

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

a. The emission testing shall be conducted within 3 months after startup of the emissions unit.

b. The emission testing shall be conducted to determine compliance with the emission limitation of 0.50 lb/hr of total OC, the emission limitation of 0.01 gr/dscf of total PE, and the control efficiency for OC of 90% by weight. The following methods shall be used to determine compliance with the emission limitation:

For OC: 40 CFR, Part 60, Appendix A, Methods 1-4 and 25 (or alternative methods approved by Ohio EPA). Testing using this method shall be performed at the inlet to the condenser as well as the outlet of the scrubber in order to determine compliance with the 90% control efficiency requirement.

For PE: 40 CFR, Part 60, Appendix A, Methods 1-5 (or alternative methods approved by Ohio EPA).

c. 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 Northeast District Office of Ohio EPA (NEDO).

d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to NEDO and the Lake County General Health District (LCGHD). 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 NEDO's refusal to accept the results of the emission test(s).

Personnel from NEDO and LCGHD 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 test(s) and submitted to NEDO within 30 days following completion of the test(s).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P025 - methyl iodide pesticide active ingredient (PAI) process unit (PU), consisting of 2 reactors, a rotary dryer, an integral process condenser, a metering tank, a mix tank (for adding sodium bicarbonate and sodium thiosulfate), a 10,000 gal wastewater storage tank, a 10,000 gal methanol storage tank, a 10,000 gal methyl iodide storage tank, and a 2,000 gal methyl iodide storage tank | None | None |

**2. Additional Terms and Conditions**

**2.a** 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