State of Ohio Environmental Protection Agency

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

Street Address:
122 S. Front Street
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Application No: 01-01319
Fac ID: 0125093096
DATE: 5/9/2006

Firm Green Fuels of Ohio
Dennis Meinert
100 Frankfort Square - Suite 106
Columbus, OH 43206

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **CDO**

OhioEPA

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 5/9/2006**
Terms and Conditions	**Effective Date: 5/9/2006**

FINAL PERMIT TO INSTALL 01-01319

Application Number:	01-01319
Facility ID:	0125093096
Permit Fee:	**$2150**
Name of Facility:	Firm Green Fuels of Ohio
Person to Contact:	Dennis Meinert
Address:	100 Frankfort Square - Suite 106 Columbus, OH 43206

Location of proposed air contaminant source(s) [emissions unit(s)]:
3857 London-Groveport Rd
Grove City, **Ohio**

Description of proposed emissions unit(s):
Methanol production.

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 (i.e., postmarked) quarterly, 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification

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, 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 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 (i.e., postmarked) quarterly, 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

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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., postmarked), 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
OC	24.76
NOx	69.2
CO	51.03
PM	10.5
SO2	0.088
Metals	< 1

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. [40 CFR Part 63, Subpart F]
Applicability and general provisions for terms and conditions A.2 and A.3 of Part II - Facility Specific Terms and Conditions

1.a [40 CFR 63.100(b)]
The provisions of A.1, A.2 and A.3 apply to chemical manufacturing process units (CMPU) that meet all the criteria specified in A.1.a.i, A.1.a.ii, and A.1.a.iii below:

i. [40 CFR 63.100(b)(1)(i)]
manufacture as a primary product one or more of the chemicals listed in Table 1 of A.1.p;

ii. [40 CFR 63.100(b)(2)]
use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants (HAP) listed in Table 2 of A.1.p; and

iii. [40 CFR 63.100(b)(3)]
located at a plant site that is a major source.

1.b [40 CFR 63.100(d)]
The primary product of a CMPU shall be determined according to the procedures specified in A.1.b.i and A.1.b.ii.

i. [40 CFR 63.100(d)(1)]
If a CMPU produces more than one intended chemical product, the product with the greatest annual design capacity on a mass basis determines the primary product of the process.

ii. Reserved

iii. Reserved

(1) Reserved

(2) Reserved

1.c [40 CFR 63.100(e)]
The source to which A.1, A.2 and A.3 applies is the collection of the process vents; storage vessels; transfer racks; waste management units; maintenance wastewater; heat exchange systems; equipment identified in A.2.z; and pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, surge control vessels, and bottoms

receivers that are associated with the collection of all CMPUs at a major source that meet the criteria specified in A.1.a.i through A.1.a.iii. The source also includes equipment required by, or utilized as a method of compliance with A.1, A.2 or A.3 which may include control devices and recovery devices.

i. [40 CFR 63.100(e)(1)]
A.1 applies to maintenance wastewater and heat exchange systems within a source that is subject to A.1.

ii. [40 CFR 63.100(e)(2)]
A.1 and A.2 apply to process vents, storage vessels, transfer racks, equipment identified in A.2.z, and wastewater streams and associated treatment residuals within a source that is subject to A.1.

iii. [40 CFR 63.100(e)(3)]
A.1 and A.3 apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, surge control vessels, and bottoms receivers within a source that is subject to A.1.

1.d [40 CFR 63.100(f)]
The source includes the emission points listed in A.1.d.i through A.1.d.xi, but those emission points are not subject to the requirements of A.1, A.2, and A.3 or the requirements of 40 CFR Part 63, Subpart A.

i. Equipment that is located within a CMPU that is subject to A.1 but the equipment does not contain organic HAPs.

ii. Storm water from segregated sewers;

iii. Water from fire-fighting and deluge systems in segregated sewers;

iv. Spills;

v. Water from safety showers;

vi. Water from testing of deluge systems;

vii. Water from testing of firefighting systems;

viii. Vessels storing organic liquids that contain organic HAPs only as impurities;

ix. Loading racks, loading arms, or loading hoses that only transfer liquids containing organic HAPs as impurities;

x. Loading racks, loading arms, or loading hoses that vapor balance during all loading operations; and

xi. Equipment that is intended to operate in organic HAP service for less than 300 hours during the calendar year.

1.e Reserved

1.f Reserved

1.g Reserved

1.h [40 CFR 63.100(k)]
Except as provided in A.1.i and A.1.j, sources subject to A.1, A.2, or A.3 are required to achieve compliance on or before the dates specified in A.1.h.i through A.1.h.v.

i. [40 CFR 63.100(k)(1)(ii)]
New sources that commence construction after August 26, 1996 shall be in compliance with A.1, A.2, and A.3 upon initial start-up or by January 17, 1997, whichever is later.

ii. Reserved

iii. Reserved

iv. Reserved

v. [40 CFR 63.100(k)(9)]
All terms in A.1 or A.2 that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), unless specified otherwise in the section that imposes the requirement, refer to the standard calendar periods.

(1) [40 CFR 63.100(k)(9)(ii)]
Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in sections (a) or (b) below, as appropriate.

(a) [40 CFR 63.100(k)(9)(ii)(A)]

Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if

there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(b) [40 CFR 63.100(k)(9)(ii)(B)]
In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(2) [40 CFR 63.100(k)(9)(iii)]
In all instances where a section of A.1 or A.2 requires completion of a task during each of multiple successive periods, the permittee may perform the required task at any time during the specified period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

1.i i. [40 CFR 63.100(l)(1)(i), (l)(1)(ii)(A), & (l)(1)(iii)]
If the permittee adds an additional CMPU meeting the criteria specified in A.1.a to the facility, the addition shall be subject to the requirements for a new source in A.1, A.2, and A.3 if it is an addition that meets the definition of construction, such construction commenced after December 31, 1992, and the addition has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.

ii. [40 CFR 63.100(l)(2)(i) & (l)(2)(ii)(A)]
If any change is made to a CMPU subject to A.1, the change shall be subject to the requirements of a new source in A.1, A.2 and A.3 if it is a change that meets the definition of reconstruction, and such reconstruction commenced after December 31, 1992.

iii. [40 CFR 63.100(l)(3)]
If an additional CMPU is added to the facility or a change is made to a CMPU and the addition or change is determined to be subject to the new source requirements according to A.1.i.i or A.1.i.ii:

(1) [40 CFR 63.100(l)(3)(i)]
The new or reconstructed source shall be in compliance with the new source requirements of A.1, A.2 and A.3 upon initial start-up of the new or reconstructed source or by April 22, 1994, whichever is later; and

(2) [40 CFR 63.100(l)(3)(ii)]
The permittee of the new or reconstructed source shall comply with the reporting and record keeping requirements in A.1, A.2, and A.3 that are applicable to new sources. The applicable reports include, but are not limited to:

(a) The application for approval of construction or reconstruction which shall be submitted by the date specified in A.2.za.ii.(2);

(b) Changes that meet the criteria in A.2.za.viii, unless the information has

been submitted in an operating permit application or amendment;

(c) The Notification of Compliance Status (NCS) as required by A.2.zb.ii for the new or reconstructed source;

(d) Periodic Reports and other reports as required by A.2.zb.iii and A.2.zb.iv; and

(e) Reports required by A.3.zc; and

(f) Reports and notifications required by sections of 40 CFR Part 63, Subpart A that are applicable to sections A.1, A.2, and A.3.

iv. [40 CFR 63.100(l)(4)]
If an additional CMPU is added to a plant site, or if an emission point is added to an existing CMPU, or if another deliberate operational process change creating an additional Group 1 emission point(s) is made to an existing CMPU, or if a surge control vessel or bottoms receiver becomes subject to A.3.q, or if a compressor becomes subject to A.3.k, and if the addition or change is not subject to the new source requirements as determined according to A.1.i.i or A.1.i.ii, the requirements in A.1.i.iv.(1) through A.1.i.iv.(3) shall apply. Examples of process changes include, but are not limited to, changes in production capacity, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this term and conditions and A.1.j, process changes do not include: process upsets, unintentional temporary process changes, and changes that are within the equipment configuration and operating conditions documented in the NCS required by A.2.zb.ii.

(1) [40 CFR 63.100(l)(4)(i)]
The added emission point(s) and any emission point(s) within the added or changed CMPU are subject to the requirements of A.1, A.2, and A.3 for an existing source;

(2) [40 CFR 63.100(l)(4)(ii)]
The added emission point(s) and any emission point(s) within the added or changed CMPU shall be in compliance with A.1, A.2, and A.3 by the dates specified in (a) or (b), as applicable.

(a) [40 CFR 63.100(l)(4)(ii)(A)]

If a CMPU is added to a plant site or an emission point(s) is added to an existing CMPU, the added emission point(s) shall be in compliance upon initial start-up of the added CMPU or emission point(s) or by 3 years after April 22, 1994, whichever is later.

(b) [40 CFR 63.100(l)(4)(ii)(B)]

If a deliberate operational process change to an existing CMPU causes a Group 2 emission point to become a Group 1 emission point, if a surge control vessel or bottoms receiver becomes subject to A.3.q, or if a compressor becomes subject to A.3.k, the permittee shall be in compliance upon initial start-up or by 3 years after April 22, 1994, whichever is later, unless the permittee demonstrates to the USEPA Region V-Administrator that achieving compliance will take longer than making the change. If this demonstration is made to the USEPA Region V-Administrator's satisfaction, the permittee shall follow the procedures in A.1.j to establish a compliance date.

(3) [40 CFR 63.100(l)(4)(iii)]

The permittee of a CMPU or emission point that is added to a plant site and is subject to the requirements for existing sources shall comply with the reporting and record keeping requirements of A.1, A.2, and A.3 that are applicable to existing sources, including, but not limited to, the reports listed in A.1.i.iv.(3)(a) through A.1.i.iv.(3)(e). A change to an existing CMPU shall be subject to the reporting requirements for existing sources, including but not limited to, the reports listed in A.1.i.iv.(3)(a) through A.1.i.iv.(3)(e) if the change meets the criteria specified in A.2.h.vii, A.2.h.viii, A.2.h.ix, or A.2.h.x for process vents or the criteria in section A.2.za.viii. The applicable reports include, but are not limited to:

(a) Reports specified in A.2.zb.viii, unless the information has been submitted in an operating permit application or amendment;

(b) The NCS as required by A.2.zb.ii for the emission points that were added or changed;

(c) Periodic Reports and other reports as required by A.2.zb.iii and A.2.zb.iv;

(d) Reports required by A.3.zc; and

(e) Reports and notifications required by sections of 40 CFR Part 63, Subpart A that are applicable to sections A.1, A.2, and A.3.

1.j [40 CFR 63.100(m)]

If a change that does not meet the criteria in A.1.i is made to a CMPU subject to A.1 and A.2, and the change causes a Group 2 emission point to become a Group 1 emission point, then the permittee shall comply with the requirements of A.2 for the

Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

i. [40 CFR 63.100(m)(1)]
The permittee shall submit to the USEPA Region V-Administrator, with a copy to the Central District Office, Ohio EPA, for approval a compliance schedule, along with a justification for the schedule.

ii. [40 CFR 63.100(m)(2)]
The compliance schedule shall be submitted with the report required in A.2.zb.viii.(1).

iii. [40 CFR 63.100(m)(3)]
The compliance schedule shall be approved or changes requested within 120 calendar days of receipt of the compliance schedule and justification.

1.k [40 CFR 63.102(a)]
General Standards. The permittee shall comply with the requirements of sections A.2 and A.3 for all process units subject to A.1.

i. [40 CFR 63.102(a)(1)]
The provisions set forth in A.2 and A.3 shall apply at all times except during periods of start-up or shutdown, malfunction, or non-operation of the CMPU (or specific portion thereof) resulting in cessation of the emissions to which A.2 and A.3 apply. However, if a start-up, shutdown, malfunction or period of non-operation of one portion of a CMPU does not affect the ability of a particular emission point to comply with the specific provisions to which it is subject, then that emission point shall still be required to comply with the applicable provisions of A.2 and A.3 during the start-up, shutdown, malfunction or period of non-operation. For example, the degassing of a storage vessel would not affect the ability of a process vent to meet the requirements of A.2.c.

ii. [40 CFR 63.102(a)(2)]
The provisions set forth in A.3 shall apply at all times except during periods of start-up or shutdown, malfunction, process unit shutdown, or non-operation of the CMPU (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which A.3 applies.

iii. [40 CFR 63.102(a)(3)]
The permittee shall not shut down items of equipment that are required or utilized for compliance with the provisions of A.1, A.2 or A.3 during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment, if the shutdown would contravene requirements of A.1, A.2 or A.3 applicable to such items of equipment. This section does not apply if the item of equipment is malfunctioning, or if the permittee must shut down the equipment to avoid damage due to a contemporaneous start-up, shutdown, or malfunction of the CMPU or portion thereof.

iv. [40 CFR 63.102(a)(4)]
During start-ups, shutdowns, and malfunctions when the requirements of A.1, A.2 and/or A.3 do not apply pursuant to A.1.k.i through A.1.k.iii, the permittee

shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this section, the term "excess emissions" means emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the permittee complied with the relevant provisions of A.1, A.2 and/or A.3. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the source. Back-up control devices are not required, but may be used if available.

1.l [40 CFR 63.103(b)]
Initial performance tests and initial compliance determinations shall be required as specified in A.2 and A.3 of these terms and conditions.

i. [40 CFR 63.103(b)(1) & (b)(2)]
Performance tests and compliance determinations shall be conducted according to the schedule and procedures in 40 CFR 63.7(a) and the applicable sections of A.2 and A.3. The permittee shall notify the USEPA Region V-Administrator, with a copy to the Ohio EPA Central District Office, of the intention to conduct a performance test at least 30 calendar days before the performance test is scheduled to allow the opportunity to have an observer present during the test.

ii. [40 CFR 63.103(b)(3)]
Performance tests shall be conducted at maximum representative operating conditions for the process. During the performance test, the permittee may operate the control or recovery device at maximum or minimum representative operating conditions for monitored control or recovery device parameters, whichever results in lower emission reduction.

iii. [40 CFR 63.103(b)(4)]
Data shall be reduced in accordance with the EPA-approved methods specified in the A.2 or A.3 or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301 of Appendix A of 40 CFR Part 63.

iv. [40 CFR 63.103(b)(6)]
For flexible operation units, the permittee shall conduct all required compliance demonstrations during production of the primary product. The permittee is not required to conduct compliance demonstrations for operating conditions during production of a product other than the primary product. Except as otherwise provided in this permit, as applicable, the permittee shall operate each control device, recovery device, and/or recapture device that is required or used for compliance, and associated monitoring systems, without regard for whether the product that is being produced is the primary product or a different product. Except as otherwise provided in this permit, as applicable, operation of a control device, recapture device and/or recovery device required or used for compliance

such that the daily average of monitored parameter values is outside the parameter range established pursuant to A.2.zb.ii.(2), or such that the monitoring data show operation inconsistent with the monitoring plan established pursuant to A.3.zb.v.(1), shall constitute a violation of the required operating conditions.

1.m [40 CFR 63.103(c)]
The permittee shall keep copies of all applicable reports and records required by A.2 and A.3 for at least 5 years; except that, if A.2 or A.3 require records to be maintained for a time period different than 5 years, those records shall be maintained for the time specified A.2 and A.3. If the permittee submits copies of reports to U. S. EPA, Region 5, with a copy to the Ohio EPA, Central District Office, the permittee is not required to maintain copies of reports.

i. [40 CFR 63.103(c)(1)]
All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. The remaining four and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

ii. [40 CFR 63.103(c)(2)]
The permittee shall keep the records specified below, as well as records specified in A.2 and A.3:

(1) [40 CFR 63.103(c)(2)(i)]
Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment or continuous monitoring systems used to comply with A.2 or A.3 during which excess emissions occur.

(2) [40 CFR 63.103(c)(2)(ii)]
For each start-up, shutdown, and malfunction during which excess emissions occur, records that the procedures specified in the source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a control device to a backup control device (e.g., the incinerator for a halogenated stream could be routed to

a flare during periods when the primary control device is out of service), records must be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of record keeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.

(3) [40 CFR 63.103(c)(2)(iii)]
For continuous monitoring systems used to comply with section A.3, records documenting the completion of calibration checks and maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(4) [40 CFR 63.103(c)(3)]
Records of start-up, shutdown and malfunction and continuous monitoring system calibration and maintenance are not required if they pertain solely to Group 2 emission points, as defined in A.2.b.ii.

iii. [40 CFR 63.103(d) & (d)(1)]
The permittee shall send all reports required by A.2 and A.3 to the USEPA Region V-Administrator, with a copy to the Ohio EPA, Central District Office,, at the addresses listed below. Wherever 40 CFR Part 63, Subpart A specifies ``postmark'' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent on or before the specified date.

USEPA Region V
77 West Jackson Blvd
Chicago, IL 60604-3507

Ohio EPA, Central District Office,
122 S. Front Street
Columbus, Ohio 43215

1.n Reserved

1.o [40 CFR 63.105(a)]
The permittee shall comply with A.1.o.i through A.1.o.iv below for maintenance wastewaters containing those organic HAP's listed in Table 9 of A.2.zc.

i. [40 CFR 63.105(b)]
The permittee shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:

(1) [40 CFR 63.104(b)(1)]
Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.

(2) [40 CFR 63.104(b)(2)]
Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and

(3) [40 CFR 63.104(b)(3)]
Specify the procedures to be followed when clearing materials from process equipment.

ii. [40 CFR 63.105(c)]
The permittee shall modify and update the information required by A.1.o.i as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.

iii. [40 CFR 63.105(d)]
The permittee shall implement the procedures described in A.1.o.i and A.1.o.ii as part of the start-up, shutdown, and malfunction plan.

iv. [40 CFR 63.105(e)]
The permittee shall maintain a record of the information required by A.1.o.i and A.1.o.ii as part of the start-up, shutdown, and malfunction plan required under 40 CFR Part 63, Subpart A.

1.p Tables

i. Table 1 - Synthetic Organic Chemical Manufacturing Industry Chemicals

Chemical name - Chemical Abstract Number - Group

Methanol - 67561 - IV

ii. Table 2 - Organic Hazardous Air Pollutants

Chemical Name - Chemical Abstract Service Number
Methanol - 67561

iii. Reserved

1.q [40 CFR 63.100(q)]
If the owner or operator of a process vent, or of a gas stream transferred subject to Section 2.c.x is unable to comply with the provisions of §§63.113 through 63.118 by the applicable compliance date specified in paragraph 1.h, 1.i or 1.j of this section for the reasons stated in paragraph (q)(1),(3), or (5) of this section, the owner or operator shall comply with the applicable provisions in §§63.113 through 63.118 as expeditiously as practicable, but in no event later than the date approved by the Administrator pursuant to paragraph (q)(2), (4), or (6) of this section, respectively. For requests under paragraph (q)(1) or (3) of this section, the date approved by the Administrator may be earlier than, and shall not be later than, the later of January 22, 2004 or 3 years after the transferee's refusal to accept the stream for disposal. For requests submitted under

paragraph (q)(5) of this section, the date approved by the Administrator may be earlier than, and shall not be later than, 3 years after the date of publication of the amendments to this subpart or to subpart G of this part which created the need for an extension of the compliance.

(1) If the owner or operator has been sending a gas stream for disposal as described in §63.113(i) prior to January 22, 2001, and the transferee does not submit a written certification as described in §63.113(i)(2) and ceases to accept the gas stream for disposal, the owner or operator shall comply with paragraph (q)(2) of this section.

(2)(i) An owner or operator directed to comply with paragraph (q)(2) of this section shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(ii) The compliance schedule and justification shall be submitted no later than 90 days after the transferee ceases to accept the gas stream for disposal.

(iii) The Administrator shall approve the compliance schedule or request changes within 120 days of receipt of the compliance schedule and justification.

(3) If the owner or operator has been sending the gas stream for disposal as described in §63.113(i) to a transferee who had submitted a written certification as described in §63.113(i)(2), and the transferee revokes its written certification, the owner or operator shall comply with paragraph (q)(4) of this section. During the period between the date when the owner or operator receives notice of revocation of the transferee's written certification and the compliance date established under paragraph (q)(4) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this paragraph (q)(3), the term "excess emissions" means emissions in excess of those that would have occurred if the transferee had continued managing the gas stream in compliance with the requirements in §§63.113 through 63.118. The measures to be taken shall be identified in the applicable startup, shutdown, and malfunction plan. If the measures that can be reasonably taken will change over time, so that a more effective measure which could not reasonably be taken initially would be reasonable at a later date, the Administrator may require the more effective measure by a specified date (in addition to or instead of any other measures taken sooner or later than that date) as a condition of approval of the compliance schedule.

(4)(i) An owner or operator directed to comply with this paragraph (q)(4) shall submit to the Administrator for approval the documents specified in paragraphs (q)(4)(i)(A) through (E) of this section no later than 90 days after the owner or operator receives notice of revocation of the transferee's written certification.

(A) A request for determination of a compliance date.

(B) A justification for the request for determination of a compliance date.

(C) A compliance schedule.

(D) A justification for the compliance schedule.

(E) A description of the measures that will be taken to minimize excess emissions until the new compliance date, and the date when each measure will first be implemented. The owner or operator shall describe how, and to what extent, each measure will minimize excess emissions, and shall justify any period of time when measures are not in place.

(ii) The Administrator shall approve or disapprove the request for determination of a compliance date and the compliance schedule, or request changes, within 120 days after receipt of the documents specified in paragraphs (q)(4)(i)(A) through (E) of this section. Upon approving the request for determination and compliance schedule, the Administrator shall specify a reasonable compliance date consistent with the introductory text in paragraph (q) of this section.

(5) If the owner's or operator's inability to meet otherwise applicable compliance deadlines is due to amendments of this subpart or of subpart G of this part published on or after January 22, 2001 and neither condition specified in paragraph (q)(1) or (3) of this section is applicable, the owner or operator shall comply with paragraph (q)(6) of this section.

(6)(i) An owner or operator directed to comply with this paragraph (6)(i) shall submit to the Administrator for approval, a request for determination of a compliance date, a compliance schedule, a justification for the determination of a compliance date, and a justification for the compliance schedule.

(ii) The documents required to be submitted under paragraph (q)(6)(i) of this section shall be submitted no later than 120 days after publication of the amendments of this subpart or of subpart G of this part which necessitate the request for an extension.

(iii) The Administrator shall approve or disapprove the request for a determination of a compliance date, or request changes, within 120 days after receipt of the request for determination of a compliance date, the compliance schedule, and the two justifications. If the request for determination of a compliance date is disapproved, the compliance schedule is disapproved and the owner or operator shall comply by the applicable date specified in paragraph 1.h, 1.i, or 1.j of this section. If the request for the determination of a compliance date is approved, the Administrator shall specify, at the time of approval, a reasonable compliance date consistent with the introductory text in paragraph (q) of this section.

2. [40 CFR Part 63, Subpart G]
Standards for process vents, storage vessels, transfer operations, and wastewater

2.a i. Definitions

(1) [40 CFR 63.111]
A Group1 process vent has a flow greater than or equal to 0.005 standard cubic meter per minute (scm/m), total organic hazardous air pollutant (HAP)

concentration is equal to or greater than 50 parts per million (ppm) by volume, and the total resource effectiveness (TRE) index value calculated per A.2.e is less than or equal to 1.0.

(2) [40 CFR 63.111]
A Group 2 process vent has a flow less than 0.005 standard cubic meter per minute (scm/m), total organic HAP concentration is less than 50 parts per million (ppm) by volume, or the TRE index value calculated per A.2.e is greater than 1.0.

(3) Terms used in A.2 have the same meanings as the same terms defined in 40 CFR 63.111.

ii. [40 CFR 63.112] Emission Standard

(1) [40 CFR 63.112(a)]
The owner or operator of an existing source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the following equation:

$E_A = 0.02\Sigma S\ EPV_1 + \Sigma S\ EPV_2 + 0.05\Sigma S\ ES_1 + \Sigma S\ ES_2 + 0.02\Sigma S\ ETR_1 + \Sigma S\ ETR_2 + \Sigma S\ EWW_{1C} + \Sigma S\ EWW_2$

where:

E_A = Emission rate, megagrams per year, allowed for the source.

$0.02\Sigma S\ EPV_1$ = Sum of the residual emissions, megagrams per year, from all Group 1 process vents, as defined in §63.111 of this subpart.

$\Sigma S\ EPV_2$ = Sum of the emissions, megagrams per year, from all Group 2 process vents as defined in §63.111 of this subpart.

$0.05\Sigma S\ ES_1$ = Sum of the residual emissions, megagrams per year, from all Group 1 storage vessels, as defined in §63.111 of this subpart.

$\Sigma S\ ES_2$ = Sum of the emissions, megagrams per year, from all Group 2 storage vessels, as defined in §63.111 of this subpart.

$0.02\Sigma S\ ETR_1$ = Sum of the residual emissions, megagrams per year, from all Group 1 transfer racks, as defined in §63.111 of this subpart.

$\Sigma S\ ETR_2$ = Sum of the emissions, megagrams per year, from all Group 2 transfer racks, as defined in §63.111 of this subpart.

$\Sigma S\ EWW_{1C}$ = Sum of the residual emissions from all Group 1 wastewater streams, as defined in §63.111 of this subpart. This term is calculated for each Group 1 stream according to the equation for EWW_{1C} in §63.150(g)(5)(i) of this subpart.

$\Sigma S\ EWW_2$ = Sum of emissions from all Group 2 wastewater streams, as defined in §63.111 of this subpart.

The emissions level represented by this equation is dependent on the collection of emission points in the source. The level is not fixed and can change as the emissions from each emission point change or as the number of emission points in the source changes.

(2) [40 CFR 63.112(b)]
The owner or operator of a new source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the equation in paragraph (1) of this section.

(3) [40 CFR 63.112(c)]
The owner or operator of an existing source shall demonstrate compliance with the emission standard in paragraph (a) of this section by following the procedures specified in paragraph (e) of this section for all emission points, or by following the emissions averaging compliance approach specified in paragraph (f) of this section for some emission points and the procedures specified in paragraph (e) of this section for all other emission points within the source.

(4) 40 CFR 63.112(d)]
The owner or operator of a new source shall demonstrate compliance with the emission standard in paragraph (2) of this section only by following the procedures in paragraph (5) of this section. The owner or operator of a new source may not use the emissions averaging compliance approach.

(5) [40 CFR 63.112(e)]

The owner or operator of an existing or new source may comply with the process vent provisions in §§63.113 through 63.118 of 40 CFR Subpart 63, the storage vessel provisions in §§63.119 through 63.123 of 40 CFR Subpart 63, the transfer operation provisions in §§63.126 through 63.130 of 40 CFR Subpart 63, the wastewater provisions in §§63.131 through 63.147 of 40 CFR Subpart 63, the leak inspection provisions in §63.148 of 40 CFR Subpart 63, and the provisions in §63.149 of 40 CFR Subpart 63.

(a) The owner or operator using this compliance approach shall also comply with the requirements of §63.151 and §63.152 of 40 CFR Subpart 63, as applicable.

(b) The owner or operator using this compliance approach is not required to calculate the annual emission rate specified in paragraph (1) of this section.

iii. [40 CFR 63.112(e)(3)]
When emissions of different kinds (e.g., emissions from process vents, transfer operations, storage vessels, process wastewater) are combined, and at least one of the emission streams would be classified as Group 1 in the absence of combination with other emission streams, the permittee shall comply with the requirements of either (1) or (2) below:

(1) [40 CFR 63.112(e)(3)(i)]
Comply with the applicable requirements of A.2 for each kind of emissions in the stream; or

(2) [40 CFR 63.112(e)(3)(ii)]
Comply with the first set of requirements identified in A.2.a.iii.(2)(a) through A.2.a.iii.(2)(c) which applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as Group 1 in the absence of combination with other emission streams, or the permittee chooses to consider that emission stream to be Group 1 for purposes of this section. Compliance with the first applicable set of requirements identified in A.2.a.iii.(2)(a) through A.2.a.iii.(2)(e) constitutes compliance with all other requirements in A.2.a.iii.(2)(a) through A.2.a.iii.(2)(e) applicable to other types of emissions in the combined stream.

(a) [40 CFR 63.112(e)(3)(ii)(A)]
The requirements of A.2 for Group 1 process vents, including applicable monitoring, record keeping, and reporting; or

(b) [40 CFR 63.112(e)(3)(ii)(B)]
The requirements of this subpart for Group 1 transfer racks, including applicable monitoring, recordkeeping, and reporting;

(c) [40 CFR 63.112(e)(3)(ii)(C)]
The requirements of §63.119(e) for control of emissions from Group 1 storage vessels, including monitoring, recordkeeping, and reporting;

(d) [40 CFR 63.112(e)(3)(ii)(D)]
The requirements of A.2.r for control devices used to control emissions from waste management units, including applicable monitoring, record keeping, and reporting; or

(e) [40 CFR 63.112(e)(3)(ii)(E)]
The requirements of A.2.r for closed vent systems for control of emissions from in-process equipment subject to A.2.z, including applicable monitoring, record keeping, and reporting.

iv. [40 CFR 63.111]
A Group 1 transfer rack loads greater than or equal to 0.65 million liters of liquids that contain organic HAPs with rack weighted average vapor pressure greater than or equal to 10.3 kilopascals.

v. [40 CFR 63.111]
A Group 2 transfer rack is a transfer rack which does not meet the definition of a Group 1 transfer rack.

vi. [40 CFR Part 63, Subpart G, Table 5 and 6]
Group 1 storage vessel means a storage vessel that meets the criteria for design storage capacity and stored-liquid maximum true vapor pressure specified in (1) through (4) below:

(1) Storage vessels at existing sources - a vessel capacity of greater than or equal to 75 cubic meters but less than 151 cubic meters and a vapor pressure (at storage temperature) of less than of equal to 13.1 kilopascals.

(2) Storage vessels at existing sources - a vessel capacity of greater than or equal to 151 cubic meters and a vapor pressure (at storage temperature) of less than of equal to 5.2 kilopascals.

(3) Storage vessels at new sources - a vessel capacity of greater than or equal to 38 cubic meters but less than 151 cubic meters and a vapor pressure (at storage temperature) of less than of equal to 13.1 kilopascals.

(4) Storage vessels at new sources - a vessel capacity of greater than or equal to 151 cubic meters and a vapor pressure (at storage temperature) of less than or equal to 0.7 kilopascals.

vii. [40 CFR 63.111]
Group 2 storage vessel means a storage vessel that does not meet the definition of a Group 1 storage vessel.

viii. [40 CFR 63.111]
Group 1 wastewater stream means a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in A.2.k.iii for compounds listed in Table 9 of A.2.zc and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in A.2.k.iv for compounds listed in Table 8 of A.2.zc.

ix. [40 CFR 63.111]
Group 2 wastewater stream means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

2.b i. [40 CFR 63.110(b)(1)]
A Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart Kb is required to comply only with the provisions of A.2.

ii. Reserved

iii. Reserved

iv. Reserved

v. [40 CFR 63.110(d)(4)]
A Group 1 process vent that is also subject to the provisions of 40 CFR Part 60, Subpart NNN is required to comply only with the provisions of A.2.

vi. [40 CFR 63.110(d)(5)]
The permittee of a Group 2 process vent that is also subject to the provisions of 40 CFR Part 60, Subpart NNN shall determine requirements according to A.2.b.vi.(1) and A.2.b.vi.(2).

(1) [40 CFR 63.110(d)(5)(i)]
If the Group 2 process vent has a TRE index value less than 1 as determined by the procedures in 40 CFR Part 60, Subpart NNN, the process vent is required to comply with the provisions in (a) through (c) below:

(a) [40 CFR 63.110(d)(5)(i)(A)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart NNN for applicability determination and the associated record keeping and reporting;

(b) [40 CFR 63.110(d)(5)(i)(B)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart NNN for process changes and recalculation of the TRE index value and the associated record keeping and reporting; and

(c) [40 CFR 63.110(d)(5)(i)(C)]
The control requirements in 40 CFR 60.662. The permittee may elect to comply with either the associated testing, monitoring, reporting, and record keeping requirements of 40 CFR Part 60, Subpart NNN or with the testing, monitoring, reporting, and record keeping requirements specified in A.2 for Group 1 process vents.

The permittee shall indicate this decision in either the NCS specified in A.2.zb.ii or in an operating permit application or amendment.

(2) [40 CFR 63.110(d)(5)(ii)]
If the Group 2 process vent has a TRE index value greater than or equal to 1 as determined by the procedures in 40 CFR Part 60, Subpart NNN, the process vent is required to comply only with the provisions specified in (a) through (d) below:

(a) [40 CFR 63.110(d)(5)(ii)(A)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart NNN for applicability determination and the associated record keeping and reporting;

(b) [40 CFR 63.110(d)(5)(ii)(B)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart NNN for process changes and recalculation of the TRE index value and the associated record keeping and reporting;

(c) [40 CFR 63.110(d)(5)(ii)(C)]
If the provisions of both A.2 and 40 CFR Part 60, Subpart NNN require continuous monitoring of recovery device operating parameters, the process vent is required to comply only with the provisions that are specified in A.2 for continuous monitoring of recovery device operating parameters and the associated testing, reporting, and record keeping.

(d) [40 CFR 63.110(d)(5)(ii)(D)]
If only the provisions of 40 CFR Part 60, Subpart NNN require continuous monitoring of recovery device operating parameters, the process vent is required to comply only with the provisions that are specified in 40 CFR Part 60, Subpart NNN for continuous monitoring of recovery device operating parameters and the associated testing, reporting, and record keeping.

vii. [40 CFR 63.110(d)(6)]
After the compliance dates specified in A.1, if the permittee of a process vent subject to A.2 that is also subject to the provisions of 40 CFR Part 60, Subpart NNN elects to control the process vent to the levels required in A.2.c.ii without calculating the TRE index value for the vent according to the procedures specified in A.2.e.iv then the permittee shall comply with the testing, monitoring, reporting, and record keeping provisions of A.2 and shall be exempt from the testing, monitoring, reporting, and record keeping provisions of 40 CFR Part 60, Subpart NNN.

viii. [40 CFR 63.110(d)(7)]

A Group 1 process vent that is also subject to the provisions of 40 CFR Part 60, Subpart RRR is required to comply only with the provisions of A.2.

ix. [40 CFR 63.110(d)(8)]
The permittee of a Group 2 process vent that is also subject to the provisions of 40 CFR Part 60, Subpart RRR shall determine requirements according to A.2.a.ix.(1) and A.2.a.ix.(2).

(1) [40 CFR 63.110(d)(8)(i)]
If the Group 2 process vent has a TRE index value less than 1 as determined by the procedures in 40 CFR Part 60, Subpart RRR, the process vent is required to comply with the provisions in sections (a) through (c) below:

(a) [40 CFR 63.110(d)(8)(i)(A)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart RRR for applicability determination and the associated record keeping and reporting;

(b) [40 CFR 63.110(d)(8)(i)(B)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart RRR for process changes and recalculation of the TRE index value and the associated record keeping and reporting; and

(c) [40 CFR 63.110(d)(8)(i)(C)]
The control requirements in 40 CFR 60.702. The permittee may elect to comply with either the associated testing, monitoring, reporting, and record keeping requirements of 40 CFR Part 60, Subpart RRR or with the testing, monitoring, reporting, and record keeping requirements specified in A.2 for Group 1 process vents. The permittee shall indicate this decision in either the NCS specified in A.2.zb.ii or in an operating permit application or amendment.

(2) [40 CFR 63.110(d)(8)(ii)]
If the Group 2 process vent has a TRE index value greater than or equal to 1 as determined by the procedures in 40 CFR Part 60, Subpart RRR, the process vent is required to comply only with the provisions specified in (a) through (d) below:

(a) [40 CFR 63.110(d)(8)(ii)(A)]

The provisions in both A.2 and in 40 CFR Part 60, Subpart RRR for applicability determination and the associated record keeping and reporting;

(b) [40 CFR 63.110(d)(8)(ii)(B)]
The provisions in both A.2 and in 40 CFR Part 60, Subpart RRR for process changes and recalculation of the TRE index value and the associated record keeping and reporting;

(c) [40 CFR 63.110(d)(8)(ii)(C)]
If the provisions of both A.2 and 40 CFR Part 60, Subpart RRR require continuous monitoring of recovery device operating parameters, the process vent is required to comply only with the provisions that are specified in A.2 for continuous monitoring of recovery device operating parameters and the associated testing, reporting, and record keeping.

(d) [40 CFR 63.110(d)(8)(ii)(D)]
If only the provisions of 40 CFR Part 60, Subpart RRR require continuous monitoring of recovery device operating parameters, the process vent is required to comply only with the provisions that are specified in 40 CFR Part 60, Subpart RRR for continuous monitoring of recovery device operating parameters and the associated testing, reporting, and record keeping.

x. [40 CFR 63.110(d)(9)]
~~I~~f the permittee of a process vent subject to A.2 that is also subject to the provisions of 40 CFR Part 60, Subpart RRR elects to control the process vent to the levels required in A.2.c.ii without calculating the TRE index value for the vent according to the procedures specified in A.2.e.iv then the permittee shall comply with the testing, monitoring, reporting, and record keeping provisions of A.2 and shall be exempt from the testing, monitoring, reporting, and record keeping provisions of 40 CFR Part 60, Subpart RRR.

xi. Reserved

2.c [40 CFR 63.113]
Process vent provisions-reference control technology

i. [40 CFR 63.113(a)]
The permittee of a Group 1 process vent shall comply with the requirements of A.2.c.ii or A.2.c.iii.

ii. [40 CFR 63.113(a)(2), (a)(2)(i), & (a)(2)(ii)]
Reduce emissions of total organic HAPs by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated

on a dry basis, corrected to 3-percent oxygen, and compliance can be determined by measuring either organic HAPs or total organic carbon using the procedures in A.2.f. Compliance may be achieved by using any combination of combustion, recovery, and/or recapture devices, except that a recovery device may not be used to comply by reducing emissions of total organic HAPs by 98 weight-percent.

iii. [40 CFR 63.113(a)(3)]
Achieve and maintain a TRE index value greater than 1.0 at the outlet of the final recovery device, or prior to release of the vent stream to the atmosphere if no recovery device is present. If the TRE index value is greater than 1.0, the vent shall comply with the provisions for a Group 2 process vent specified in either A.2.c.v or A.2.c.vi, whichever is applicable.

iv. [40 CFR 63.113(b)]
If a boiler or process heater is used to comply with the percent reduction requirement or concentration limit specified in A.2.c.ii, then the vent stream shall be introduced into the flame zone of such a device.

v. [40 CFR 63.113(d)]
For Group 2 process vents having a flow rate greater than or equal to 0.005 standard cubic meter per minute, a HAP concentration greater than or equal to 50 parts per million by volume, and a TRE index value greater than 1.0 but less than or equal to 4.0, the permittee shall maintain a TRE index value greater than 1.0; comply with the monitoring of recovery device parameters in A.2.d.ii or A.2.d.iii; comply with the TRE index calculations of A.2.e; and comply with the applicable reporting and record keeping provisions of A.2.g and A.2.h. Such process vents are not subject to any other provisions of A.2.d through A.2.h.

vi. [40 CFR 63.113(e)]
For Group 2 process vents with a TRE index greater than 4.0, the permittee shall maintain a TRE index value greater than 4.0; comply with the provisions for calculation of TRE index in A.2.e; and comply with the reporting and record keeping provisions in A.2.g.ii, A.2.h.iii, and A.2.h.viii. Such process vents are not subject to monitoring or any other provisions of A.2.c through A.2.h.

vii. [40 CFR 63.113(f)]
For Group 2 process vents with a flow rate less than 0.005 standard cubic meter per minute, the permittee shall maintain a flow rate less than 0.005 standard cubic meter per minute; comply with the Group determination procedures in A.2.e.i, A.2.e.ii, and A.2.e.v; and comply with the reporting and record keeping requirements in A.2.g.iii, A.2.h.iv, and A.2.h.ix. Such process vents are not subject to monitoring or any other provisions of A.2.d through A.2.h.

viii. [40 CFR 63.113(g)]
For Group 2 process vents with a concentration less than 50 parts per million by volume, the permittee shall maintain a concentration less than 50 parts per million by volume; comply with the Group determination procedures in A.2.e.i, A.2.e.ii, and A.2.e.v; and comply with the reporting and record keeping requirements in A.2.g.iv, A.2.h.v, and A.2.h.x. Such process vents are not subject to monitoring or any other provisions of A.2.d through A.2.h.

ix. [40 CFR 63.113(h)]
For process vents complying with A.2.c.ii, the permittee is not required to

perform the group determination described in A.2.e for such process vents.

x. [40 CFR 63.113(i)]
Off-site control or on-site control not owned or operated by the source. This paragraph (i) applies to gas streams that have the characteristics specified in §63.107(b) through (h) or meet the criteria specified in §63.107(i); that are transferred for disposal to an on-site control device (or other compliance equipment) not owned or operated by the owner or operator of the source generating the gas stream, or to an off-site control device or other compliance equipment; and that have the characteristics (e.g., flow rate, total organic HAP concentration, or TRE index value) of a Group 1 process vent, determined at the point of transfer.

(a) The owner or operator transferring the gas stream shall:

(1) Comply with the provisions specified in §63.114(d) for each gas stream prior to transfer.

(2) Notify the transferee that the gas stream contains organic hazardous air pollutants that are to be treated in accordance with the provisions of this subpart. The notice shall be submitted to the transferee initially and whenever there is a change in the required control.

(b) The owner or operator may not transfer the gas stream unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat any gas stream transferred under this paragraph (i) and received from a source subject to the requirements of this subpart in accordance with the requirements of either §§63.113 through 63.118, or §63.102(b), or subpart D of this part if alternative emission limitations have been granted the transferor in accordance with those provisions. The certifying entity may revoke the written certification by sending a written statement to EPA and the owner or operator giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph (i). Upon expiration of the notice period, the owner or operator may not transfer the gas stream to the transferee. Records retained by the transferee shall be retained in accordance with §63.103(c).

(c) By providing this written certification to EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph (i)(2) of this section with respect to any transfer covered by the written certification. Failure to abide by any of those provisions with respect to such transfers may result in enforcement action by EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(d) Written certifications and revocation statements to EPA from the transferees of such gas streams shall be signed by a responsible official of the certifying entity, provide the name and address of the certifying

entity, and be sent to the appropriate EPA Regional Office at the addresses listed in §63.13. Such written certifications are not transferable by the transferee.

2.d [40 CFR 63.114]
Process vent provisions-monitoring requirements

i. [40 CFR 63.114(a)]
The permittee shall install monitoring equipment specified in A.2.d.i.(1) and A.2.d.i.(2) for combustion devices and A.2.d.i.(3) for recovery or recapture devices used to comply with the requirements of A.2.c.ii. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(1) [40 CFR 63.114(a)(1), (a)(1)(i), & (a)(1)(ii)]
Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required. Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) [40 CFR 63.114(a)(3)]
Where a boiler or process heater of less than 44 megawatts design heat input capacity is used, a temperature monitoring device in the firebox equipped with a continuous recorder is required.

(3) [40 CFR 63.114(a)(5)]
Where a recovery device or recapture device is used to comply with the requirements of A.2.c.ii, the permittee shall utilize the appropriate monitoring device identified in A.2.d.ii.

ii. [40 CFR 63.114(b)]
For process vents with a TRE index value greater than 1.0 as specified under A.2.c.iii or A.2.c.v that uses one or more recovery devices, the permittee shall install either an organic monitoring device equipped with a continuous recorder or the monitoring equipment specified in A.2.d.ii.(1), A.2.d.ii.(2), or A.2.d.ii.(3), depending on the type of recovery device used. All monitoring equipment shall be installed, calibrated, and maintained according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. Monitoring is not required for process vents with TRE index values greater than 4.0 as specified in A.2.c.vi.

(1) [40 CFR 63.114(b)(1)]

Where an absorber is the final recovery device in the recovery system, a scrubbing liquid temperature monitoring device and a specific gravity monitoring device, each equipped with a continuous recorder shall be used;

(2) [40 CFR 63.114(b)(2)]
Where a condenser is the final recovery device in the recovery system, a condenser exit (product side) temperature monitoring device equipped with a continuous recorder shall be used;

(3) [40 CFR 63.114(b)(3)]
Where a carbon adsorber is the final recovery device in the recovery system, an integrating regeneration stream flow monitoring device having an accuracy of plus or minus 10 percent or better, capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle; and a carbon bed temperature monitoring device, capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle shall be used.

iii. [40 CFR 63.114(c)]
The permittee may request approval to monitor parameters other than those listed in A.2.d.i or A.2.d.ii. The request shall be submitted according to the procedures specified in A.2.za.v or A.2.zb.v. Approval shall be requested if the permittee:

(1) [40 CFR 63.114(c)(1)]
Uses a combustion device other than an incinerator, boiler, process heater, or flare; or

(2) [40 CFR 63.114(c)(2)]
Maintains a TRE greater than 1.0 but less than or equal to 4.0 without a recovery device or with a recovery device other than the recovery devices listed in A.2.d.ii; or

(3) [40 CFR 63.114(c)(3)]
Uses one of the combustion or recovery or recapture devices listed in A.2.d.i, but seeks to monitor a parameter other than those specified in A.2.d.i.

iv. [40 CFR 63.114(d)]
For process vents using a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with A.2.c.ii, the permittee shall comply with A.2.d.iv.(1) or A.2.d.iv.(2). 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 A.2.d.iv.

(1) [40 CFR 63.114(d)(1)]
Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in A.2.h.i.(3). 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

(2) [40 CFR 63.114(d)(2)]
Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

v. [40 CFR 63.114(e)]
The permittee shall establish a range that indicates proper operation of the control or recovery device for each parameter monitored under A.2.h.i, A.2.h.ii, and A.2.h.iii. In order to establish the range, the information required in A.2.zb.ii shall be submitted in the NCS or the operating permit application or amendment. The range may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by the EPA, and the permittee is not required to conduct a performance test under A.2.f, if the prior performance test was conducted using the same methods specified in A.2.f and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

2.e [40 CFR 63.115]
Process vent provisions-methods and procedures for process vent group determination

i. [40 CFR 63.115(a), (a)(1), & (a)(2)]
For purposes of determining process vent stream flow rate, total organic HAPs or total organic carbon (TOC) concentration or TRE index value, as specified under A.2.e.ii, A.2.e.iii, or A.2.e.iv, the sampling site shall be after the last recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present and prior to release to the atmosphere. Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site. No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.

ii. [40 CFR 63.115(b), (b)(1), & (b)(2)]
To demonstrate that a process vent stream flow rate is less than 0.005 standard cubic meter per minute in accordance with the Group 2 process vent definition of A.2.a, the permittee shall measure volumetric flow rate by using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A and the sampling site shall be selected as specified in A.2.e.i.

iii. [40 CFR 63.115(c)]
To demonstrate that a process vent stream has an organic HAP concentration below 50 parts per million by volume in accordance with the Group 2 process vent definition, the permittee shall measure either total organic HAP or TOC concentration using the following procedures:

(1) [40 CFR 63.115(c)(1)]
The sampling site shall be selected as specified in A.2.e.i.

(2) [40 CFR 63.115(c)(2)]
Method 18 or Method 25A of 40 CFR Part 60, Appendix A shall be used to measure concentration; alternatively, any other method or data that has been validated according to the protocol in Method 301 of 40 CFR Part 63, Appendix A may be used.

(3) [40 CFR 63.115(c)(3), (c)(3)(i), & (c)(3)(ii)]
Where Method 18 of 40 CFR Part 60, Appendix A is used, the minimum sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run. The concentration of either TOC (minus methane and ethane) or organic HAP shall be calculated according to A.2.e.iii.(3)(a) or A.2.e.iii.(3)(b), as applicable.

(a) The total organic carbon concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using the equation listed in 40 CFR 63.115(c)(3)(ii)(A). Where:
CTOC = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume (ppmv).
Cji = Concentration of sample component j of the sample i, dry basis, ppmv.
n = Number of components in the sample.
x = Number of samples in the sample run.

(b) The total organic HAP concentration (CHAP) shall be computed according to the equation in A.2.e.iii.(3)(a) except that only the organic HAP species shall be summed. The list of organic HAP's is provided in Table 2 of A.1.p.

iv. [40 CFR 63.115(d)]
To determine the TRE index value, the permittee shall conduct a TRE determination and calculate the TRE index value according to the procedures in A.2.e.iv.(1) and A.2.e.iv.(2) and the TRE equation in A.2.e.iv.(3).

(1) [40 CFR 63.115(d)(1)]
Engineering assessment may be used to determine process vent stream flow rate, net heating value, TOC emission rate, and total organic HAP emission rate for the representative operating condition expected to yield the lowest TRE index value.

(a) [40 CFR 63.115(d)(1)(i)]
If the TRE index value calculated using such engineering assessment and the TRE equation in A.2.e.iv.(3) is greater than 4.0, then the permittee is not required to perform the measurements specified in A.2.e.iv.(2).

(b) [40 CFR 63.115(d)(1)(ii)]
If the TRE index value calculated using such engineering assessment and the TRE equation in A.2.e.iv.(3) is less than or equal to 4.0, then the permittee is required to perform the measurements specified in A.2.e.iv.(2) for group determination or consider the process vent a Group 1 vent and comply with the emission reduction specified in A.2.c.i.

(c) [40 CFR 63.115(d)(1)(iii)]
Engineering assessment includes, but is not limited to, the following: previous test results provided the tests are representative of current operating practices at the process unit; bench-scale or pilot-scale test data representative of the process under representative operating conditions; maximum flow rate, TOC emission rate, organic HAP emission rate, or net heating value limit specified or implied within a permit limit applicable to the process vent; and design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. All data, assumptions, and procedures used in the engineering assessment shall be documented. Examples of analytical methods include, but are not limited to:

(i) [40 CFR 63.115(d)(1)(iii)(D)(1)]
Use of material balances based on process stoichiometry to estimate maximum organic HAP concentrations,

(ii) [40 CFR 63.115(d)(1)(iii)(D)(2)]
Estimation of maximum flow rate based on physical

equipment design such as pump or blower capacities,

(iii) [40 CFR 63.115(d)(1)(iii)(D)(3)]
Estimation of TOC or organic HAP concentrations based on saturation conditions,

(iv) [40 CFR 63.115(d)(1)(iii)(D)(4)]
Estimation of maximum expected net heating value based on the stream concentration of each organic compound or, alternatively, as if all TOC in the stream were the compound with the highest heating value.

(2) [40 CFR 63.115(d)(2)]
Except as provided in A.2.e.iv.(1), process vent stream flow rate, net heating value, TOC emission rate, and total organic HAP emission rate shall be measured and calculated according to the procedures in A.2.e.iv.(2)(a) through A.2.e.iv.(2)(e) and used as input to the TRE index value calculation in A.2.e.iv.(3).

(a) [40 CFR 63.115(d)(2)(i)]
The vent stream volumetric flow rate (Qs), in standard cubic meters per minute at 20 C, shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate. If the vent stream tested passes through a final steam jet ejector and is not condensed, the stream volumetric flow shall be corrected to 2.3 percent moisture.

(b) [40 CFR 63.115(d)(2)(ii), (d)(2)(ii)(A), (B), & (C)]
The molar composition of the process vent stream, which is used to calculate net heating value, shall be determined using the following methods: Method 18 of 40 CFR Part 60, Appendix A to measure the concentration of each organic compound; American Society for Testing and Materials (ASTM) D1946-77 to measure the concentration of carbon monoxide and hydrogen; and Method 4 of 40 CFR Part 60, Appendix A to measure the moisture content of the stack gas.

(c) [40 CFR 63.63.115(d)(2)(iii)]
The net heating value of the vent stream shall be calculated using the equation listed in 40 CFR 63.115(d)(2)(iii). Where:
HT= Net heating value of the sample, megaJoule per standard cubic meter, where the net enthalpy per mole of vent stream is based on combustion at 25 C and 760 millimeters of mercury, but the standard temperature for determining the volume corresponding to one mole is 20 C, as in the definition of Qs (vent stream flow rate).
KI= Constant, 1.740x10-7 (parts per million)-1 (gram-mole per standard cubic meter) (megaJoule per kilocalorie), where standard temperature for (gram-mole per standard cubic meter) is 20 C.
Bws= Water vapor content of the vent stream, proportion by volume; except that if the vent stream passes through a final steam jet and is not condensed, it shall be assumed that Bws=0.023 in order to correct to 2.3 percent moisture.
Cj= Concentration on a dry basis of compound j in parts per million, as measured for all organic compounds by Method 18 of 40 CFR Part 60, Appendix A and measured for hydrogen and carbon monoxide by ASTM D1946-77.
Hj= Net heat of combustion of compound j, kilocalorie per gram-mole, based on combustion at 25 C and 760 millimeters mercury. The heats of combustion of vent stream components shall be determined using ASTM D2382-76 if published values are not available or cannot be calculated.

(d) [40 CFR 63.115(d)(2)(iv)]
The emission rate of TOC (minus methane and ethane) (ETOC) and the emission rate of total organic HAP (EHAP) in the vent

stream shall both be calculated using the equation listed in 40 CFR 63.115(d)(2)(iv). Where:
E= Emission rate of TOC (minus methane and ethane) or emission rate of total organic HAP in the sample, kilograms per hour.
K2= Constant, 2.494x10-6 (parts per million)-1 (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 C.
Cj= Concentration on a dry basis of organic compound j in parts per million as measured by Method 18 of 40 CFR Part 60, Appendix A. If the TOC emission rate is being calculated, Cj includes all organic compounds measured minus methane and ethane; if the total organic HAP emission rate is being calculated, only organic HAP compounds listed in Table 2 in A.1.p are included.
Mj= Molecular weight of organic compound j, gram/gram-mole.
Qs= Vent stream flow rate, dry standard cubic meter per minute, at a temperature of 20 C.

(e) [40 CFR 63.115(d)(2)(v), (d)(2)(v)(A), (d)(2)(v)(A)(1), (2), (3), (4) & (d)(2)(v)(B)]
In order to determine whether a vent stream is halogenated, the mass emission rate of halogen atoms contained in organic compounds shall be calculated. The vent stream concentration of each organic compound containing halogen atoms (parts per million by volume, by compound) shall be determined based on the following procedures: process knowledge that no halogen or hydrogen halides are present in the process; applicable engineering assessment as discussed in A.2.e.iv.(1)(c); concentration of organic compounds containing halogens measured by Method 18 of 40 CFR Part 60, Appendix A; or any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A.

The equation listed in 40 CFR 63.115(d)(2)(v)(B) shall be used to calculate the mass emission rate of halogen atoms. Where:
E= mass of halogen atoms, dry basis, kilogram per hour.
K2= Constant, 2.494x10-6 (parts per million)-1 (kilogram-mole per standard cubic meter) (minute/hour), where standard temperature is 20 C.

Cj= Concentration of halogenated compound j in the gas stream, dry basis, ppmv.
Mji= Molecular weight of halogen atom i in compound j of the gas stream, kilogram per kilogram-mole.
Lji= Number of atoms of halogen i in compound j of the gas stream.
Q= Flow rate of gas stream, dry standard cubic meters per minute, determined according to A.2.e.iv.(1) or A.2.e.iv.(2)(a).
j= Halogenated compound j in the gas stream.
i= Halogen atom i in compound j of the gas stream.
n= Number of halogenated compounds j in the gas stream.
m= Number of different halogens i in each compound j of the gas stream.

(3) [40 CFR 63.115(d)(3)]
The permittee shall calculate the TRE index value of the vent stream using the equations and procedures in this section.

(a) The equation for calculating the TRE index value for a vent stream controlled by a flare or incinerator is listed in 40 CFR 63.115(d)(3)(i). Where:
TRE= TRE index value.
EHAP= Hourly emission rate of total organic HAP, kilograms per hour, as calculated in A.2.e.iv.(1) or A.2.e.iv.(2)(d).
Qs= Vent stream flow rate, standard cubic meters per minute, at a standard temperature of 20 C, as calculated in A.2.e.iv.(1) or A.2.e.iv.(2)(a).
HT= Vent stream net heating value, megaJoules per standard cubic meter, as calculated in A.2.e.iv.(1) or A.2.iv.(2)(c).
ETOC= Emission rate of TOC (minus methane and ethane), kilograms per hour, as calculated in A.2.e.iv.(1) or A.2.e.iv.(2)(d).
a,b,c,d = Coefficients presented in Table 1 of A.2.zc, selected in accordance with A.2.e.iv.(3)(b) and A.2.e.iv.(3)(c).

(b) The permittee of a nonhalogenated vent stream shall calculate the TRE index value based on the use of a flare, a thermal incinerator with 0 percent heat recovery, and a thermal incinerator with 70 percent heat recovery and shall select the lowest TRE index value. The permittee shall use the applicable coefficients in Table 1 of A.2.zc for nonhalogenated vent streams located within existing sources and the applicable coefficients in Table 2 of A.2.zc for nonhalogenated vent streams located within new sources.

(c) The permittee of a halogenated vent stream shall calculate the TRE index value based on the use of a thermal incinerator with 0 percent heat recovery, and a scrubber. The permittee shall use the applicable coefficients in Table 1 of A.2.zc for halogenated vent streams located within existing sources and the applicable

coefficients in Table 2 of A.2.zc for halogenated vent streams located within new sources.

v. [40 CFR 63.115(e)]
The permittee of a Group 2 process vent shall recalculate the TRE index value, flow, or organic HAPs concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of A.2.e.v, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based.

(1) [40 CFR 63.115(e)(1)]
The TRE index value, flow rate, or organic HAP concentration shall be recalculated based on measurements of vent stream flow rate, TOC, and organic HAP concentrations, and heating values as specified in A.2.e.i, A.2.e.ii, A.2.e.iii, and A.2.e.iv, as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in A.2.e.iv.(1).

(2) [40 CFR 63.115(e)(2)]
Where the recalculated TRE index value is less than or equal to 1.0, or less than or equal to 4.0 but greater than 1.0, the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute, or the recalculated concentration is greater than or equal to 50 ppmv, the permittee shall submit a report as specified in A.2.h.vii, A.2.h.viii, A.2.h.ix, or A.2.h.x and shall comply with the appropriate provisions in A.2.c by the dates specified in A.1.

2.f [40 CFR 63.116]
Process vent provisions, performance test methods and procedures to determine compliance

i. [40 CFR 63.116(b)(3)]
The permittee is not required to conduct a performance test for a control device for which a performance test was conducted for determining compliance with a regulation promulgated by the EPA and the test was conducted using the same

methods specified A.2.f and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

ii. [40 CFR 63.116(c)]
Except as provided in A.2.f.i, the permittee using a control device to comply with the organic HAP concentration limit or percent reduction efficiency requirements in A.2.c.ii shall conduct a performance test using the procedures in A.2.f.ii.(1) through A.2.f.ii.(4). The organic HAP concentration and percent reduction may be measured as either total organic HAP or as TOC (minus methane and ethane) according to the procedures specified.

(1) [40 CFR 63.116(c)(1)]
Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites.

(a) [40 CFR 63.116(c)(1)(i), (c)(1)(i)(A), & (c)(1)(i)(B)]
For determination of compliance with the 98 percent reduction of total organic HAP requirement of A.2.c.ii, sampling sites shall be located at the outlet of the control device and at the inlet of the control device, after the final product recovery device. If a process vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater.

(b) [40 CFR 63.116(c)(1)(ii)]
For determination of compliance with the 20 ppmv total organic HAP limit in A.2.c.ii, the sampling site shall be located at the outlet of the control device.

(2) [40 CFR 63.116(c)(2)]
The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate.

(3) [40 CFR 63.116(c)(3)]
To determine compliance with the 20 ppmv total organic HAP limit in A.2.c.ii, the permittee shall use Method 18 of 40 CFR Part 60, Appendix A to measure either TOC (minus methane and ethane) or total organic HAP. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A of this part, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(a) [40 CFR 63.116(c)(3)(i)]
The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(b) [40 CFR 63.116(c)(3)(ii)]
The concentration of either TOC (minus methane or ethane) or total organic HAP shall be calculated according to A.2.f.ii.(3)(c) or A.2.f.ii.(3)(d).

(c) The TOC concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using the equation listed in 40 CFR 63.116(c)(3)(ii)(A). Where:
CTOC = Concentration of TOC (minus methane and ethane), dry basis, ppmv.
Cji = Concentration of sample components j of sample i, dry basis, ppmv.
n = Number of components in the sample.
x = Number of samples in the sample run.

(d) [40 CFR 63.116(c)(3)(ii)(B)]
The total organic HAP concentration (CHAP) shall be computed according to the equation in A.2.f.ii.(3)(c) except that only the organic HAP species shall be summed. The list of organic HAP's is provided in Table 2 of A.1.p.

(e) [40 CFR 63.116(c)(3)(iii)]
The concentration of TOC or total organic HAP shall be corrected to 3 percent oxygen if a combustion device is the control device according to A.2.f.ii.(3)(f) or A.2.f.ii.(3)(g).

(f) [40 CFR 63.116(c)(3)(iii)(A)]
The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR Part 60, Appendix A shall be used to determine the oxygen concentration (%O2d). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic

HAP samples are taken.

(g) The concentration corrected to 3 percent oxygen (Cc) shall be computed using the equation listed in 40 CFR 63.116(c)(3)(iii)(B). Where:
Cc = Concentration of TOC or organic HAP corrected to 3 percent oxygen, dry basis, ppmv.
Cm = Concentration of TOC (minus methane and ethane) or organic HAP, dry basis, ppmv.
%O2d = Concentration of oxygen, dry basis, percent by volume.

(4) [40 CFR 63.116(c)(4)]
To determine compliance with the 98 percent reduction requirement of A.2.c.ii, the permittee shall use Method 18 of 40 CFR Part 60, Appendix A; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR Part 63, Appendix A may be used. The following procedures shall be used to calculate percent reduction efficiency:

(a) [40 CFR 63.116(c)(4)(i)]
The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.

(b) [40 CFR 63.116(c)(4)(ii)]
The mass rate of either TOC (minus methane and ethane) or total organic HAP (Ei, Eo) shall be computed in accordance with A.2.f.ii.(4)(c), A.2.f.ii.(4)(d), and A.2.f.ii.(4)(e).

(c) The equations listed in 40 CFR 63.116(c)(4)(ii)(A) shall be used. Where:
Cij, Coj = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, ppmv.
Ei, Eo= Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour.
Mij, Moj = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.
Qi, Qo = Flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.
K2 = Constant, 2.494 x 10-6 (parts per million)-1 (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 C.

(d) [40 CFR 63.116(c)(4)(ii)(B)]
Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR Part 60, Appendix A are summed using the equation in A.2.f.ii.(4)(c).

(e) [40 CFR 63.116(c)(4)(ii)(C)]
Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using the equation in A.2.f.ii.(4)(c). The list of organic HAP's is provided in Table 2 of A.1.p.

(f) The percent reduction in TOC (minus methane and ethane) or total organic HAP shall be calculated using the equation listed in 40 CFR 63.116(c)(4)(iii). Where:
R = Control efficiency of control device, percent.
Ei = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the control device as calculated under A.2.f.ii.(4)(c), kilograms TOC per hour or kilograms organic HAP per hour.
Eo = Mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the control device, as calculated under A.2.f.ii.(4)(c), kilograms TOC per hour or kilograms organic HAP per hour.

(g) [40 CFR 63.116(c)(4)(iv)]
If the process vent stream entering a boiler or process heater with a design capacity less than 44 megawatts is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total organic HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total organic HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total organic HAP exiting the combustion device, respectively.

2.g [40 CFR 63.117]
Process vent provisions-reporting and record keeping requirements for group and TRE determinations and performance tests

i. [40 CFR 63.117(a)]
Each permittee subject to the control provisions for Group 1 vent streams in A.2.c.i, A.2.c.ii, or A.2.c.iii or the provisions for Group 2 vent streams with a TRE index value greater than 1.0 but less than or equal to 4.0 in A.2.c.vi shall:

(1) [40 CFR 63.117(a)(1)]
Keep an up-to-date, readily accessible record of the data specified in A.2.g.i.(4) through A.2.g.i.(6), as applicable, and

(2) [40 CFR 63.117(a)(2)]
Include the data in A.2.g.i.(4) through A.2.g.i.(6) in the NCS report as specified in A.2.zb.ii.

(3) [40 CFR 63.117(a)(3)]
If any subsequent TRE determinations or performance tests are conducted after the NCS has been submitted, report the data in A.2.g.i.(4) through A.2.g.i.(6) in the next Periodic Report as specified in A.2.zb.iii.

(4) [40 CFR 63.117(a)(4)]
Record and report the following when using a combustion device to achieve a 98 weight percent reduction in organic HAP or an organic HAP concentration of 20 ppmv, as specified in A.2.c.i:

(a) [40 CFR 63.117(a)(4)(i) and Table 3]
The parameter monitoring results for incinerators, catalytic incinerators, boilers or process heaters specified below, and averaged over the same time period of the performance testing.

(i) Thermal Incinerator - The permittee shall monitor and maintain continuous records of the firebox temperature of the thermal incinerator. The permittee shall record and report the firebox temperature averaged over the full period of the performance test. The permittee shall record the daily average firebox temperature for each operating day and shall report all daily average temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected.

(ii) Catalytic incinerator - The permittee shall monitor and maintain continuous records of the temperature upstream and downstream of the catalyst bed of the catalytic incinerator. The permittee shall record and report the upstream and downstream temperatures and the temperature difference across the catalyst bed averaged over the full period of the performance test. The permittee

shall record the daily average upstream temperature and temperature difference across the catalyst bed for each operating day. The permittee shall report all daily average upstream temperatures that are outside the range established in the NCS or operating permit. The permittee shall report all daily average temperature differences across the catalyst bed that are outside the range established in the NCS or operating permit. The permittee shall report all operating days when insufficient monitoring data are collected.

(iii) Boiler or process heater with a design input capacity less than 44 megawatts and vent stream is not introduced with or as the primary fuel. The permittee shall monitor and maintain continuous records of the firebox temperature. The permittee shall record and report the firebox temperature averaged over the full period of the performance test. The permittee shall record the daily average firebox temperature for each operating day. The permittee shall report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected.

(iv) All control devices - The permittee shall comply with 1) or 2) below:

1) The permittee shall monitor for the presence of flow diverted to the atmosphere from the control device. The permittee shall maintain hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour. The permittee shall record and report the times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

2) The permittee shall perform monthly inspections of sealed valves and maintain records that monthly inspections were performed. The permittee shall record and report all monthly inspections that show

the valves are moved to the diverting position or the seal has been changed.

(v) Recapture devices - The permittee shall monitor the appropriate parameter identified in A.2.g.i.(5) when the term "recapture" is substituted for "recovery." The permittee shall maintain records and submit reports for monitored parameters identified in A.2.g.i.(5)

(b) [40 CFR 63.117(a)(4)(ii)]
For an incinerator, the percent reduction of organic HAP or TOC achieved by the incinerator determined as specified in A.2.f.ii, or the concentration of organic HAP or TOC (ppmv, by compound) determined as specified in A.2.f.ii at the outlet of the incinerator on a dry basis corrected to 3 percent oxygen.

(c) [40 CFR 63.117(a)(4)(iii)]
For a boiler or process heater, a description of the location at which the vent stream is introduced into the boiler or process heater.

(d) [40 CFR 63.117(a)(4)(iv)]
For a boiler or process heater with a design heat input capacity of less than 44 megawatts and where the process vent stream is introduced with combustion air or used as a secondary fuel and is not mixed with the primary fuel, the percent reduction of organic HAP or TOC, or the concentration of organic HAP or TOC (ppmv, by compound) determined as specified in A.2.f.ii at the outlet of the combustion device on a dry basis corrected to 3 percent oxygen.

(5) [40 CFR 63.117(a)(7), (a)(7)(i), Table 4, and 63.117(a)(7)(ii)]
The parameter monitoring results for condensers or absorbers as the final recovery device shall be averaged over the same time period of the measurements of vent stream flow rate and concentration used in the TRE determination (both measured while the vent stream is normally routed and constituted). Record and report the following when achieving and maintaining a TRE index value greater than 1.0 but less than 4.0 as specified in A.2.c.iii or A.2.c.v:

(a) Condenser - The permittee shall monitor the exit (product side) temperature of the condenser. The permittee shall maintain continuous records of the exit temperature and shall record and report the exit temperature averaged over the full period of the TRE determination. The permittee shall record the daily average exit temperature for each operating day and shall report all daily average exit temperatures that are outside the range established in the NCS, operating permit, or most recent Periodic Report.

(b) Absorber - The permittee shall monitor the items in sections (i) and (ii) below:

(i) The permittee shall monitor the exit temperature of the absorbing liquid. The permittee shall maintain continuous records of the exit temperature and shall record and report the exit temperature of the absorbing liquid averaged over the full period of the TRE determination. The permittee shall record the daily average exit temperature of the absorbing liquid for each operating day and shall report all the daily average exit temperatures of the absorbing liquid that are outside the range established in the NCS, operating permit, or most recent Periodic Report.

(ii) The permittee shall monitor the exit specific gravity of the absorbing liquid. The permittee shall maintain continuous records of the specific gravity and shall record and report the exit specific gravity averaged over the full period of the TRE determination. The permittee shall record the daily average exit specific gravity for each operating day and shall report all daily average exit specific gravity values that are outside the range established in the NCS, operating permit, or most recent Periodic Report.

(c) The measurements and calculations performed to determine the TRE index value of the vent stream.

(6) [40 CFR 63.117(a)(8)]
Record and report the halogen concentration in the process vent stream determined according to the procedures specified in A.2.e.iv.(2)(e).

ii. [40 CFR 63.117(b)]
The permittee of a Group 2 process vent with a TRE index greater than 4.0 as specified in A.2.c.vii, shall maintain records and submit as part of the NCS specified in A.2.ab, measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in A.2.e.iv.(1).

iii. [40 CFR 63.117(c)]
The permittee of a group 2 process vent based on a flow rate less than 0.005 standard cubic meter per minute must submit to USEPA Region V, with a copy to the Central District Office, Ohio EPA, the flow rate measurement using methods and procedures specified in A.2.e.i and A.2.e.ii with the NCS specified in A.2.zb.

iv. [40 CFR 63.117(a)(7)(d)]
The permittee of a Group 2 process vent based on organic HAP or TOC concentration less than 50 ppmv must submit an organic HAP or TOC concentration measurement using the methods and procedures specified in A.2.e.i and A.2.e.iii with the NCS specified in A.2.zb.

v. [40 CFR 63.117(f)]
For each parameter monitored according to A.2.g.i.(4)(a) or A.2.g.i.(5)(a), the permittee shall establish a range for the parameter that indicates proper operation of the control or recovery device. In order to establish the range, the information required in A.2.zb.ii shall be submitted in the NCS or the operating permit application or amendment.

2.h [40 CFR 63.118]
Process vent provisions-Periodic Reporting and record keeping requirements

i. [40 CFR 63.118(a)]
Where a control device is used to comply with A.2.c.ii, the permittee shall keep the following records up-to-date and readily accessible:

(1) [40 CFR 63.118(a)(1)]
Continuous records of the equipment operating parameters specified to be monitored under A.2.d.i and listed in A.2.g.i.(4)(a).

(2) [40 CFR 63.118(a)(2)]
Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in A.2.zb.vi.

(3) [40 CFR 63.118(a)(3)]
Hourly records of whether the flow indicator specified under A.2.d.iv.(1) was operating and whether flow was detected at any time under 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 monitor is not operating.

(4) [40 CFR 63.118(a)(4)]
Where a seal mechanism is used to comply with A.2.d.iv.(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 duration 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 car-seal that has broken.

ii. [40 CFR 63.118(b)]
Where a recovery device is used or other means to achieve and maintain a TRE index value greater than 1.0 but less than 4.0 as specified in A.2.c.iii or A.2.c.vi, the permittee shall keep the following records up-to-date and readily accessible:

(1) [40 CFR 63.118(b)(1)]
Continuous records of the equipment operating parameters specified to be monitored under A.2.d.ii and listed in A.2.g.i.(5)(a) or specified in accordance with A.2.d.iii and A.2.d.v; and

(2) [40 CFR 63.118(b)(2)]
Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in A.2.ab.vi. If carbon adsorber regeneration stream flow and carbon bed regeneration temperature are monitored, the records specified in A.2.g.i.(5)(a) shall be kept instead of the daily averages.

iii. [40 CFR 63.118(c)]
Where compliance is demonstrated with the TRE index value greater than 4.0 under A.2.c.vii or greater than 1.0 under A.2.c.iii or A.2.c.vi, the permittee shall keep up-to-date, readily accessible records of:

(1) [40 CFR 63.118(c)(1)]
Any process changes as defined in A.2.e.v; and

(2) [40 CFR 63.118(c)(2)]
Any recalculation of the TRE index value pursuant to A.2.e.v.

iv. [40 CFR 63.118(d)]
Where compliance is demonstrated by maintaining a flow rate less than 0.005 standard cubic meter per minute under A.2.c.vii, the permittee shall keep up-to-date, readily accessible records of:

(1) [40 CFR 63.118(d)(1)]
Any process changes as defined in A.2.e.v that increase the vent stream flow rate,

(2) [40 CFR 63.118(d)(2)]

Any recalculation or measurement of the flow rate pursuant to A.2.e.v, and

(3) [40 CFR 63.118(d)(3)]
If the flow rate increases to 0.005 standard cubic meter per minute or greater as a result of the process change, the TRE determination performed according to the procedures of A.2.e.iv.

v. [40 CFR 63.118(e)]
Where compliance is demonstrated by maintaining an organic HAP concentration less than 50 ppmv organic HAP concentration under A.2.c.viii, the permittee shall keep up-to-date, readily accessible records of:

(1) [40 CFR 63.118(e)(1)]
Any process changes as defined in A.2.e.v that increase the organic HAP concentration of the process vent stream;

(2) [40 CFR 63.118(e)(2)]
Any recalculation or measurement of the concentration pursuant to A.2.e.v; and

(3) [40 CFR 63.118(e)(3)]
If the organic HAP concentration increases to 50 ppmv or greater as a result of the process change, the TRE determination performed according to the procedures of A.2.e.iv.

vi. [40 CFR 63.118(f)]
Where compliance is demonstrated in accordance with the requirements of A.2.c, the permittee shall submit to USEPA Region V, with a copy to the Central District Office, Ohio EPA, Periodic Reports of the following recorded information according to the schedule in A.2.zb:

(1) [40 CFR 63.118(f)(1)]
Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under sections A.2.h.i and A.2.h.ii were outside the ranges established in the NCS or operating permit.

(2) [40 CFR 63.118(f)(2)]
For Group 1 points, reports of the duration of periods when monitoring data is not collected for each excursion caused by insufficient monitoring data as defined in A.2.zb.iii.(2)(a)(i).

(3) [40 CFR 63.118(f)(3)]
Reports of the times and durations of all periods recorded under A.2.h.i.(3) when the vent stream is diverted from the control device through a bypass line.

(4) [40 CFR 63.118(f)(4)]
Reports of all periods recorded under A.2.h.i.(4) in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

vii. [40 CFR 63.118(g)]
Whenever a process change, as defined in A.2.e.v, is made that causes a Group 2 process vent to become a Group 1 process vent, the permittee shall submit a

report within 180 calendar days after the process change as specified in A.2.za.viii. The report shall include:

(1) [40 CFR 63.118(g)(1)]
A description of the process change;

(2) [40 CFR 63.118(g)(2)]
The results of the recalculation of the flow rate, organic HAP concentration, and TRE index value required under A.2.e.v and recorded under A.2.h.iii, A.2.h.iv, or A.2.h.v; and

(3) [40 CFR 63.118(g)(3)]
A statement that the permittee will comply with the provisions of A.2.c for Group 1 process vents by the dates specified in A.1.

viii. [40 CFR 63.118(h)]
Whenever a process change, as defined in A.2.e.v, is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0, the permittee shall submit a report within 180 calendar days after the process change. The report may be submitted as part of the next Periodic Report. The report shall include:

(1) [40 CFR 63.118(h)(1)]
A description of the process change;

(2) [40 CFR 63.118(h)(2)]
The results of the recalculation of the TRE index value required under A.2.e.v and recorded under A.2.h.iii; and

(3) [40 CFR 63.118(h)(3)]
A statement that the permittee will comply with the requirements specified in A.2.c.vi.

ix. [40 CFR 63.118(i)]
Whenever a process change, as defined in A.2.e.v, is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 standard cubic meter per minute or greater and a TRE index value less than or equal to 4.0, the permittee shall submit a report within 180 calendar days after the process change. The report may be submitted as part of the next Periodic Report. The

report shall include:

(1) [40 CFR 63.118(i)(1)]
A description of the process change;

(2) [40 CFR 63.118(i)(2)]
The results of the recalculation of the flow rate and the TRE determination required under A.2.e.v and recorded under A.2.h.iv; and

(3) [40 CFR 63.118(i)(3)]
A statement that the permittee will comply with the requirements specified in A.2.c.vi.

x. [40 CFR 63.118(j)]
Whenever a process change, as defined in A.2.e.v, is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0, the permittee shall submit a report within 180 calendar days after the process change. The report may be submitted as part of the next Periodic Report. The report shall include:

(1) [40 CFR 63.118(j)(1)]
A description of the process change,

(2) [40 CFR 63.118(j)(2)]
The results of the recalculation of the organic HAP concentration and the TRE determination required under A.2.e.v and recorded under A.2.h.v, and

(3) [40 CFR 63.118(j)(3)]
A statement that the permittee will comply with the requirements specified in A.2.c.vi.

xi. [40 CFR 63.118(k)]
The permittee is not required to submit a report of a process change if one of the conditions listed in A.2.h.xi.(1), A.2.h.xi.(2), A.2.h.xi.(3), or A.2.h.xi.(4) is met.

(1) [40 CFR 63.118(k)(1)]
The process change does not meet the definition of a process change in A.2.e.v, or

(2) [40 CFR 63.118(k)(2)]
The vent stream flow rate is recalculated according to A.2.e.v and the recalculated value is less than 0.005 standard cubic meter per minute, or

(3) [40 CFR 63.118(k)(3)]
The organic HAP concentration of the vent stream is recalculated according to A.2.e.v and the recalculated value is less than 50 ppmv, or

(4) [40 CFR 63.118(k)(4)]
The TRE index value is recalculated according to A.2.e.v and the recalculated value is greater than 4.0.

2.i Reserved

2.j Reserved

2.k [40 CFR 63.132]
Process wastewater provisions-general

i. [40 CFR 63.132(a)]
The permittee shall comply with the requirements in A.2.k.i.(1) through A.2.k.i.(3), no later than the applicable dates specified in A.1 for process wastewater streams located at existing sources.

(1) [40 CFR 63.132(a)(1)]
The permittee shall determine whether each wastewater stream requires control for compounds listed in Table 9 of A.2.zc by complying with the requirements in either A.2.k.i.(1)(a) or A.2.k.i.(1)(b), and complying with the requirements in A.2.k.i.(1)(c).

(a) Comply with A.2.k.ii, determining whether the wastewater stream is Group 1 or Group 2 for compounds listed in Table 9 of A.2.zc; or

(b) Comply with A.2.k.v, designating the wastewater stream as a Group 1 wastewater stream.

(c) Comply with A.2.k.vi.

(2) [40 CFR 63.132(a)(2)]
The permittee shall comply with A.2.k.i.(2)(a) through A.2.k.i.(2)(d) for wastewater streams that are Group 1 for compounds listed in Table 9 of A.2.zc.

(a) [40 CFR 63.132(a)(2)(i), (a)(2)(i)(A), & (a)(2)(i)(B)]
Comply with the applicable requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators as specified in A.2.l through A.2.p, except as provided in this section and A.2.q.i.(2). The waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. The pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices.

(b) [40 CFR 63.132(a)(2)(ii)]
Comply with the applicable requirements for control of compounds listed in Table 9 of A.2.zc as specified in A.2.q. Alternatively, the

permittee may elect to comply with the treatment provisions specified in A.2.k.vii.

(c) [40 CFR 63.132(a)(2)(iii)]
Comply with the applicable monitoring and inspection requirements specified in A.2.t.

(d) [40 CFR 63.132(a)(2)(iv)]
Comply with the applicable record keeping and reporting requirements specified in A.2.w and A.2.x.

(3) [40 CFR 63.132(a)(3)]
The permittee shall comply with the applicable record keeping and reporting requirements of sections A.2.w and A.2.x for Group 2 wastewater streams.

ii. [40 CFR 63.132(b)]
The permittee shall comply with the requirements in A.2.k.ii.(1) through A.2.k.ii.(4) for process wastewater streams located at new sources, no later than the applicable dates specified in A.1.

(1) [40 CFR 63.132(b)(1)]
The permittee shall determine whether each wastewater stream requires control for compounds listed in Table 8 of A.2.zc by complying with the requirements in either A.2.k.ii.(1)(a) or A.2.k.ii.(1)(b), and complying with the requirements in A.2.k.ii.(1)(c).

(a) [40 CFR 63.132(b)(1)(i)]
Comply with A.2.k.iv, determining whether the wastewater stream is Group 1 or Group 2 for compounds listed in Table 8 of A.2.zc; or

(b) [40 CFR 63.132(b)(1)(ii)]
Comply with A.2.k.v, designating the wastewater stream as a Group 1 wastewater stream for compounds listed in Table 8 of A.2.zc.

(c) [40 CFR 63.132(b)(1)(iii)]
Comply with A.2.k.vi.

(2) [40 CFR 63.132(b)(2)]
The permittee shall determine whether each wastewater stream requires control for compounds listed in Table 9 of A.2.zc by complying with the requirements in either A.2.k.ii.(2)(a) or A.2.k.ii.(2)(b), and comply with the requirements in A.2.k.ii.(2)(c).

(a) [40 CFR 63.132(b)(2)(i)]
Comply with A.2.k.iii, determining whether the wastewater stream is

Group 1 or Group 2 for compounds listed in Table 9 of A.2.zc; or

(b) [40 CFR 63.132(b)(2)(ii)]
Comply with A.2.k.v, designating the wastewater stream as a Group 1 wastewater stream.

(c) [40 CFR 63.132(b)(1)(iii)]
Comply with A.2.k.vi.

(3) [40 CFR 63.132(b)(3)]
The permittee shall comply with A.2.k.ii.(3)(a) through A.2.k.ii.(3)(d) for wastewater streams that are Group 1 for Table 8 and/or Table 9 compounds.

(a) [40 CFR 63.132(b)(3)(i)]
Comply with the applicable requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators specified in the requirements of A.2.l through A.2.p, except as provided in this section and A.2.q.i.(2). The waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. The pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices.

(b) [40 CFR 63.132(b)(3)(ii)]
Comply with the applicable requirements for control of compounds listed in Table 8 of A.2.zc specified in A.2.q. Alternatively, the permittee may elect to comply with the provisions specified in A.2.k.vii.

(c) [40 CFR 63.132(b)(3)(iii)]
Comply with the applicable monitoring and inspection requirements specified in A.2.t.

(d) [40 CFR 63.132(b)(3)(iv)]
Comply with the applicable record keeping and reporting

requirements specified in A.2.w and A.2.x.

(4) [40 CFR 63.132(b)(4)]
The permittee shall comply with the record keeping and reporting requirements specified in A.2.w and A.2.x for wastewater streams that are Group 2 for both Table 8 and Table 9 compounds.

iii. [40 CFR 63.132(c)]
This section provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for compounds listed in Table 9 of A.2.zc. Total annual average concentration shall be determined according to the procedures specified in A.2.u.iii.

(1) [40 CFR 63.132(c)(1)]
A wastewater stream is a Group 1 wastewater stream for compounds listed in Table 9 of A.2.zc if:

(a) [40 CFR 63.132(c)(1)(i)]
The total annual average concentration of Table 9 compounds is greater than or equal to 10,000 parts per million by weight at any flow rate; or

(b) [40 CFR 63.132(c)(1)(ii)]
The total annual average concentration of Table 9 compounds is greater than or equal to 1,000 parts per million by weight and the annual average flow rate is greater than or equal to 10 liters per minute.

(2) [40 CFR 63.132(c)(2)]
A wastewater stream is a Group 2 wastewater stream for Table 9 compounds if it is not a Group 1 wastewater stream for Table 9 compounds by the criteria in A.2.k.iii.(1).

iv. [40 CFR 63.132(d)]
This section provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for compounds listed in Table 8 of A.2.zc. Annual average concentration for each Table 8 compound shall be determined according to the procedures specified in A.2.u.ii. Annual average flow rate shall be determined according to the procedures specified in A.2.u.iii.

(1) [40 CFR 63.132(d)(1)]
A wastewater stream is a Group 1 wastewater stream for Table 8 compounds if the annual average flow rate is 0.02 liter per minute or greater and the annual average concentration of any individual Table 8 compound is 10 parts per million by weight or greater.

(2) [40 CFR 63.132(d)(2)]

A wastewater stream is a Group 2 wastewater stream for Table 8 compounds if the annual average flow rate is less than 0.02 liter per minute or the annual average concentration for each individual Table 8 compound is less than 10 parts per million by weight.

v. [40 CFR 63.132(e)]
The permittee may elect to designate a wastewater stream a Group 1 wastewater stream in order to comply with A.2.k.i or A.2.k.ii. To designate a wastewater stream or a mixture of wastewater streams a Group 1 wastewater stream, the procedures specified in A.2.k.v.(1), A.2.k.v.(2), and A.2.u.i.(2) shall be followed.

(1) [40 CFR 63.132(e)(1)]
From the point of determination for each wastewater stream that is included in the Group 1 designation to the location where the permittee elects to designate such wastewater stream(s) as a Group 1 wastewater stream, the permittee shall comply with all applicable emission suppression requirements specified in A.2.l through A.2.p.

(2) [40 CFR 63.132(e)(2)]
From the location where the permittee designates a wastewater stream or mixture of wastewater streams to be a Group 1 wastewater stream, such Group 1 wastewater stream shall be managed in accordance with all applicable emission suppression requirements specified in A.2.l through A.2.p and with the treatment requirements in A.2.q.

vi. [40 CFR 63.132(f)]
The permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million of Table 9 compounds (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of A.2.u.ii) from a CMPU 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 sections A.2.k.vi.(1) through A.2.k.vi.(4) below:

(1) equipment leaks;

(2) activities included in maintenance or startup/shutdown/malfunction plans;

(3) spills; or

(4) samples of a size not greater than reasonably necessary for the method of analysis that is used.

vii. [40 CFR 63.132(g)]
The permittee may elect to transfer a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream to an off-site treatment operation.

(1) [40 CFR 63.132(g)(1)(i)]
The permittee transferring the wastewater stream or residual shall comply with the provisions specified in A.2.l through A.2.p for each waste management unit that receives or manages a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream prior to shipment or transport.

(2) [40 CFR 63.132(g)(1)(ii)]
The permittee transferring the wastewater stream or residual shall include a notice with the shipment or transport of each Group 1 wastewater stream or residual removed from a Group 1 wastewater stream. The notice shall state that the wastewater stream or residual contains organic HAPs that are to be treated in accordance with the provisions A.2. When the transport is continuous or ongoing (for example, discharge to a publicly-owned treatment works), the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment.

(3) [40 CFR 63.132(g)(2)]
The permittee may not transfer the wastewater stream or residual unless the transferee has submitted to USEPA Region V, with a copy to the Central District Office, Ohio EPA, a written certification that the transferee will manage and treat any Group 1 wastewater stream or residual removed from a Group 1 wastewater stream received from a source subject to the requirements of section A.2 in accordance with the requirements of either A.2.l through A.2.x, or A.1.u. The certifying entity may revoke the written certification by sending a written statement to USEPA Region V, with a copy to the Central District Office, Ohio EPA, and the permittee giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this section. Upon expiration of the notice period, the permittee may not transfer the wastewater stream or residual to the treatment operation.

(4) [40 CFR 63.132(g)(3)]
By providing this written certification to USEPA Region V, with a copy to the Central District Office, Ohio EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in A.2.k.vii.(3) with respect to any shipment of wastewater or residual covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by U. S. EPA, and/or Ohio EPA, against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by the permittee.

(5) [40 CFR 63.132(g)(4)]
Written certifications and revocation statements from the transferees of wastewater or residuals shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to USEPA Region V, with a copy to the Central District Office, Ohio EPA. Such written certifications are not transferable by the treater.

2.l [40 CFR 63.133]
Process wastewater provisions-wastewater tanks

i. [40 CFR 63.133(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 requirements of either A.2.I.i.(1) or A.2.I.i.(2) as follows:

[40 CFR Part 63, Subpart G, Table 10]
For tanks with a capacity less than 75 cubic meters, the permittee shall comply with requirements of A.2.I.i.(1).

For tanks with a capacity equal to or greater than 75 but less than 151 cubic meters and a vapor pressure less than 13.1 kPa, the permittee shall comply with requirements of A.2.I.i.(1).

For tanks with a capacity equal to or greater than 75 but less than 151 cubic meters and a vapor pressure equal to or greater than 13.1 kPa, the permittee shall comply with requirements of A.2.I.i.(2).

For tanks with a capacity equal to or greater than 151 cubic meters and a vapor pressure less than 5.2 kPa, the permittee shall comply with requirements of A.2.I.i.(1).

For tanks with a capacity equal to or greater than 151 cubic meters and a vapor pressure equal to or greater than 5.2 kPa, the permittee shall comply with requirements of A.2.I.i.(2).

(1) [40 CFR 63.133(a)(1)]
The permittee shall operate and maintain a fixed roof except that if the wastewater tank is used for heating wastewater, or treating by means of an exothermic reaction or the contents of the tank is spared, the permittee shall comply with the requirements specified in A.2.I.i.(2).

(2) [40 CFR 63.133(a)(2)]
The permittee shall comply with the requirements in A.2.I.ii through A.2.I.iv and shall operate and maintain one of the emission control techniques listed in A.2.I.i.(2)(a) through A.2.I.i.(2)(c).

(a) [40 CFR 63.133(a)(2)(i)]
A fixed roof and a closed-vent system that routes the organic HAPs vapors vented from the wastewater tank to a control device.

(b) [40 CFR 63.133(a)(2)(ii)]
A fixed roof and an internal floating roof.

(c) [40 CFR 63.133(a)(2)(iii)]
An external floating roof.

ii. [40 CFR 63.133(b)]
If the permittee elects to comply with the requirements of A.2.l.i.(2)(a), the fixed roof shall meet the requirements of A.2.l.ii.(1), the control device shall meet the requirements of A.2.l.ii.(2), and the closed-vent system shall meet the requirements of A.2.l.ii.(3).

(1) [40 CFR 63.133(b)(1)]
The fixed-roof shall meet the following requirements:

(a) [40 CFR 63.133(b)(1)(i)]
Except as provided in A.2.l.ii.(4), the fixed roof and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in accordance with the requirements specified in A.2.y.

(b) [40 CFR 63.133(b)(1)(ii)]
Each opening shall be maintained in a closed position (e.g., covered by a lid) at all times that the wastewater tank contains a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream except when it is necessary to use the opening for wastewater sampling, removal, or for equipment inspection, maintenance, or repair.

(2) [40 CFR 63.133(b)(2)]
The control device shall be designed, operated, and inspected in accordance with the requirements of A.2.r.

(3) [40 CFR 63.133(b)(3)]
Except as provided in A.2.l.ii.(4), the closed-vent system shall be inspected in accordance with the requirements of A.2.y.

(4) [40 CFR 63.133(b)(4)]
For any fixed roof tank and closed-vent system that is operated and maintained under negative pressure, the permittee is not required to comply with the requirements specified in A.2.y.

iii. [40 CFR 63.133(f)]
Each wastewater tank shall be inspected initially, and semi-annually thereafter, for improper work practices in accordance with A.2.t. 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.

iv. [40 CFR 63.133(h)]
Except as provided in A.2.s, 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 calendar days after identification. If a failure that is detected during inspections required by A.2.l.i.(2)(a) cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. Documentation of a

decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

2.m [40 CFR 63.134]
This facility has no surface impoundments which receive, manage, or treat a Group 1 wastewater stream at the time of permit issuance.

2.n [40 CFR 63.135]
Process wastewater provisions-containers

i. [40 CFR 63.135(a)]
The permittee shall comply with the requirements of A.2.n.ii through A.2.n.vi for each container that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.

ii. [40 CFR 63.135(b)]
The permittee shall operate and maintain a cover on each container used to handle, transfer, or store a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream in accordance with the following requirements:

(1) [40 CFR 63.135(b)(1)]
Except as provided in A.2.n.iv.(4), if the capacity of the container is greater than 0.42 cubic meters, the cover and all openings (e.g., bungs, hatches, sampling ports, and pressure relief devices) shall be maintained in accordance with the requirements specified in A.2.y.

(2) [40 CFR 63.135(b)(2)]
If the capacity of the container is less than or equal to 0.42 cubic meters, the permittee shall comply with either (a) or (b) below:

(a) [40 CFR 63.135(b)(2)(i)]
The container must meet existing Department of Transportation specifications and testing requirements under 49 CFR Part 178; or

(b) [40 CFR 63.135(b)(2)(ii)]
Except as provided in section A.2.n.iv.(4), the cover and all openings shall be maintained without leaks as specified in A.2.y.

(3) [40 CFR 63.135(b)(3)]
The cover and all openings shall be maintained in a closed position (e.g., covered by a lid) at all times that a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream is in the container except when it is necessary to use the opening for filling, removal, inspection, sampling, or pressure relief events related to safety considerations.

iii. [40 CFR 63.135(c)]
For containers with a capacity greater than or equal to 0.42 cubic meter, a submerged fill pipe shall be used when a container is being filled by pumping with a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream.

(1) [40 CFR 63.135(c)(1)]
The submerged fill pipe outlet shall extend to no more than 6 inches or within two fill pipe diameters of the bottom of the container while the container is being filled.

(2) [40 CFR 63.135(c)(2)]
The cover shall remain in place and all openings shall be maintained in a closed position except for those openings required for the submerged fill pipe and for venting of the container to prevent physical damage or permanent deformation of the container or cover.

iv. [40 CFR 63.135(d)]
During treatment of a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, including aeration, thermal or other treatment, in a container, whenever it is necessary for the container to be open, the container shall be located within an enclosure with a closed-vent system that routes the organic HAPs vapors vented from the container to a control device.

(1) [40 CFR 63.135(d)(1)]
Except as provided in A.2.n.iv.(4), the enclosure and all openings (e.g., doors, hatches) shall be maintained in accordance with the requirements specified in A.2.y.

(2) [40 CFR 63.135(d)(2)]
The control device shall be designed, operated, and inspected in accordance with A.2.r.

(3) [40 CFR 63.135(d)(3)]
Except as provided in A.2.n.iv.(4), the closed-vent system shall be inspected in accordance with A.2.y.

(4) [40 CFR 63.135(d)(4)]
For any enclosure and closed-vent system that is operated and maintained under negative pressure, the permittee is not required to

comply with the requirements specified in A.2.y.

v. [40 CFR 63.135(e)]
Each container shall be inspected initially, and semi-annually thereafter, for improper work practices and control equipment failures in accordance with A.2.t.

(1) [40 CFR 63.135(e)(1)]
For containers, 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.

(2) [40 CFR 63.135(e)(2)]
For containers, control equipment failure includes, but is not limited to, any time a cover or door has a gap or crack, or is broken.

vi. [40 CFR 63.135(f)]
Except as provided in A.2.s, 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.

2.o [40 CFR 63.136]
Process wastewater provisions-individual drain systems

i. [40 CFR 63.136(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.2.o.ii, through A.2.o.iv or with A.2.o.v through A.2.o.vii.

ii. [40 CFR 63.136(b)]
If the permittee elects to comply with this section, 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.2.o.ii.(1) through A.2.o.ii.(5).

(1) [40 CFR 63.136(b)(1)]
The cover and all openings shall meet the following requirements:

(a) [40 CFR 63.136(b)(1)(i)]
Except as provided in A.2.o.ii.(4), the cover and all openings (e.g., access hatches, sampling ports) shall be maintained in accordance with the requirements specified in A.2.y.

(b) [40 CFR 63.136(b)(1)(ii)]
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.

(2) [40 CFR 63.136(b)(2)]
The control device shall be designed, operated, and inspected in accordance with A.2.r.

(3) [40 CFR 63.136(b)(3)]
Except as provided in A.2.o.ii.(4), the closed-vent system shall be inspected in accordance with A.2.y.

(4) [40 CFR 63.136(b)(4)]
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 A.2.y.

(5) [40 CFR 63.136(b)(5)]
The individual drain system shall be designed and operated to segregate the vapors within the system from other drain systems and the atmosphere.

iii. [40 CFR 63.136(c)]
Each individual drain system shall be inspected initially, and semi- annually thereafter, for improper work practices and control equipment failures, in accordance with the inspection requirements specified in A.2.t.i.(1) through A.2.t.i.(5).

(1) [40 CFR 63.136(c)(1)]
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.

(2) [40 CFR 63.136(c)(2)]
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.

iv. [40 CFR 63.136(d)]
Except as provided in A.2.s, 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.

v. [40 CFR 63.136(e)(1)]
If the permittee elects to comply with this section, the permittee shall comply with the requirements in A.2.o.v.(1) through A.2.o.v.(3):

(1) [40 CFR 63.136(e)(1)]
Each drain shall be equipped with water seal controls or a tightly fitting cap or plug. The permittee shall comply A.2.o.v.(1)(a) and A.2.o.v.(1)(b).

(a) [40 CFR 63.136(e)(1)(i)]
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) [40 CFR 63.136(e)(1)(ii)]
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.)

(2) [40 CFR 63.136(e)(2)]
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.2.o.v.(2)(a) or A.2.o.v.(2)(b).

(a) [40 CFR 63.136(e)(2)(i)]
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 A.2.y and the control device shall be designed, operated, and inspected in accordance with the requirements of A.3.r.

(b) [40 CFR 63.136(e)(2)(ii)]
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 of (i) and (ii) below:

(i) [40 CFR 63.136(e)(2)(ii)(A)]
The vent pipe shall be at least 90 centimeters in length and

no greater than 10.2 centimeters in nominal inside diameter.

(ii) [40 CFR 63.136(e)(2)(ii)(B)]
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 USEPA Region V-Administrator, or the Central District Office, Ohio EPA, that the junction box water seal is properly designed and restricts ventilation.

(3) [40 CFR 63.136(e)(3)]
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.

vi. [40 CFR 63.136(f)]
Equipment used to comply with A.2.o.v.(1), A.2.o.v.(2), or A.2.o.v.(3) shall be inspected as follows:

(1) [40 CFR 63.136(f)(1)]
Each drain using a tightly fitting cap or plug shall be visually inspected initially, and semi-annually thereafter, to ensure caps or plugs are in place and that there are no gaps, cracks, or other holes in the cap or plug.

(2) [40 CFR 63.136(f)(2)]
Each junction box shall be visually inspected initially, and semi-annually thereafter, to ensure that there are no gaps, cracks, or other holes in the cover.

(3) [40 CFR 63.136(f)(3)]
The unburied portion of each sewer line shall be visually inspected initially, and semi-annually thereafter, for indication of cracks or gaps that could result in air emissions.

vii. [40 CFR 63.136(g)]
Except as provided in A.2.s, 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.

2.p [40 CFR 63.137]
Process wastewater provisions-oil-water separators

i. [40 CFR 63.137(a)]
For each oil-water separator 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 requirements of A.2.p.iii and A.2.p.iv and shall operate and maintain one of the following:

(1) [40 CFR 63.137(a)(1)]

A fixed roof and a closed vent system that routes the organic HAPs vapors vented from the oil-water separator to a control device. The fixed roof, closed-vent system, and control device shall meet the requirements specified in A.2.p.ii;

(2) [40 CFR 63.137(a)(2)]
A floating roof meeting the requirements in 40 CFR Part 60, Subpart QQQ 60.693-2(a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4). For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the permittee shall operate and maintain a fixed roof, closed vent system, and control device that meet the requirements specified in A.2.p.ii.

ii. [40 CFR 63.137(b)]
If the permittee elects to comply with the requirements of A.2.p.i.(1) or A.2.p.i.(2), the fixed roof shall meet the requirements of A.2.p.ii.(1), the control device shall meet the requirements of A.2.p.ii.(2), and the closed-vent system shall meet the requirements of A.2.p.ii.(3).

(1) The fixed-roof shall meet the following requirements:

(a) [40 CFR 63.137(b)(1)(i)]
Except as provided in A.2.p.ii.(4), the fixed roof and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in accordance with the requirements specified in A.2.y.

(b) [40 CFR 63.137(b)(1)(ii)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the oil-water separator contains a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

(2) [40 CFR 63.137(b)(2)]
The control device shall be designed, operated, and inspected in accordance with the requirements of A.2.r.

(3) [40 CFR 63.137(b)(3)]
Except as provided in A.2.p.ii.(4), the closed-vent system shall be inspected in accordance with the requirements of A.2.y.

(4) [40 CFR 63.137(b)(4)]
For any fixed roof and closed-vent system that is operated and maintained under negative pressure, the permittee is not required to comply with the requirements of A.2.y.

iii. [40 CFR 63.137(c)]
If the permittee elects to comply with the requirements of A.2.p.i.(2), seal gaps shall be measured according to the procedures specified in 40 CFR 60.696(d)(1) and the schedule specified in A.2.p.iii.(1) and A.2.p.iii.(2).

(1) [40 CFR 63.137(c)(1)]
Measurement of primary seal gaps shall be performed within 60 calendar days after installation of the floating roof and introduction of a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream and once every 5 years thereafter.

(2) [40 CFR 63.137(c)(2)]
Measurement of secondary seal gaps shall be performed within 60 calendar days after installation of the floating roof and introduction of a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream and once every year thereafter.

iv. [40 CFR 63.137(d)]
Each oil-water separator shall be inspected initially, and semi-annually thereafter, for improper work practices in accordance with A.2.t. For oil-water separators, improper work practice includes, but is not limited to, leaving open or ungasketed any access door or other opening when such door or opening is not in use.

v. [40 CFR 63.137(e)]
Each oil-water separator shall be inspected for control equipment failures as defined in A.2.p.v.(1) according to the schedule specified in A.2.p.v.(2) and A.2.p.v.(3).

(1) [40 CFR 63.137(e)(1)]
For oil-water separators, control equipment failure includes, but is not limited to, the conditions specified in (a) through (f) below.

(a) The floating roof is not resting on either the surface of the liquid or on the leg supports.

(b) There is stored liquid on the floating roof.

(c) A rim seal is detached from the floating roof.

(d) There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.

(e) There are gaps between the primary seal and the separator wall that exceed 67 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the primary seal and the separator wall exceeds 3.8 centimeters.

(f) There are gaps between the secondary seal and the separator wall that exceed 6.7 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the secondary seal and the separator wall exceeds 1.3 centimeters.

(g) A gasket, joint, lid, cover, or door has a gap or crack, or is broken.

(2) [40 CFR 63.137(e)(2)]
The permittee shall inspect for the control equipment failures in sections A.2.p.v.(1) according to the schedule specified in A.2.p.iii.

(3) [40 CFR 63.137(e)(3)]
The permittee shall inspect for control equipment failures in A.2.p.v.(1)(g) initially, and semi-annually thereafter.

vi. [40 CFR 63.137(f)]
Except as provided in A.2.s, 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 calendar days after identification.

2.q [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

i. [40 CFR 63.138(a)]
This section specifies the performance standards for treating Group 1 wastewater streams. The permittee shall comply with the requirements as specified in A.2.q.i.(1) to A.2.q.i.(4). Once a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream has been treated in accordance with A.2, it is no longer subject to the requirements of A.2.

(1) For all Group 1 wastewater streams, the permittee shall comply with A.2.q.ii.

(2) Biological treatment processes in compliance with this section may be either open or closed biological treatment processes. An open biological treatment process in compliance with this section need not be covered and vented to a control device as required in A.2.l through A.2.p. An open biological treatment process in compliance with this section and using A.2.v.ii to demonstrate compliance is not subject to the requirements of A.2.l through A.2.p. Waste management units upstream of an open biological treatment process shall meet the requirements of A.2.l through A.2.p, as applicable.

(3) For each open biological treatment process, the permittee shall conduct a performance test as specified in A.2.v.

(4) When residuals result from treating Group 1 wastewater streams, the permittee shall comply with the requirements for residuals specified in A.2.q.iv.

ii. [40 CFR 63.138(f)]
The permittee shall achieve the required mass removal (RMR) of Table 8 compounds at a new source for a wastewater stream that is Group 1 for Table 8 and/or of Table 9 compounds at a new or existing source for a wastewater stream that is Group 1 for Table 9 compounds. For open biological treatment processes compliance shall be determined using the procedures specified in A.2.v.ii.

iii. [40 CFR 63.138(j)]
The permittee shall comply with A.2.v.ii for the open biological treatment unit is used to comply with A.2.q.ii.

(1) A design evaluation and supporting documentation that address the operating characteristics of the treatment process and that is based on operation at a representative wastewater stream flow rate and a concentration under which it would be most difficult to demonstrate compliance. The mass flow rate of Table 8 or Table 9 compounds exiting the treatment process shall be the sum of the mass flow rate of Table 8 or Table 9 compounds in the wastewater stream exiting the biological treatment process and the mass flow rate of the vented gas stream exiting the control device. The mass flow rate entering the treatment process minus the mass flow rate exiting the process determines the actual mass removal.

(2) Performance tests conducted using test methods and procedures that meet the applicable requirements specified in A.2.v.

iv. [40 CFR 63.138(k)]
For each residual removed from a Group 1 wastewater stream, the permittee shall control for air emissions by complying with A.2.l through A.2.p and by complying with one of the provisions in (1) through (3) below.

(1) Recycle the residual to a production process or sell the residual for the purpose of recycling. Once a residual is returned to a production process, the residual is no longer subject to this section.

(2) Return the residual to the treatment process.

(3) Treat the residual to destroy the total combined mass flow rate of Table 8 and/or Table 9 compounds by 99 percent or more.

2.r [40 CFR 63.139]
Process wastewater provisions-control devices

i. [40 CFR 63.139(a)]
For each control device or combination of control devices used to comply with the provisions in A.2.l through A.2.q, the permittee shall operate and maintain the control device or combination of control devices in accordance with the requirements of A.2.r.ii through A.2.r.vi.

ii. [40 CFR 63.139(b)]
Whenever organic HAPs emissions are vented to a control device which is used to comply with the provisions of A.2, such control device shall be operating.

iii. [40 CFR 63.139(c)(1)]
An enclosed combustion device (including but not limited to a vapor incinerator, boiler, or process heater) shall meet the conditions in A.2.r.iii.(1), A.2.r.iii.(2), or A.2.r.iii.(3), alone or in combination with other control devices. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(1) [40 CFR 63.139(c)(1)(i)]
Reduce the total organic compound emissions, less methane and ethane, or total organic HAPs emissions vented to the control device by 95 percent by weight or greater;

(2) [40 CFR 63.139(c)(1)(ii)]
Achieve an outlet total organic compound concentration, less methane and ethane, or total organic HAPs concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen. The permittee shall use either Method 18 of 40 CFR Part 60, Appendix A, or any other method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR Part 63, Appendix A; or

(3) [40 CFR 63.139(c)(1)(iii)]
Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760 C.

iv. [40 CFR 63.139(d)]
The permittee shall demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in A.2.r.iii by using one or more of the methods specified in A.2.r.iv.(1) and A.2.r.iv.(2).

(1) [40 CFR 63.139(d)(1)]
Performance tests conducted using the test methods and procedures specified in A.2.v.iv for control devices other than flares; or

(2) [40 CFR 63.139(d)(2), & (d)(2)(iii)]
A design evaluation that addresses the vent stream characteristics and control device operating parameters. For a boiler or process heater, the design evaluation shall consider the vent stream composition, constituent concentrations, and flow rate; shall establish the design minimum and average flame zone temperatures and combustion zone residence time; and shall describe the method and location where the vent stream is introduced into the flame zone.

v. [40 CFR 63.139(e)]
The permittee of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with A.2.t.

vi. [40 CFR 63.139(f)]
Except as provided in A.2.s, if gaps, cracks, tears, or holes are observed in ductwork, piping, or connections to covers and control devices during an inspection, a first effort to repair shall be made as soon as practical but no later than 5 calendar days after identification. Repair shall be completed no later than 15 calendar days after identification or discovery of the defect.

2.s [40 CFR 63.140]
Process wastewater provisions-delay of repair

i. [40 CFR 63.140(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 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.

ii. [40 CFR 63.140(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.

iii. [40 CFR 63.140(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 A.2.x.ii.(6) to document the reasons that the delay of repair was necessary.

2.t [40 CFR 63.143]
Process wastewater provisions-inspections and monitoring of operations

i. [40 CFR 63.143(a) and Table 11]
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 (1) through (4) below:

(1) Tanks: The permittee shall perform visual inspections of all wastewater tanks for leaks of the fixed roof or any opening, for control equipment failure, and for improper work practices on a semi-annual basis. [Table 11]

(2) Containers:

(a) To comply with A.2.n.ii.(1) and A.2.n.ii.(2)(b), the permittee shall visually inspect the cover and all openings for leaks initially and on a semi-annual basis thereafter.

(b) To comply with A.2.n.iv.(1), the permittee shall visually inspect the enclosure and all openings for leaks initially and on a semi-annual basis thereafter.

(c) To comply with A.2.n.v, the permittee shall visually inspect the container for control equipment failures and improper work practices initially and on a semi-annual basis thereafter.

(3) Individual Drain Systems:

(a) To comply with A.2.o.ii.(1), the permittee shall visually inspect the cover and all openings to ensure there are no gaps, cracks, or holes initially and on a semi-annual basis thereafter.

(b) To comply with A.2.o.iii, the permittee shall visually inspect the individual drain system for control equipment failures and improper work practices initially and on a semi-annual basis thereafter.

(c) To comply with A.2.o.v.(1), the permittee shall perform a visual inspection to verify that sufficient water is present to properly maintain integrity of

water seals initially and on a semi-annual basis thereafter.

(d) To comply with A.2.o.v.(2) and A.2.o.vi.(1), the permittee shall visually inspect all drains using tightly-fitted caps or plugs to ensure caps and plugs are in place and properly installed initially and on a semi-annual basis thereafter.

(e) To comply with A.2.o.vi.(2), the permittee shall inspect all junction boxes to ensure covers are in place and have no visible gaps, cracks, or holes initially and on a semi-annual basis thereafter. The inspection may be visual, by smoke test or by other means specified.

(f) To comply with A.2.o.vi.(3), the permittee shall visually inspect the unburied portions of all sewer lines for cracks and gaps initially and on a semi-annual basis thereafter.

(4) Oil-water separators:

(a) To comply with A.2.p.ii.(1), the permittee shall visually inspect fixed roofs and all openings for leaks initially and on a semi-annual basis thereafter.

(b) To comply with A.2.p.iii, the permittee shall measure the floating roof primary seal gaps in accordance with 40 CFR 60.696(d)(1) initially and once every 5 years.

(c) To comply with A.2.p.iii, the permittee shall measure the floating roof secondary seal gaps in accordance with 40 CFR 60.696(d)(1) initially and on an annual basis thereafter.

(d) To comply with A.2.p.iv, the permittee shall visually inspect oil-water separators for control equipment failures and improper work practices initially and on a semi-annual basis thereafter.

ii. [40 CFR 63.143(c)]
For the biological treatment unit used to comply with A.2.q, the permittee shall request approval to monitor appropriate parameters that demonstrate proper operation of the biological treatment unit. The request shall be submitted according to the procedures specified in A.2.za.v, and shall include a description of planned reporting and record keeping procedures. The permittee shall include as part of the submittal the basis for the selected monitoring frequencies and the

methods that will be used.

iii. [40 CFR 63.143(e)]
For each control device used to comply with the requirements of A.2.l through A.2.r, the permittee shall comply with the requirements in A.2.r.iv, and with the requirements specified in sections (1) and (2) below.

(1) [40 CFR Part 63, Subpart G, Table 13]
For all control devices, the permittee shall comply with either (a) or (b).

(a) The permittee shall install flow indicators at all bypass lines in order to monitor the presence of flow diverted from the control device to the atmosphere. The flow indicator shall be equipped with continuous recorder. The permittee shall maintain hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour.

(b) The permittee shall equip valves on bypass lines with car-seal or lock-and-key configuration seals. The permittee shall perform monthly inspections of the sealed valves. The permittee shall maintain monthly records of the results of the monthly inspections.

(2) [40 CFR 63.143(e)(4)]
For a boiler or process heater less than 44 megawatts and vent stream is not mixed with the primary fuel, the permittee shall install a temperature monitoring device in the firebox in order to monitor the combustion temperature. The temperature monitoring device shall be equipped with a continuous recorder. The permittee shall maintain continuous records of the firebox temperature.

iv. [40 CFR 63.143(f)]
For each parameter monitored in accordance with A.2.t.ii or A.2.t.iii, the permittee shall establish a range that indicates proper operation of the treatment process or control device. In order to establish the range, the permittee shall comply with the requirements specified in A.2.w.ii.(5)(a) and A.2.w.ii.(6)(b).

v. [40 CFR 63.143(g)]
Monitoring equipment shall be installed, calibrated, and maintained according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

2.u i. [40 CFR 63.144(a)]
The permittee shall comply with A.2.u.i.(1) or A.2.u.i.(2) for each wastewater stream to determine which wastewater streams require control for Table 8 and/or Table 9 compounds. The permittee may use a combination of the approaches in A.2.u.i.(1) and A.2.u.i.(2) for different wastewater streams generated at the source.

(1) [40 CFR 63.144(a)(1)]
Determine whether a wastewater stream is a Group 1 or Group 2 wastewater stream in accordance with A.2.u.ii and A.2.u.iii.

(2) [40 CFR 63.144(a)(2)]
The permittee may designate as a Group 1 wastewater stream a single wastewater stream or a mixture of wastewater streams. The permittee is not required to determine the concentration or flow rate for each designated Group 1 wastewater stream for the purposes of A.2.u.

ii. [40 CFR 63.144(b)]
To comply with the requirements of A.2.u.i.(1), the permittee shall determine the annual average concentration for Table 8 and/or compounds listed in Table 9 of

A.2.ac according to A.2.u.ii.(1) for existing sources or A.2.u.ii.(2) for new sources. The annual average concentration shall be a flow weighted average representative of actual or anticipated operation of the CMPU generating the wastewater over a designated 12 month period. For flexible operation units, the permittee shall consider the anticipated production over the designated 12 month period and include all wastewater streams generated by the process equipment during this period. The permittee is not required to determine the concentration of Table 8 or Table 9 compounds that are not reasonably expected to be in the process.

(1) [40 CFR 63.144(b)(1)]
The permittee of an existing source who elects to comply with the requirements of A.2.u.i.(1) shall determine the flow weighted total annual average concentration for Table 9 compounds. For the purposes of A.2.u, the term concentration, whether concentration is used alone or with other terms, may be adjusted by multiplying by the compound-specific fraction measured (Fm) factors listed in Table 34 of A.2.zc unless determined by the methods in A.2.u.ii.(4)(a)(i) and/or A.2.u.ii.(4)(a)(ii). When concentration is determined by Method 305 as specified in A.2.u.ii.(4)(a)(ii), concentration may be adjusted by dividing by the compound-specific Fm factors listed in Table 34 of A.2.zc. When concentration is determined by Method 25D as specified in A.2.u.ii.(4)(a)(i), concentration may not be adjusted by the compound-specific Fm factors listed in Table 34 of A.2.zc. Compound-specific Fm factors may be used only when concentrations of individual compounds are determined or when only one compound is in the wastewater stream. Flow weighted total annual average concentration for Table 9 compounds means the total mass of Table 9 compounds occurring in the wastewater stream during the designated 12-month period divided by the total mass of the wastewater stream during the same designated 12-month period. The total annual average concentration shall be determined for each wastewater stream either at the point of determination, or downstream of the point of determination with adjustment for concentration changes made according to A.2.u.ii.(5). The procedures specified in A.2.u.ii.(3) and A.2.u.ii.(4) are considered acceptable procedures for determining the annual average concentration. They may be used in combination, and no one procedure shall take precedence over another.

(2) [40 CFR 63.144(b)(2)]
The permittee of a new source who elects to comply with the

requirements of A.2.u.i.(1) shall determine both the flow weighted total annual average concentration for Table 9 compounds and the flow weighted annual average concentration for each Table 8 compound. For the purposes of A.2.u, the term concentration, whether concentration is used alone or with other terms, may be adjusted by multiplying by the compound-specific Fm factors listed in Table 34 of A.2.zc unless determined by the methods in A.2.u.ii.(4)(a)(i) and/or A.2.u.ii.(4)(a)(ii). When concentration is determined by Method 305 as specified in A.2.u.ii.(4)(a)(ii), concentration may be adjusted by dividing by the compound-specific Fm factors listed in Table 34 of A.2.zc. When concentration is determined by Method 25D as specified in A.2.u.(4)(a)(i), concentration may not be adjusted by the compound-specific Fm factors listed in Table 34 of A.2.zc. Compound-specific fraction measured factors are compound specific and shall be used only when concentration of individual compounds are determined or when only one compound is in the wastewater stream. The flow weighted annual average concentration of each Table 8 compound means the mass of each Table 8 compound occurring in the wastewater stream during the designated 12-month period divided by the total mass of the wastewater stream during the same designated 12-month period. Flow weighted total annual average concentration for Table 9 compounds means the total mass of Table 9 compounds occurring in the wastewater stream during the designated 12-month period divided by the total mass of the wastewater stream during the same designated 12-month period. The annual average concentration shall be determined for each wastewater stream either at the point of determination, or downstream of the point of determination with adjustment for concentration changes made according to A.2.u.ii.(5).

Procedures specified in A.2.u.ii.(3) and A.2.u.ii.(4) are considered acceptable procedures for determining the annual average concentration. They may be used in combination, and no one procedure shall take precedence over another.

(3) [40 CFR 63.144(b)(3)]
Where knowledge of the wastewater 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.

(4) [40 CFR 63.144(b)(5)]
Test data from sampling at the point of determination or at a location downstream of the point of determination. Where the permittee elects to comply with A.2.u.i.(1) by measuring the concentration for the relevant Table 8 or Table 9 compounds, the permittee shall comply with the requirements of A.2.u.ii.(4). For each wastewater stream, measurements shall be made either at the point of determination, or downstream of the point of determination with adjustment for concentration changes made according to A.2.u.ii.(5). A minimum of three samples from each wastewater stream shall be taken. Samples may be grab samples or composite samples.

(a) [40 CFR 63.144(b)(5)(i)]
The permittee shall use any of the methods specified in A.2.u.ii.(4)(a)(i) through A.2.u.ii.(4)(a)(vi).

(i) Use procedures specified in Method 25D of 40 CFR Part 60, Appendix A.

(ii) Use procedures specified in Method 305 of 40 CFR Part 63, Appendix A.

(iii) Use procedures specified in Methods 624 and 625 of 40 CFR Part 136, Appendix A and comply with the sampling protocol requirements specified in A.2.u.ii.(4)(a). If these methods are used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 136.5 shall be followed. For Method 625, make corrections to the compounds for which the analysis is being conducted based on the accuracy as recovery factors in Table 7 of the method.

(iv) Use procedures specified in Method 1624 and Method 1625 of 40 CFR Part 136, Appendix A and comply with the requirements specified in A.2.u.ii.(4)(b). If these methods are used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 136.5 shall be followed.

(v) Use procedures specified in other EPA methods and comply with the requirements specified in A.2.u.ii.(4)(b) and either A.2.u.ii.(4)(c)(i) or A.2.u.ii.(4)(c)(ii).

(vi) Use procedures specified in methods other than EPA methods and comply with the requirements specified in

A.2.u.ii.(4)(b) and A.2.u.ii.(4)(c)(i).

(b) [40 CFR 63.144(b)(5)(ii)]
The permittee who is expressly referred to this section by provisions of A.2 shall prepare a sampling plan. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity. The sample plan shall include procedures for determining recovery efficiency of the relevant HAPs listed in Table 8 or Table 9 of A.2.zc. An example of an acceptable sampling plan would be one that incorporates similar sampling and sample handling requirements to those of Method 25D of 40 CFR Part 60, Appendix A. The sampling plan shall be maintained at the facility.

(c) [40 CFR 63.144(b)(5)(iii)]
The permittee shall validate EPA methods other than Methods 25D, 305, 624, 625, 1624, and 1625 using the procedures specified in A.2.u.ii.(4)(c)(i) or A.2.u.ii.(4)(c)(ii). The permittee shall validate other methods as specified in A.2.u.ii.(4)(c)(i).

(i) Validation of EPA methods and other methods. The method used to measure organic HAPs concentrations in the wastewater shall be validated according to section 5.1 or 5.3, and the corresponding calculations in section 6.1 or 6.3, of Method 301 40 CFR Part 63, Appendix A. The data are acceptable if they meet the criteria specified in section 6.1.5 or 6.3.3 of Method 301 of 40 CFR Part 63, Appendix A. If correction is required under section 6.3.3 of Method 301 of 40 CFR Part 63, Appendix A, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 of 40 CFR Part 63, Appendix A are not required. The concentrations of the individual organic HAPs measured in the water may be corrected to their concentrations had they been measured by Method 305 of 40 CFR Part 63, Appendix A by multiplying each concentration by the compound-specific fraction measured (Fm) factor listed in Table 34 of A.2.zc.

(ii) Validation for EPA methods. Follow the procedures as specified in "Alternative Validation Procedure for EPA Waste Methods" 40 CFR Part 63, Appendix D.

(d) [40 CFR 63.144(b)(5)(iv)]
The average concentration for each individually speciated Table 8 compound shall be calculated by adding the individual values determined for the specific compound in each sample and dividing by the number of samples. The total average concentration of Table 9 compounds shall be calculated by first summing the concentration of the individual compounds to obtain a total HAPs concentration for the sample; add the sample totals and then divide by the number of samples in the run to obtain the sample average for the run. If the method used does not speciate the compounds, the sample results should be added and this total divided by the number of samples in the run to obtain the sample average for the

run.

(5) [40 CFR 63.144(b)(6)]
Adjustment for concentrations determined downstream of the point of determination. The permittee shall make corrections to the annual average concentration or total annual average concentration when the concentration is determined downstream of the point of determination at a location where: two or more wastewater streams have been mixed; one or more wastewater streams have been treated; or, losses to the atmosphere have occurred. The permittee shall make the adjustments either to the individual data points or to the final annual average concentration.

iii. [40 CFR 63.144(c)]
Procedures to determine flow rate, when evaluating Group status under A.2.u.i.(1). The permittee who elects to comply with A.2.u.i.(1) 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.2.u.iii.(4). 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 CMPU generating the wastewater over a designated 12-month period. The permittee shall consider the total annual wastewater volume generated by the CMPU. If the CMPU is a flexible operation unit, the permittee shall consider all anticipated production in the process equipment over the designated 12-month period. The procedures specified in A.2.u.iii.(1), A.2.u.iii.(2), and A.2.u.iii.(3) are considered acceptable procedures for determining the flow rate. They may be used in combination, and no one procedure shall take precedence over another.

(1) [40 CFR 63.144(c)(1)]
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.

(2) [40 CFR 63.144(c)(2)]
The permittee may use historical records to determine the annual average flow rate. Derive the highest annual average flow rate of wastewater from historical records representing the most recent 5 years of operation or, if

the process unit has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the process unit. Where historical records are 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.

(3) [40 CFR 63.144(c)(3)]
Where the permittee elects to comply with A.2.u.i.(1) by measuring the flow rate, the permittee shall comply with the requirements of this section. Measurements shall be made at the point of determination, or at a location downstream of the point of determination with adjustments for flow rate changes made according to A.2.u.iii.(4). Where measurement data are 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.

(4) [40 CFR 63.144(c)(4)]
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.

2.v [40 CFR 63.145]
Process wastewater provisions-test methods and procedures to determine compliance

i. [40 CFR 63.145(a)]
This section specifies the procedures for performance tests that are conducted to demonstrate compliance of a treatment process or a control device with the control requirements specified in A.2.q. The permittee shall comply with the requirements of A.2.v.i.(1) or A.2.v.i.(2) when conducting a design evaluation. The permittee shall comply with the applicable requirements of A.2.v.i through A.2.v.iv when conducting a performance test.

(1) [40 CFR 63.145(a)(1)]
For the open biological treatment process, the permittee shall conduct a performance test as specified in A.2.v.

(2) [40 CFR 63.145(a)(2)]
The permittee shall conduct either a design evaluation as specified in A.2.r.iv, or a performance test as specified in A.2.v.iv for control devices other than flares.

(3) [40 CFR 63.145(a)(3)]
Compliance shall be demonstrated for representative operating conditions. Operations during periods of startup, shutdown, or malfunction and periods of non-operation shall not constitute representative conditions. The permittee shall record the process information that is necessary to document operating conditions during the test.

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(4) [40 CFR 63.145(a)(4)]
Performance tests shall be conducted when the treatment process or control device is operating at a representative inlet flow rate and concentration. If the treatment process or control device will be operating at several different sets of representative operating conditions, the permittee shall comply with A.2.v.i.(4)(a) and A.2.v.i.(4)(b). The permittee shall record information that is necessary to document treatment process or control device operating conditions during the test.

(a) [40 CFR 63.145(a)(4)(i)]
If the treatment process or control device will be operated at several different sets of representative operating conditions, performance testing over the entire range is not required. In such cases, the performance test results shall be supplemented with modeling and/or engineering assessments to demonstrate performance over the operating range.

(b) [40 CFR 63.145(a)(4)(ii)]
If concentration and/or flow rate to the treatment process or control device are not relatively constant (i.e., comparison of inlet and outlet data will not be representative of performance), the permittee shall consider residence time, when determining concentration and flow rate.

(5) [40 CFR 63.145(a)(5)]
All testing equipment shall be prepared and installed as specified in the applicable test methods.

(6) [40 CFR 63.145(a)(6)]
Compounds that meet the requirements specified in A.2.v.i.(6)(a), A.2.v.i.(6)(b), or A.2.v.i.(6)(c) are not required to be included in the performance test. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 34 of A.2.zc. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in Table 34 of A.2.zc.

(a) [40 CFR 63.145(a)(6)(i)]
Compounds not used or produced by the CMPU; or

(b) [40 CFR 63.145(a)(6)(ii)]
Compounds with concentrations at the point of determination that are below 1 part per million by weight; or

(c) [40 CFR 63.145(a)(6)(iii)]
Compounds with concentrations at the point of determination that are below the lower detection limit where the lower detection limit is greater than 1 part per million by weight. The method shall be an analytical method for wastewater which has that compound as a target analyte.

(7) [40 CFR 63.145(a)(8)]
When using a biological treatment process to comply with A.2.q, the permittee may elect to calculate the AMR using a subset of Table 8 and/or Table 9 compounds determined at the point of determination or downstream of the point of determination with adjustment for concentration and flow rate changes made according to A.2.u.ii.(5) and A.2.u.iii.(4), respectively. All Table 8 and/or Table 9 compounds measured to determine the RMR, except as provided by A.2.v.i.(6), shall be included in the RMR calculation.

(8) [40 CFR 63.145(a)(9)(i)]
For purposes of demonstrating compliance with A.2.v.ii. When wastewater is conveyed exclusively by hard-piping from the point of determination to a treatment process that is either the only treatment process or the first in a series of treatment processes (i.e., no treatment processes or other waste management units are used upstream of this treatment process to store, handle, or convey the wastewater), the inlet to the treatment process shall be at any location from the point of determination to where the wastewater stream enters the treatment process. When samples are taken upstream of the treatment process and before wastewater streams have converged, the permittee shall ensure that the mass flow rate of all Group 1 wastewater streams is accounted for when using A.2.q.ii to comply, except as provided in A.2.v.i.(6).

ii. [40 CFR 63.145(f)]
This section applies to the use of performance tests that are conducted for open aerobic biological treatment processes to demonstrate compliance with the mass removal (RMR) provisions for Table 8 and/or Table 9 compounds. These compliance options are specified in A.2.q.ii. The permittee shall comply with the requirements specified in A.2.v.ii.(1) through A.2.v.ii.(6).

(1) [40 CFR 63.145(f)(1)]
The concentration of Table 8 and/or Table 9 compounds in the wastewater shall be determined as provided in this section. Concentration measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment

for concentration change made according to A.2.u.ii.(5). Concentration measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in A.2.v.i.(7) for a series of treatment processes. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per A.2.u.ii.(4)(b). The method shall be an analytical method for wastewater which has that compound as a target analyte. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 34 of A.2.zc. Concentration measurements based on methods other than Method 305 shall not adjust by the compound-specific Fm factor listed in Table 34 of A.2.zc.

(2) [40 CFR 63.145(f)(2)]
Flow rate measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment for flow rate change made according to A.2.u.iii.(2). Flow rate measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in A.2.v.i.(7) for a series of treatment processes. Flow rate shall be determined using inlet and outlet flow measurement devices. Where the outlet flow is not greater than the inlet flow, a flow measurement device shall be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements.

(3) The RMR for open biological treatment processes of Table 8 and/or Table 9 compounds for each Group 1 wastewater stream shall be calculated using Equation WW11 listed in 40 CFR 63.145(f)(3). Where:
RMR=Required mass removal for treatment process or series of treatment processes, kilograms per hour.
d=Density of the Group 1 wastewater stream, kilograms per cubic meter.
Q=Volumetric flow rate of wastewater stream at the point of determination, liters per hour.
i=Identifier for a compound.
n=Number of Table 8 or Table 9 compounds in stream.
Ci=Concentration of Table 8 or Table 9 compounds at the point of

determination, parts per million by weight.
Fri=Fraction removal value of a Table 8 or Table 9 compound. Fr values are listed in Table 9.
10^9=Conversion factor, mg/kg * l/m3.

(4) [40 CFR 63.145(f)(4)]
The RMR is calculated by adding together the required mass removal for each Group 1 wastewater stream to be combined for treatment.

(5) [40 CFR 63.145(f)(5)]
The actual mass removal (AMR) shall be calculated using Equation WW12 as specified in A.2.v.ii.(5)(a) when the performance test is performed across the open aerobic biological treatment process only. If compliance is being demonstrated in accordance with A.2.v.i.(7)(a), the AMR for the series shall be calculated using Equation WW13 in A.2.v.ii.(5)(b). (This equation is for situations where treatment is performed in a series of treatment processes connected by hard-piping.) If compliance is being demonstrated in accordance with A.2.v.i.(7)(b), the AMR for the biological treatment process shall be calculated using Equation WW12 in A.2.v.ii.(5)(a). The AMR for the biological treatment process used in a series of treatment processes calculated using Equation WW12 shall be added to the AMR determined for each of the other individual treatment processes in the series of treatment processes.

(a) Calculate AMR for the open or closed aerobic biological treatment process using Equation WW12 listed in 40 CFR 63.145(f)(5)(i).
Where:
AMR=Actual mass removal of Table 8 or Table 9 compounds achieved by open or closed biological treatment process, kilograms per hour.
QMWa=Mass flow rate of Table 8 or Table 9 compounds in wastewater entering the treatment process, kilograms per hour.
Fbio=Site-specific fraction of Table 8 or Table 9 compounds biodegraded. Fbio shall be determined as specified in A.2.v.iii and Appendix C of 40 CFR Part 63.

(b) Calculate AMR across a series of treatment units where the last treatment unit is an open or closed aerobic biological treatment process using Equation WW13 listed in 40 CFR 63.145(f)(5)(ii).
Where:
AMR=Actual mass removal of Table 8 or Table 9 compounds achieved by a series of treatment processes, kilograms per hour.
QMWa=Mass flow rate of Table 8 or Table 9 compounds in wastewater entering the first treatment process in a series of treatment processes, kilograms per hour.
QMWb=Mass flow rate of Table 8 or Table 9 compounds in wastewater exiting the last treatment process in a series of

treatment processes prior to the biological treatment process, kilograms per hour.
Fbio=Site-specific fraction of Table 8 or Table 9 compounds biodegraded. Fbio shall be determined as specified in A.2.v.iii and Appendix C of 40 CFR Part 63.

(6) [40 CFR 63.145(f)(6)]
Compare the RMR calculated in Equation WW11 to the AMR calculated in either Equation WW12 or WW13, as applicable. Compliance is demonstrated if the AMR is greater than or equal to the RMR.

iii. [40 CFR 63.145(h)]
Site-specific fraction biodegraded (Fbio). The Table 9 compounds are divided into two sets for the purpose of determining whether Fbio must be determined, and if Fbio must be determined, which procedures may be used to determine compound-specific kinetic parameters. These sets are designated as lists 1 and 2 in Table 36 of A.2.zc.

(1) [40 CFR 63.145(h)(2)(i)]
For wastewater streams that include one or more compounds on list 2 of Table 36 of A.2.zc, the permittee shall determine fbio for the list 2 compounds using any of the procedures specified in 40 CFR Part 63, Appendix C. (The symbol ``fbio'' represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.) The permittee shall calculate fbio for the list 1 compounds using the defaults for first order biodegradation rate constants (K1) in Table 37 of A.2.zc and follow the procedure explained in form III of 40 CFR Part 63, Appendix C, or any of the procedures specified in 40 CFR Part 63, Appendix C.

(2) [40 CFR 63.145(h)(2)(iii)]
This section applies to performance tests that are conducted to demonstrate compliance of a control device with the efficiency limits specified in A.2.r.iii. If complying with the 95-percent reduction efficiency requirement, comply with the requirements specified in A.2.v.iv.(1) through A.2.v.iv.(9). If complying with the 20 ppm by volume requirement, comply with the requirements specified in sections A.2.v.iv.(1) through A.2.v.iv.(6) and A.2.v.iv.(9). The 20 ppm by volume limit or 95 percent reduction efficiency requirement shall be measured as either total organic HAPs or as TOC minus methane and ethane.

iv. Performance tests for control devices other than flares

(1) [40 CFR 63.145(i)(1)]
Sampling sites shall be selected using Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate. For determination of compliance with the 95 percent reduction requirement, sampling sites shall be located at the inlet and the outlet of the control device. For determination of compliance with the 20 ppmv limit, the sampling site shall be located at the outlet of the control device.

(2) [40 CFR 63.145(i)(2)]
The concentration of total organic HAPs or TOC in a gas stream entering or exiting the control device shall be determined as provided in this section. Samples may be grab samples or composite samples (i.e., integrated samples). Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs. Concentration measurements shall be determined using Method 18 of 40 CFR Part 60, Appendix A. Alternatively, any other test method validated according to the procedures in Method 301 of 40 CFR Part 63, Appendix A may be used.

(3) [40 CFR 63.145(i)(3)]
The volumetric flow rate of the gas stream entering or exiting the control device shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate. Volumetric flow rate measurements shall be taken at the same time as the concentration measurements.

(4) The TOC concentration (CGT) is the sum of the concentrations of the individual components. If compliance is being determined based on TOC, the permittee shall compute TOC for each run using Equation WW14 listed in 40 CFR 63.145(i)(4). Where:
CGT=Total concentration of TOC (minus methane and ethane) in vented gas stream, average of samples, dry basis, ppmv.
CGSi,j=Concentration of sample components in vented gas stream for sample j, dry basis, ppmv.
i=Identifier for a compound.
n=Number of components in the sample.
j=Identifier for a sample.
m=Number of samples in the sample run.

(5) [40 CFR 63.145(i)(5)]
The permittee determining compliance based on total organic HAPs concentration (CHAP) shall compute CHAP according to Equation WW14, except that only Table 9 compounds shall be summed.

(6) [40 CFR 63.145(i)(6)]

If the control device is a combustion device, comply with the requirements specified in A.2.v.iv.(6)(a) to determine oxygen concentration, and in A.2.v.iv.(6)(b) to calculate the percent oxygen correction.

(a) [40 CFR 63.145(i)(6)(ii)]
The concentration of TOC or total organic HAPs shall be corrected to 3 percent oxygen if the control device is a combustion device. The emission rate correction factor for excess air, composite sampling (i.e., integrated sampling) and analysis procedures of Method 3B of 40 CFR Part 60, Appendix A shall be used to determine the actual oxygen concentration (%02d). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAPs samples are taken.

(b) The concentration corrected to 3 percent oxygen (CGc), when required, shall be computed using Equation WW15 listed in 40 CFR 63.145(i)(6)(ii). Where:
CGc=Concentration of TOC or organic HAPs corrected to 3 percent oxygen, dry basis, ppmv.
CGT=Total concentration of TOC (minus methane and ethane) in vented gas stream, average of samples, dry basis, ppmv.
%02d=Concentration of oxygen measured in vented gas stream, dry basis, percent by volume.

(7) The mass rate of either TOC (minus methane and ethane) or total organic HAPs shall be calculated using the following equations. Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by methods specified in A.2.v.iv.(2) are summed using Equations WW16 and WW17. Where the mass rate of total organic HAPs is being calculated, only Table 9 compounds shall be summed using Equations WW16 and WW17 listed in 40 CFR 63.145(i)(7).
Where:
CGa,i, CGb,i=Concentration of TOC (minus methane and ethane) or total organic HAPs, in vented gas stream, entering (CGa,i) and exiting (CGb,i) the control device, dry basis, ppmv.
QMGa, QMGb=Mass rate of TOC (minus methane and ethane) or total organic HAPs, in vented gas stream, entering (QMGa) and exiting (QMGb) the control device, dry basis, kilograms per hour.
MWi=Molecular weight of a component, kilogram/kilogram-mole.
QGa, QGb=Flow rate of gas stream entering (QGa) and exiting (QGb) the

control device, dry standard cubic meters per hour.
K2=Constant, 41.57 x 10-9 (parts per million)-1 (gram-mole per standard cubic meter) (kilogram/gram), where standard temperature (gram-mole per standard cubic meter) is 20 Celsius.
i=Identifier for a compound.
n=Number of components in the sample.

(8) The percent reduction in TOC (minus methane and ethane) or total organic HAPs shall be calculated using Equation WW18 listed in 40 CFR 63.145(i)(8). Where:
E=Destruction efficiency of control device, percent.
QMGa, QMGb=Mass rate of TOC (minus methane and ethane) or total organic HAPs, in vented gas stream entering and exiting (QMGb) the control device, dry basis, kilograms per hour.

(9) [40 CFR 63.145(i)(9)]
If complying with the 95 percent reduction efficiency requirement, compliance is demonstrated if the mass destruction efficiency (calculated in Equation WW18) is 95 percent or greater. If complying with the 20 ppmv limit in A.2.r.iii.(2), compliance is demonstrated if the outlet TOC concentration, less methane and ethane, or total organic HAPs concentration is 20 ppmv, or less. For combustion control devices, the concentration shall be calculated on a dry basis, corrected to 3 percent oxygen.

2.w [40 CFR 63.146]
Process wastewater provisions-reporting

i. [40 CFR 146(a)]
For each waste management unit, treatment process, or control device used to comply with A.2.q.ii for which the permittee seeks to monitor a parameter other than those specified in A.2.t, the permittee shall submit a request for approval to monitor alternative parameters according to the procedures specified in A.2.za.v or A.2.za.vi.

ii. [40 CFR 63.146(b)]
The permittee shall submit the information specified in A.2.w.ii.(1) through A.2.w.ii.(6) as part of the NCS required by A.2.zb.ii.

(1) [40 CFR 63.146(b)(2) and Table 15]
For each new and existing source, the permittee shall submit the information specified in A.2.w.ii.(1)(a) through A.2.w.ii.(1)(i) for Table 8 and/or Table 9 compounds with the NCS. Other requirements for the NCS are specified in A.2.zb.ii.

(a) Process unit identification code and a description of the process unit;

(b) Stream identification code;

(c) Concentration of Table 8 and/or Table 9 compound(s) (ppmv);

(i) Except when A.2.k.v is used, annual average concentration as specified in A.2.k.iii or A.2.k.iv and A.2.u.

(ii) When A.2.k.v is used, indicate the wastewater stream is a designated Group 1 wastewater stream.

(d) Flow rate (lpm);

(i) When A.2.k.v is used, indicate the wastewater stream is a designated Group 1 wastewater stream.

(ii) Except when A.2.k.v is used, annual average flow rate as specified in A.2.k.iii or A.2.k.iv and in A.2.u.

(e) Indicate whether the stream is Group 1 or Group 2. If Group 1, indicate whether it is Group 1 for Table 8 or Table 9 compounds or for both Table 8 and Table 9 compounds;

(f) Cite the section of A.2.q for the compliance option used;

(g) Treatment process identification;

(h) Waste management units identification; and

(i) Intended control device

(2) [40 CFR 63.146(b)(4) and Table 17]
For each treatment process identified in A.2.w.ii.(1) that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the permittee shall submit the information specified in A.2.w.ii.(2)(a) through A.2.w.ii.(2)(d) with the NCS. Other requirements for the NCS are specified in A.2.zb.ii.

(a) Treatment process identification - Identification codes should correspond to those listed in A.2.w.ii.(1).

(b) Description of the treatment process

(c) Wastewater stream(s) treated - Stream identification code for each wastewater stream treated by each treatment unit. Identification codes should correspond to entries listed in A.2.w.ii.(1).

(d) Monitoring parameters - Parameter(s) to be monitored or measured in accordance with A.2.t.

(3) [40 CFR 63.146(b)(5) and Table 18]
For each waste management unit identified in A.2.w.ii.(1)(a) that receives or manages a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the permittee shall submit the information specified in A.2.w.ii.(3)(a) through A.2.w.ii.(3)(c) with the NCS. Other requirements for the NCS are specified in A.2.zb.ii.

(a) Identification codes for waste management units should correspond to those listed in A.2.w.ii.(1).

(b) Description of waste management unit.

(c) Wastewater stream(s) received or managed - Stream identification code for each wastewater stream received or managed by each waste management unit. Identification codes should correspond to entries listed in A.2.w.ii.(1).

(4) [40 CFR 63.146(b)(6) and Table 19]
For each residual removed from a Group 1 wastewater stream, the permittee shall report the information specified in A.2.w.ii.(4)(a) through A.2.w.ii.(4)(h) with the NCS. Other requirements for the NCS are specified in A.2.zb.ii.

(a) Identification of residual removed from Group 1 wastewater stream;

(b) Description of residual;

(c) Identification of stream from which residual is removed;

(d) Identification of treatment process from which residual originates;

(e) Indicate whether residual is sold, returned to production process, or returned to waste management unit or treatment process; or whether HAP mass of residual is destroyed by 99 percent;

(f) Control device identification code;

(g) If the fate of the residual is such that the HAP mass is destroyed by 99 percent, give description of the control device used for HAP destruction;

(h) If the fate of the residual is such that the HAP mass is destroyed by 99 percent, provide an estimate of control device efficiency and attach substantiation in accordance with A.2.w.ii.(7).

(5) [40 CFR 63.146(b)(7)]
For each control device used to comply with A.2.l through A.2.r, the permittee shall submit the information specified in A.2.w.ii.(5)(a) and in either A.2.w.ii.(5)(b) or A.2.w.ii.(5)(c).

(a) [40 CFR 63.146(b)(7)(ii)(A)]
The information on parameter ranges specified in A.2.zb.ii.(2) for the applicable parameters specified in A.2.t.iv, unless the parameter range has already been established in the operating permit; and either

(b) [40 CFR 63.146(b)(7)(ii)(B)]
The design evaluation specified in A.2.r.iv.(2); or

(c) [40 CFR 63.146(b)(7)(ii)(C)]
Results of the performance test specified in A.2.r.iv.(1). Performance test results shall include operating ranges of key process and control parameters during the performance test; the value of each parameter being monitored in accordance with A.2.t; and applicable supporting calculations.

(6) [40 CFR 63.146(b)(9)]
Except as provided in A.2.w.ii.(7)(c) for each waste management unit or treatment process used to comply with A.2.q.ii, the permittee shall submit the information specified in either A.2.w.ii.(7)(a) or A.2.w.ii.(7)(b).

(a) [40 CFR 63.146(b)(9)(i)]
The design evaluation and supporting documentation specified in A.2.q.iii.(2).

(b) [40 CFR 63.146(b)(9)(ii)]
Results of the performance test specified in A.2.q.iii.(2).

Performance test results shall include operating ranges of key process and control parameters during the performance test; the value of each parameter being monitored in accordance with A.2.t; and applicable supporting calculations.

iii. [40 CFR 63.146(c)]
For each waste management unit that receives, manages, or treats a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream, the permittee shall submit as part of the next Periodic Report required by A.2.zb.iii the results of each inspection required by A.2.t.i in which a control equipment failure was identified. Control equipment failure is defined for each waste management unit in A.2.l through A.2.p. Each Periodic Report shall include the date of the inspection, identification of each waste management unit in which a control equipment failure was detected, description of the failure, and description of the nature of and date the repair was made.

iv. [40 CFR 63.146(e)]
Except as provided in A.2.w.v, for each control device used to comply with A.2.l through A.2.r, the permittee shall submit as part of the next Periodic Report required by A.2.zb.iii the information specified in (1) and (2) below:

(1) [40 CFR 63.146(e)(1) and Table 20]
For each boiler or process heater with a design heat input capacity less than 44 megawatts and the vent stream is not mixed with the primary fuel; the permittee shall report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected. The daily average is the average of all values recorded during the operating day, as specified in A.2.x.iv. The Periodic Reports shall include the duration of periods when monitoring data are not collected for each excursion as defined in A.2.zb.iii.(2)(b)(i).

(2) [40 CFR 63.146(e)(2) and Table 20]
For all control devices; the permittee shall report the times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating, or the permittee shall report all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

v. [40 CFR 63.146(f)]

Where the permittee obtains approval to use a treatment process or control device other than one for which monitoring requirements are specified in A.2.t, or to monitor parameters other than those specified in A.2.t, the appropriate reporting requirements will be specified in the operating permit.

2.x [40 CFR 63.147]
Process wastewater provisions-record keeping

i. [40 CFR 63.147(a)]
The permittee transferring a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream in accordance with A.2.k.viii shall keep a record of the notice sent to the treatment operator stating that the wastewater stream or residual contains organic HAPs which are required to be managed and treated in accordance with the provisions of A.2.

ii. [40 CFR 63.147(b)]
The permittee shall keep in a readily accessible location the records specified in A.2.x.i.(1) through A.2.x.i.(6).

(1) [40 CFR 63.147(b)(1)]
A record that each waste management unit inspection required by A.2.l through A.2.p was performed.

(2) [40 CFR 63.147(b)(2)]
A record that each inspection for control devices required by A.2.r was performed.

(3) [40 CFR 63.147(b)(4)]
For A.2.t.ii, the permittee shall keep the records specified in the operating permit.

(4) [40 CFR 63.147(b)(5)]
Except as provided in A.2.x.v, continuous records of the monitored parameters specified in A.2.t.iii.

(5) [40 CFR 63.147(b)(6)]
Documentation of a decision to use an extension, as specified in A.2.l.iv, which shall include a description of the failure, documentation that alternate storage capacity is unavailable, and specification of a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

(6) [40 CFR 63.147(b)(7)]
Documentation of a decision to use a delay of repair due to unavailability of parts, as specified in A.2.s.iii, shall include a description of the failure, the reason additional time was necessary (including a statement of why replacement parts were not kept on site and when the manufacturer promised delivery), and the date when repair was completed.

iii. [40 CFR 63.147(c)]
For each boiler or process heater used to comply with A.2.l through A.2.r, the permittee shall keep a record of any changes in the location at which the vent stream is introduced into the flame zone as required in A.2.r.iii.

iv. [40 CFR 63.147(d)]
The permittee shall keep records of the daily average value of each continuously monitored parameter for each operating day as specified in A.2.zb.vi.

v. [40 CFR 63.147(e)]
Where the permittee obtains approval to use a control device other than one for which monitoring requirements are specified in A.2.t, or to monitor parameters other than those specified in A.2.t, the appropriate record keeping requirements will be specified in the operating permit.

vi. [40 CFR 63.147(f)]
If the permittee uses process knowledge to determine the annual average concentration of a wastewater stream as specified in A.2.u.ii.(3) and/or uses process knowledge to determine the annual average flow rate as specified in A.2.u.iii.(1), and determines that the wastewater stream is not a Group 1 wastewater stream, 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 stream.

2.y [40 CFR 63.148]
Leak inspection provisions

i. [40 CFR 63.148(a)]
Except as provided in A.2.y.xi, for each vapor collection system, closed-vent system, fixed roof, cover, or enclosure required to comply with this section, the permittee shall comply with the requirements of A.2.y.ii through A.2.y.x.

ii. [40 CFR 63.148(b)]
Except as provided in A.2.y.vii and A.2.viii, each vapor collection system and closed-vent system shall be inspected according to the procedures and schedule specified in A.2.y.ii.(1) and A.2.y.ii.(2) and each fixed roof, cover, and enclosure shall be inspected according to the procedures and schedule specified in A.2.y.ii.(3).

(1) [40 CFR 63.148(b)(1)]
If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall:

(a) Conduct an initial inspection according to the procedures in A.2.y.iii, and

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

(2) [40 CFR 63.148(b)(2)]
If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(a) Conduct an initial inspection according to the procedures in A.2.y.iii, and

(b) Conduct annual inspections according to the procedures in A.2.y.iii.

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

(3) [40 CFR 63.148(b)(3)]
For each fixed roof, cover, and enclosure, the permittee shall:

(a) Conduct an initial inspection according to the procedures in A.2.y.iii, and

(b) Conduct semi-annual visual inspections for visible, audible, or olfactory indications of leaks as specified in A.2.l through A.2.p.

iii. [40 CFR 63.148(c)]
Each vapor collection system, closed vent system, fixed roof, cover, and enclosure shall be inspected according to the procedures specified in A.2.y.iii.(1) through A.2.y.iii.(5).

(1) [40 CFR 63.148(c)(1)]
Inspections shall be conducted in accordance with Method 21 of 40 CFR Part 60, Appendix A.

(2) (a) [40 CFR 63.148(c)(2)(i)]
Except as provided in A.2.y.iii.(2), 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 volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts which are not organic HAPs or volatile organic compounds, the average stream response factor shall be calculated on an inert-free basis.

(b) [40 CFR 63.148(c)(2)(ii)]
If no instrument is available at the plant site that will meet the performance criteria specified in A.2.y.iii.(1), 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.2.y.iii.(2)(a).

(3) [40 CFR 63.148(c)(3)]
The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR Part 60, Appendix A.

(4) [40 CFR 63.148(c)(4)]
Calibration gases shall be as follows:

(a) Zero air (less than 10 parts per million hydrocarbon in air); and

(b) Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in A.2.y.ii.(2)(a). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(5) [40 CFR 63.148(c)(5)]
The permittee may elect to adjust or not adjust instrument readings for background. If the permittee elects to not adjust readings for background, all such 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 measure background concentration using the procedures in A.3.aa.ii and A.3.aa.iii. The permittee shall subtract background reading from the maximum concentration indicated by the instrument.

(6) [40 CFR 63.148(c)(6)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining compliance.

iv. [40 CFR 63.148(d)]
Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in A.2.y.v.

(1) [40 CFR 63.148(d)(1)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) [40 CFR 63.148(d)(2)]
Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in A.2.y.iv.(3).

(3) [40 CFR 63.148(d)(3)]
For leaks found in vapor collection systems used for transfer operations, repairs shall be completed no later than 15 calendar days after the leak is detected or at the beginning of the next transfer loading operation, whichever is later.

v. [40 CFR 63.148(e)]
Delay of repair of a vapor collection system, closed vent system, fixed roof, cover, or enclosure for which leaks have been detected is allowed if the repair is technically infeasible without a 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 shutdown.

vi. [40 CFR 63.148(f)]
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 comply with the provisions of either A.2.y.vi.(1) or A.2.y.vi.(2), except as provided in A.2.y.vi.(3).

(1) [40 CFR 63.148(f)(1)]
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 generated as specified in A.2.h.i.(2). The flow indicator shall be installed at the entrance to any bypass line; or

(2) [40 CFR 63.148(f)(2)]
Secure the bypass line valve in the closed 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 closed position and the vent stream is not diverted through the bypass line.

(3) [40 CFR 63.148(f)(3)]
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 section.

vii. [40 CFR 63.148(g)]
Any parts of the vapor collection system, closed vent system, fixed roof, cover, or enclosure that are designated, as described in A.2.y.xi.(1), as unsafe to inspect are exempt from the inspection requirements of A.2.y.ii.(1), A.2.y.ii.(2) and A.2.y.ii.(3)(a) if:

(1) [40 CFR 63.148(g)(1)]
The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with A.2.y.ii.(1), A.2.y.ii.(2) or A.2.y.ii.(3)(a); and

(2) [40 CFR 63.148(g)(2)]
The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

viii. [40 CFR 63.148(h)]
Any parts of the vapor collection system, closed vent system, fixed roof, cover, or enclosure that are designated, as described in A.2.y.ix.(2), as difficult to inspect are exempt from the inspection requirements of A.2.y.ii.(1), A.2.y.ii.(2) and A.2.y.ii.(3)(a) if:

(1) [40 CFR 63.148(h)(1)]
The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) [40 CFR 63.148(h)(2)]
The permittee has a written plan that requires inspection of the equipment at least once every 5 years.

ix. [40 CFR 63.148(i)]
The permittee shall record the information specified in A.2.y.ix.(1) through A.2.y.ix.(5).

(1) [40 CFR 63.148(i)(1)]
Identification of all parts of the vapor collection system, closed vent system, fixed roof, cover, or enclosure that are designated as unsafe to

inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) [40 CFR 63.148(i)(2)]
Identification of all parts of the vapor collection system, closed vent system, fixed roof, cover, or enclosure that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) [40 CFR 63.148(i)(3)]
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.2.y.ix.(3)(a) or A.2.y.ix.(3)(b).

(a) Hourly records of whether the flow indicator specified under A.2.y.vi.(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times 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 A.2.y.vi.(2), hourly records of flow are not required. In such cases, the permittee shall record whether the monthly visual inspection of the seals or closure mechanisms 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 configuration has been checked out, and records of any car-seal that has broken.

(4) [40 CFR 63.148(i)(4)]
For each inspection during which a leak is detected, a record of the information specified in A.2.y.ix.(4)(a) through A.2.y.ix.(4)(h).

(a) The instrument identification numbers; operator name or initials; and identification of the equipment.

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

(c) Maximum instrument reading measured by the method specified in A.2.y.iv after the leak is successfully repaired or determined to be non-repairable.

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

(e) The name, initials, or other form of identification of the person whose decision it was that repair could not be effected without a shutdown.

(f) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(g) Dates of shutdowns that occur while the equipment is unrepaired.

(h) The date of successful repair of the leak.

(5) [40 CFR 63.148(i)(5)]
For each inspection conducted in accordance with A.2.y.iii during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(6) [40 CFR 63.148(i)(6)]
For each visual inspection conducted in accordance with A.2.y.ii.(1)(b) or A.2.y.ii.(3)(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

x. [40 CFR 63.148(j)]
The permittee shall submit with the reports required by A.3.zc or with the reports required by A.2.zb.iii, the information specified in A.2.y.x.(1) through A.2.y.x.(3).

(1) [40 CFR 63.148(j)(1)]
The information specified in A.2.y.ix.(4);

(2) [40 CFR 63.148(j)(2)]
Reports of the times of all periods recorded under A.2.y.ix.(3)(a) when the vent stream is diverted from the control device through a bypass line; and

(3) [40 CFR 63.148(j)(3)]
Reports of all periods recorded under A.2.y.ix.(3)(b) in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

xi. [40 CFR 63.148(k)]
If a closed-vent system subject to A.2.y is also subject to A.3.s, the permittee shall comply with the provisions of A.3.s and is exempt from the requirements of A.2.y.

2.z [40 CFR 63.149]
Control requirements for certain liquid streams in open systems within a CMPU

i. [40 CFR 63.149(a)]
The permittee shall comply with the provisions of Table 35 of A.2.zc, for each item of equipment meeting all the criteria specified in A.2.z.ii through A.2.z.iv and either A.2.z.v.(1) or A.2.z.v.(2).

ii. [40 CFR 63.149(b)]
The item of equipment is of a type identified in Table 35 of A.2.zc;

iii. [40 CFR 63.149(c)]
The item of equipment is part of a CMPU that meets the criteria of A.1.a;

iv [40 CFR 63.149(d)]
The item of equipment is controlled less stringently than in Table 35 and is not listed in A.1.d, and the item of equipment is not otherwise exempt from controls by the provisions of A.1, A.2, and A.3; and

v. [40 CFR 63.149(e)]
The item of equipment is a:

(1) [40 CFR 63.149(e)(1)]
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 parts per million by weight of Table 9 compounds at any flow rate; or a total annual average concentration greater than or equal to 1,000 parts per million by weight of Table 9 compounds at an annual average flow rate greater than or equal to 10 liters per minute. At a CMPU subject to the new source requirements of A.1.i.i or A.1.i.ii, the

criteria of this section are also met if the item of equipment conveys water with an annual average concentration greater than or equal to 10 parts per million by weight of any Table 8 compound at an annual average flow rate greater than or equal to 0.02 liter per minute, or

(2) [40 CFR 63.149(3)(2)]
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 Table 9 compounds at an annual average flow rate greater than or equal to 10 liters per minute. At a CMPU subject to the new source requirements of 40 A.1.i.i or A.1.i.ii, the criteria of this section are also met if the tank receives one or more streams that contain water with an annual average concentration greater than or equal to 10 parts per million by weight of any Table 8 compound at an annual average flow rate greater than or equal to 0.02 liter per minute. The permittee shall determine the characteristics of the stream as specified in (a) or (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 A.2.u.ii and A.2.u.iii.

2.za [40 CFR 63.151]
Initial notification

i. [40 CFR 63.151(a)]
The permittee shall submit the reports listed in A.2.za.i.(1) through A.2.za.i.(5) below.

(1) An Initial Notification described in A.2.za.ii, and

(2) An Implementation Plan for new sources subject to A.2, unless an operating permit application has been submitted prior to the date the Implementation Plan is due and the permittee has elected to include the information specified in A.2.zb.v in that application. The submittal date and contents of the Implementation Plan are specified in A.2.za.iii.

(3) A NCS described in A.2.zb,

(4) Periodic Reports described in A.2.zb, and

(5) Other reports described in A.2.zb.

ii. [40 CFR 63.151(b)]
The permittee shall submit a written Initial Notification, containing the information described in A.2.za.ii.(1), according to the schedule in A.2.za.ii.(2).

(1) [40 CFR 63.151(b)(1)]
The Initial Notification shall include the following information:

(a) The name and address of the permittee;

(b) The address (physical location) of the affected source;

(c) An identification of the kinds of emission points within the CMPUs that are subject to A.2;

(d) An identification of the chemical manufacturing processes subject to A.2; and

(e) A statement of whether the source can achieve compliance by the relevant compliance date specified in A.1.

(2) [40 CFR 63.151(b)(2)]
The Initial Notification shall be submitted according to the schedule in (a) or (b) below:

(a) For an existing source, the Initial Notification shall be submitted within 120 calendar days after the 4/22/94.

(b) For a new source that has an initial start-up 90 calendar days after 4/22/94 or later, the application for approval of construction or reconstruction required by 40 CFR 63.5(d) of Subpart A shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practicable before construction or reconstruction is planned to commence (but it need not be sooner than 90 calendar days after 4/22/94).

iii. [40 CFR 63.151(c)(2)(i)]
For a new source that has an initial start-up 90 calendar days after 4/22/94 or later, the Implementation Plan including the information specified in A.2.zb.v shall be submitted with the application for approval of construction or reconstruction by the date specified in A.2.za.ii.(2)(b).

iv. [40 CFR 63.151(e)]
The permittee expressly referred to this section shall report, in an Implementation Plan or operating permit application, the information listed in (1)

through (4) below:

(1) [40 CFR 63.151(e)(1)]
A list designating each emission point complying with A.2.c through A.2.z and whether each emission point is Group 1 or Group 2.

(2) [40 CFR 63.151(e)(2)]
The control technology or method of compliance that will be applied to each Group 1 emission point.

(3) [40 CFR 63.151(e)(3)]
A statement that the compliance demonstration, monitoring, inspection, record keeping, and reporting provisions in A.2.c through A.2.z that are applicable to each emission point will be implemented beginning on the date of compliance.

(4) [40 CFR 63.151(e)(5)]
The monitoring information in A.2.za.v if, for any emission point, the permittee of a source seeks to comply through use of a control technique other than those for which monitoring parameters are specified in A.2.d for process vents and A.2.t for process wastewater.

v. [40 CFR 63.151(f)]
The permittee who has been directed by any section of A.2 that expressly references this section to set unique monitoring parameters or who requests approval to monitor a different parameter than those listed in A.2.d or A.2.t for process wastewater shall submit the information specified in (1), (2), and (3) below with the operating permit application.

(1) [40 CFR 63.151(f)(1)]
A description of the parameter(s) to be monitored to ensure the control technology or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

(2) [40 CFR 63.151(f)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device, the schedule for this demonstration, and a statement that the permittee will establish a range for the monitored parameter as part of the NCS report required in A.2.zb.ii, unless this information has already been included in the operating permit application.

(3) [40 CFR 63.151(f)(3)]
The frequency and content of monitoring, recording, and reporting if monitoring and recording is not continuous, or if reports of daily average values when the monitored parameter value is outside the range established in the operating

permit or NCS will not be included in Periodic Reports required under A.2.zb.iii. The rationale for the proposed monitoring, recording, and reporting system shall be included.

vi. [40 CFR 63.151(g)]
The permittee may request approval to use alternatives to the continuous operating parameter monitoring and record keeping provisions listed in A.2.d, A.2.g, and A.2.h for process vents, A.2.t, A.2.w, and A.2.x for wastewater.

(1) [40 CFR 63.151(g)(1)]
Requests shall be included in the operating permit application and shall contain the information specified in A.2.za.vi.(3) through A.2.za.vi.(5), as applicable.

(2) [40 CFR 63.151(g)(2)]
The provisions in 40 CFR 63.8(f)(5)(i) of Subpart A shall govern the review and approval of requests.

(3) [40 CFR 63.151(g)(3)]
The permittee of a source that does not have an automated monitoring and recording system capable of measuring parameter values at least once every 15 minutes and generating continuous records may request approval to use a non-automated system with less frequent monitoring.

(a) [40 CFR 63.151(g)(3)(i)]
The requested system shall include manual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily average values shall be calculated from these hourly values and recorded.

(b) [40 CFR 63.151(g)(3)(ii)]
The request shall contain:

(i) A description of the planned monitoring and record keeping system;

(ii) Documentation that the source does not have an automated monitoring and recording system;

(iii) Justification for requesting an alternative monitoring and record keeping system; and

(iv) Demonstration to USEPA Region V-Administrator's satisfaction that the proposed monitoring frequency is sufficient to represent control device operating conditions

considering typical variability of the specific process and control device operating parameter being monitored.

(4) [40 CFR 63.151(g)(4)]
The permittee may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example once every 15 minutes) but records all values that meet set criteria for variation from previously recorded values.

(a) [40 CFR 63.151(g)(4)(i)]
The requested system shall be designed to:

(i) Measure the operating parameter value at least once every 15 minutes.

(ii) Record at least four values each hour during periods of operation.

(iii) Record the date and time when monitors are turned off or on.

(iv) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident.

(v) Compute daily average values of the monitored operating parameter based on recorded data.

(vi) If the daily average is not an excursion, as defined in A.2.zb.iii.(2)(b), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

(b) [40 CFR 63.151(g)(4)(ii)]
The request shall contain a description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all criteria in A.2.za.vi.(4)(a).

(5) [40 CFR 63.151(g)(5)]
The permittee may request approval to use other alternative monitoring systems according to the procedures specified in 40 CFR 63.8(f) of Subpart A.

vii. [40 CFR 63.151(h)]
The permittee required to prepare an Implementation Plan, or otherwise required to submit a report, under A.2.za.iii or A.2.za.iv shall also submit a supplement for any additional alternative controls or operating scenarios that may be used to achieve compliance.

viii. [40 CFR 63.151(j)]
The permittee of a source subject to A.2, shall report to the USEPA Region V-Administrator, with a copy to the Central District Office, Ohio EPA, under the circumstances described in A.2.za.viii.(1), A.2.za.viii.(2), and A.2.za.viii.(3) unless the relevant information has been included and submitted in an operating permit application or amendment, or as otherwise specified by the permitting authority. The information shall be submitted within 180 calendar days after the change is made or the information regarding the change is known to the source. The update may be submitted in the next Periodic Report if the change is made after the date the NCS is due.

(1) [40 CFR 63.151(j)(1)]
Whenever a deliberate change is made such that the group status of any emission point changes. The information submitted shall include a compliance schedule as specified in A.1 if the emission point becomes Group 1.

(2) [40 CFR 63.151(j)(2)]
Whenever the permittee elects to achieve compliance with A.2 by using a control technique other than that previously reported to the USEPA Region V-Administrator, with a copy to the Central District Office, Ohio EPA, or plans to monitor a different parameter, or operate a control device in a manner other than that previously reported.

(3) [40 CFR 63.151(j)(3)]
Whenever an emission point or a CMPU is added to a source, a written addendum to the information submitted under A.2.za.iv containing information on the new emission point shall be submitted.

2.zb [40 CFR 63.152]
General reporting and continuous records

i. [40 CFR 63.152(a)]
The permittee shall submit the reports listed in A.2.zb.i.(1) through A.2.zb.i.(5) and keep continuous records of monitored parameters as specified in A.2.zb.vi.

(1) An Initial Notification described in A.2.za.ii.

(2) An Implementation Plan described in A.2.za.iii, and A.2.za.iv for new sources.

(3) A NCS described in A.2.zb.ii.

(4) Periodic Reports described in A.2.zb.iii.

(5) Other reports described in A.2.zb.iv and A.2.zb.v.

ii. [40 CFR 63.152(b)]
The permittee of a source subject to A.2 shall submit a NCS within 150 calendar days after the compliance dates specified in A.1.

(1) [40 CFR 63.152(b)(1)]
The notification shall include the results of any emission point group determinations, performance tests, inspections, continuous monitoring system performance evaluations, values of monitored parameters established during performance tests, and any other information used to demonstrate compliance or required to be included in the NCS under A.2.g for process vents and A.2.w for process wastewater.

(a) [40 CFR 63.152(b)(1)(ii)]
For performance tests and group determinations that are based on measurements, the NCS shall include one complete test report for each test method used for a particular kind of emission point. For additional tests performed for the same kind of emission point using the same method, the results and any other information required in A.2.g and A.2.w for process wastewater shall be submitted, but a complete test report is not required.

(b) [40 CFR 63.152(b)(1)(ii)]
A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.

(2) [40 CFR 63.152(b)(2)]
For each monitored parameter for which a range is required to be established under A.2.d for process vents, A.2.t for process wastewater or A.2.za.v, or A.2.zb.v, the NCS shall include the information in A.2.zb.ii.(2)(a), A.2.zb.ii.(2)(b), and A.2.zb.ii.(2)(c), unless the range and the operating day definition have been established in the operating permit. The record keeping and reporting requirements applicable to storage vessels are located in A.2.i.

(a) [40 CFR 63.152(b)(2)(i)]
The specific range of the monitored parameter(s) for each emission point;

(b) [40 CFR 63.152(b)(2)(ii)]
The rationale for the specific range for each parameter for each emission point, including any data and calculations used to develop the range and a description of why the range indicates proper operation of the control device.

(i) [40 CFR 63.152(b)(2)(ii)(A)]
If a performance test is required by A.2 for a control device, the range shall be based on the parameter values measured during the performance test and may be supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of permitted parameter values.

(ii) [40 CFR 63.152(b)(2)(ii)(B)]
If a performance test is not required by A.2 for a control device, the range may be based solely on engineering assessments and/or manufacturer's recommendations.

(c) [40 CFR 63.152(b)(2)(iii)]
A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends.

(3) [40 CFR 63.152(b)(4)]
If any emission point is subject to A.2 and to other standards as specified in A.2.b and if the provisions of A.2.b allow the permittee to choose which testing, monitoring, reporting, and record keeping provisions will be followed, then the NCS shall indicate which rule's requirements will be followed for testing, monitoring, reporting, and record keeping.

(4) [40 CFR 63.152(b)(5)]
The permittee who transfers a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream for treatment pursuant to A.2.k.vii shall include in the NCS the name and location of the transferee and a description of the Group 1 wastewater stream or residual sent to the treatment facility.

iii. [40 CFR 63.152(c)]
The permittee of a source subject to A.2 shall submit Periodic Reports.

(1) [40 CFR 63.152(c)(1)]
Except as specified under A.2.zb.iii.(5) and A.2.zb.iii.(6), a report containing the information in A.2.zb.iii.(2), A.2.zb.iii.(3), and A.2.zb.iii.(4) shall be submitted semiannually no later than 60 calendar days after the end of each 6-month period. The first report shall be submitted no later than 8 months after the date the NCS is due and shall cover the 6-month period beginning on the date the NCS is due.

(2) [40 CFR 63.152(c)(2)]
Except as provided in A.2.zb.iii.(2)(d), for an permittee of a source complying with the provisions of A.2.c through A.2.x for any emission points, Periodic Reports shall include all information specified in A.2.g and A.2.h for process vents, A.2.j for transfer operations, and A.2.w for process wastewater, including reports of periods when monitored parameters are outside their established ranges.

(a) [40 CFR 63.152(c)(2)(i)]
For each parameter or parameters required to be monitored for a control device, the permittee shall establish a range of parameter values to ensure that the device is being applied, operated and maintained properly. As specified in A.2.zb.ii.(2), these parameter values and the definition of an operating day shall be approved as part of and incorporated into the source's NCS or operating permit, as appropriate.

(b) [40 CFR 63.152(c)(2)(ii)]
The parameter monitoring data for Group 1 emission points that are required to perform continuous monitoring shall be used to determine compliance with the required operating conditions for the monitored control devices or recovery devices. For each excursion, except for excused excursions, the permittee shall be deemed to have failed to have applied the control in a manner that achieves the required operating conditions.

(i) [40 CFR 63.152(c)(1)(ii)(A)]
An excursion means any of the three cases listed below. For a control device or recovery device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in below, this is considered a single excursion for the control device or recovery device.

1) When the daily average value of one or more monitored parameters is outside the permitted range.

2) When the period of control device or recovery device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours.

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

4) Monitoring data are insufficient to constitute a valid hour of data, if measured values are unavailable for any of the 15-minute periods within the hour. For data compression systems approved under A.2.za.vi.(4), monitoring data are insufficient to calculate a valid hour of data if there are less than 4 data values recorded during the hour.

(ii) [40 CFR 63.152(c)(1)(ii)(B)]
The number of excused excursions for each control device or recovery device for each semiannual period is specified in below. This section applies to sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the NCS is due.

1) six excused excursions for the first semiannual period;

2) five excused excursions for the second semiannual period;

3) four excused excursions for the third semiannual period;

4) three excused excursions for the fourth semiannual period;

5) two excused excursions for the fifth semiannual period; and

6) one excused excursions for the sixth and all subsequent semiannual periods.

(iii) [40 CFR 63.152(c)(1)(ii)(C)]
If a monitored parameter is outside its established range or monitoring data are not collected during periods of start-up, shutdown, or malfunction (and the source is operated during such periods in accordance with the source's start-up, shutdown, and malfunction plan) or during periods of non-operation of the CMPU or portion thereof (resulting in cessation of the emissions to which the monitoring applies), then the excursion is not a violation and, in cases where continuous monitoring is required, the excursion does not count toward the number of excused excursions for determining compliance.

(iv) [40 CFR 63.152(c)(1)(ii)(D)]
Nothing in A.2.zb.iii.(2)(b) shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of A.1, A.2 or 40 CFR Part 63, Subpart A.

(v) [40 CFR 63.152(c)(1)(ii)(E)]
Section A.2.zb.iii.(2)(b), except A.2.zb.iii.(2)(b)(iii), shall apply only to emission points and control devices or recovery devices for which continuous monitoring is required by A.2.c through A.2.z.

(c) [40 CFR 63.152(c)(2)(iii)]
Periodic Reports shall include the daily average values of monitored parameters for both excused and unexcused excursions, as defined in A.2.zb.iii.(2)(b)(i). For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified.

(3) [40 CFR 63.152(c)(3)]
If any performance tests are reported in a Periodic Report, the following information shall be included:

(a) [40 CFR 63.152(c)(3)(i)]
One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in A.2.zb.ii.(1)(b).

(b) [40 CFR 63.152(c)(3)(ii)]
For additional tests performed for the same kind of emission point using the same method, results and any other information required in A.2.g for process vents and A.2.w for process wastewater shall be submitted, but a complete test report is not required.

(4) [40 CFR 63.152(c)(4)]
Periodic Reports shall include the information in (a) through (d) below, as applicable:

(a) [40 CFR 63.152(c)(4)(i)]
For process vents, reports of process changes as required under A.2.h.vii, A.2.h.viii, A.2.h.ix, and A.2.h.x,

(b) [40 CFR 63.152(c)(4)(ii)]
Any supplements required under A.2.za.viii,

(c) [40 CFR 63.152(c)(4)(iii)]
Notification if any Group 2 emission point becomes a Group 1 emission point, including a compliance schedule as required in A.1, and

(d) [40 CFR 63.152(c)(4)(iv)]
For process wastewater streams sent for treatment pursuant to A.2.k.vii, reports of changes in the identity of the treatment facility or transferee.

iv. [40 CFR 63.152(d)(1)]
Other reports shall be submitted as specified in 40 CFR Part 63, Subpart A or in A.2.c through A.2.za. Reports of start-up, shutdown, and malfunction required by 40 CFR 63.10(d)(5) of Subpart A. The semi-annual start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under A.2.zb.iii instead of the schedule specified in 40 CFR 63.10(d)(5)(i) of Subpart A.

v. [40 CFR 63.152(e)]
The permittee shall submit the information specified in A.2.zb.v.(1) through A.2.zb.v.(3) with the operating permit application. The permittee shall submit written updates as amendments to the operating permit application on the schedule and under the circumstances described in A.2.za.viii. Notwithstanding, if the permittee has an operating permit under 40 CFR Part 70 or 71, the permittee shall follow the schedule and format required by the Ohio EPA.

(1) [40 CFR 63.152(e)(1)]
The information specified in A.2.za.v or A.2.za.vi for any emission points for which the permittee requests approval to monitor a unique parameter or use an alternative monitoring and recording system, and

(2) [40 CFR 63.152(e)(3)]
The information specified in A.2.za.iv for points not included in an emissions average.

(3) [40 CFR 63.152(e)(4)]
The information specified in A.2.za.vii as applicable.

vi. [40 CFR 63.152(f)]
If required to keep continuous records by A.2.h, A.2.j, A.2.x or other terms and conditions, the permittee shall keep records as specified in (1) through (7) below, unless an alternative record keeping system has been requested and approved under A.2.za.v or A.2.za.vi or A.2.zb.v or under 40 CFR 63.8(f) of Subpart A, and except as provided in A.2.zb.iii.(2)(b)(ii) or A.2.zb.vii.

(1) [40 CFR 63.152(f)(1)]

The monitoring system shall measure data values at least once every 15 minutes.

(2) [40 CFR 63.152(f)(2)]
The permittee shall record either:

(a) Each measured data value; or

(b) Block average values for 15-minute or shorter periods calculated from all measured data values during each period or at least one measured data value per minute if measured more frequently than once per minute.

(3) [40 CFR 63.152(f)(3)]
If the daily average value of a monitored parameter for a given operating day is within the range established in the NCS or operating permit, the permittee shall either:

(a) Retain block hourly average values for that operating day for 5 years and discard, at or after the end of that operating day, the 15-minute or more frequent average values and readings recorded under A.2.zb.vi.(2); or

(b) Retain the data recorded in A.2.zb.vi.(2) for 5 years.

(4) [40 CFR 63.152(f)(4)]
If the daily average value of a monitored parameter for a given operating day is outside the range established in the NCS or operating permit, the permittee shall retain the data recorded that operating day under A.2.zb.vi.(2) for 5 years.

(5) [40 CFR 63.152(f)(5)]
Daily average values of each continuously monitored parameter shall be calculated for each operating day, and retained for 5 years, except as specified in A.2.zb.vi.(6) and A.2.zb.vi.(7).

(a) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.

(b) The operating day shall be the period from midnight to midnight.

[40 CFR 63.152(f)(6)]

(6) If all recorded values for a monitored parameter during an operating day are within the range established in the NCS or operating permit, the permittee may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that operating day. For these operating days, the records required in A.2.zb.vi.(3) shall also be retained for 5 years.

[40 CFR 63.152(f)(7)]

(7) Monitoring data recorded during periods identified in A.2.zb.vi.(7)(a) through A.2.zb.vi.(7)(e) shall not be included in any average computed under A.2. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating.

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(b) Start-ups;

(c) Shutdowns;

(d) Malfunctions;

(e) Periods of non-operation of the CMPU (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

vii. [40 CFR 63.152(g)]

For any parameter with respect to any item of equipment, the permittee may implement the record keeping requirements in A.2.zb.vii.(1) or A.2.zb.vii.(2) as alternatives to the continuous operating parameter monitoring and record keeping provisions listed in A.2.d, A.2.g, and A.2.h for process vents, A.2.j for transfer operations, A.2.t, A.2.w, and A.2.x for wastewater, and/or A.2.zb.vi, except that A.2.zb.vi.(7) shall apply. The permittee shall retain each record required by A.2.zb.vii (1) or A.2.zb.vii.(2) as provided in A.1.m, except as provided otherwise in A.2.zb.vi.(1) or A.2.zb.vi.(2).

(1) [40 CFR 63.152(g)(1)]

The permittee may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of A.2.zb.vii.(1)(a) through A.2.zb.vii.(1)(f) are met. The permittee electing to comply with the requirements of A.2.zb.vii.(1) shall notify the USEPA Region V-Administrator, with a copy to the Ohio EPA, Central District Office,, in the NCS or, if the NCS has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of A.2.zb.vii.(1).

(a) [40 CFR 63.152(g)(1)(i)]

The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than startups, shutdowns, or malfunctions (e.g., a temperature reading of -200 C on a boiler), and will alert the operator by alarm or other means. The permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(b) [40 CFR 63.152(g)(1)(ii)]
The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this average is readily available to the USEPA Region V-Administrator and the Ohio EPA, Central District Office, on-site during the operating day. The permittee shall record the occurrence of any period meeting the criteria in A.2.zb.vii.(1)(b)(i) through A.2.zb.vii.(1)(b)(iii). All instances in an operating day constitute a single occurrence.

(i) The running average is above the maximum or below the minimum established limits;

(ii) The running average is based on at least 6 1-hour average values; and

(iii) The running average reflects a period of operation other than a startup, shutdown, or malfunction.

(c) [40 CFR 63.152(g)(1)(iii)]
The monitoring system is capable of detecting unchanging data during periods of operation other than startups, shutdowns, or malfunctions, except in circumstances where the presence of unchanging data is the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(d) [40 CFR 63.152(g)(1)(iv)]
The monitoring system will alert the permittee by an alarm or other means, if the running average parameter value calculated under A.2.zb.vii.(1)(b) reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(e) [40 CFR 63.152(g)(1)(v)]
The permittee shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of A.2.zb.vii.(1), at the times specified in A.2.zb.vii.(1)(e)(i) through A.2.zb.vii.(1)(e)(iii). The permittee shall document that the required verifications occurred.

(i) Upon initial installation.

(ii) Annually after initial installation.

(iii) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(f) [40 CFR 63.152(g)(1)(vi)]
The permittee shall retain the records identified in (i) through (iii) below.

(i) Identification of each parameter, for each item of equipment, for which the permittee has elected to comply with the requirements of A.2.zb.vii.

(ii) A description of the applicable monitoring system(s), and of how compliance will be achieved with each requirement of A.2.zb.vii.(1)(a) through A.2.zb.vii.(1)(e). The description shall identify the location and format (e.g., on-line storage; log entries) for each required record. If the description changes, the permittee shall retain both the current and the most recent superseded description. The description, and the most recent superseded description, shall be retained as provided in A.1.m, except as provided in A.2.zb.vii.(1)(f)(iv).

(iii) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of A.2.zb.vii.(1).

(iv) The permittee subject to A.2.zb.vii.(1)(f)(ii) shall retain the current description of the monitoring system as long as the description is current, but not less than 5 years from the date of its creation. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The permittee shall retain the most recent superseded description at least until 5 years from the date of its creation. The superseded description shall be retained on-site (or accessible from a central location by computer that provides access within 2 hours after a request) at least 6

months after its creation. Thereafter, the superseded description may be stored off-site.

(2) [40 CFR 63.152(g)(2)]
If the permittee has elected to implement the requirements of A.2.zb.vii.(1), and a period of 6 consecutive months has passed without an excursion as defined in A.2.zb.vii.(2)(d), the permittee is no longer required to record the daily average value for that parameter for that unit of equipment, for any operating day when the daily average value is less than the maximum, or greater than the minimum established limit. With approval by the USEPA Region V-Administrator, monitoring data generated prior to the compliance date of A.2 shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring was required and/or approved by the USEPA Region V-Administrator.

(a) [40 CFR 63.152(g)(2)(i)]
If the permittee elects not to retain the daily average values, the permittee shall notify the USEPA Region V-Administrator, with a copy to the Ohio EPA, Central District Office,, in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(b) [40 CFR 63.152(g)(2)(ii)]
If, on any operating day after the permittee has ceased recording daily averages as provided in A.2.zb.vii.(2), there is an excursion as defined in A.2.zb.vii.(2)(d), the permittee shall immediately resume retaining the daily average value for each day, and shall notify the USEPA Region V-Administrator, with a copy to the Ohio EPA, Central District Office,, in the next Periodic Report. The permittee shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in A.2.zb.vii.(2)(d).

(c) [40 CFR 63.152(g)(2)(iii)]
The permittee shall retain the records specified in A.2.zb.vii.(1)(a) through A.2.zb.vii.(1)(f). For any calendar week, if compliance with A.2.zb.vii.(1)(a), A.2.zb.vii.(1)(b), A.2.zb.vii.(1)(c), and A.2.zb.vii.(1)(d) does not result in retention of a record of at least one occurrence or measured parameter value, the permittee shall record and retain at least one parameter value during a period of operation other than a startup, shutdown, or malfunction.

(d) [40 CFR 63.152(g)(2)(iv)]

For purposes of A.2.zb.vii, an excursion means that the daily average value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in A.2.zb.vii.(2)(d)(i) and A.2.zb.vii.(2)(d)(ii).

(i) The daily average value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of A.2.zb.vii.(2), if the permittee follows the applicable provisions of the startup, shutdown, and malfunction plan required by 40 CFR 63.6(e)(3) of Subpart A.

(ii) An excused excursion, as described in A.2.zb.iii.(2)(b)(ii) and A.2.zb.iii.(2)(b)(iii), shall not be considered an excursion for purposes of A.2.zb.vii.(2).

2.zc Tables

i. Table 1 Process Vents--Coefficients for Total Resource Effectiveness for Existing Source Nonhalogenated and Halogenated Vent Streams

(1) Nonhalogenated stream:
Flare: a = 1.935; b = 3.660x10-1; c = -7.687x10-3; d = -7.333x10-4
Thermal Incinerator (0% heat recovery): a = 1.492; b = 6.267x10-2; c = 3.177x10-2; d = -1.159x10-3
Thermal Incinerator (70%heat recovery): a = 2.519; b = 1.183x10-2; c = 1.300x10-2; d = 4.790x10-2

(2) Halogenated stream:
Thermal Incinerator and scrubber: a = 3.995; b = 5.200x10-2; c = -1.769x10-3; d = 9.700x10-4

ii. Table 2. Process Vents--Coefficients for Total Resource Effectiveness for New Source Nonhalogenated and Halogenated Vent Stream

(1) Nonhalogenated stream:
Flare: a = 0.5276; b = 0.0998; c = -2.096 x 10-3; d = -2.000 x 10-4
Thermal Incinerator (0% heat recovery): 0.4068; b = 0.0171; c = 8.664 x 10-3; d = -3.162 x 10-4
Thermal Incinerator (70% heat recovery): a = 0.6868; b = 3.209 x 10-3; c = 3.546 x 10-3; d = 1.306 x 10-2

(2) Halogenated stream:
Thermal Incinerator and scrubber: a = 1.0895; b = 1.417 x 10-2; c =-4.822 x 10-4; d = 2.645 x 10-4

iii. Table 8.-- Organic HAP's Subject to the Wastewater Provisions for Process Units at New Sources

Chemical name - CAS Number
Allyl chloride - 107051
Benzene - 71432
Butadiene (1,3-) - 106990
Carbon disulfide - 75150
Carbon tetrachloride - 56235
Cumene - 98828
Ethylbenzene - 100414
Ethyl chloride (Chloroethane) - 75003
Ethylidene dichloride (1,1-Dichloroethane) - 75343
Hexachlorobutadiene - 87683
Hexachloroethane - 67721
Hexane - 100543
Methyl bromide (Bromomethane) - 74839
Methyl chloride (Chloromethane) - 74873
Phosgene - 75445
Tetrachloroethylene (Perchloroethylene) - 127184
Toluene - 108883
Trichloroethane (1,1,1-) (Methyl chloroform) - 71556
Trichloroethylene - 79016
Trimethylpentane (2,2,4-) - 540841
Vinyl chloride (chloroethylene) - 75014
Vinylidene chloride (1,1-Dichloroethylene) - 75354
Xylene (m-) - 108383
Xylene (p-) - 106423

iv. Table 9.-- Organic HAP's Subject to the Wastewater Provisions for Process Units at New and Existing Sources and Corresponding Fraction Removed (Fr) Values

Chemical name - CAS No. - Fr
Acetaldehyde - 75070 - 0.95
Acetonitrile - 75058 - 0.62
Acetophenone - 98862 - 0.72
Acrolein - 107028 - 0.96
Acrylonitrile - 107131 - 0.96
Allyl chloride - 107051 - 0.99
Benzene - 71432 - 0.99
Benzyl chloride - 100447 - 0.99
Biphenyl - 92524 - 0.99

Bromoform - 75252 - 0.99
Butadiene (1,3-) - 106990 - 0.99
Carbon disulfide - 75150 - 0.99
Carbon tetrachloride - 56235 - 0.99
Chlorobenzene - 108907 - 0.99
Chloroform - 67663 - 0.99
Chloroprene (2-Chloro-1,3-butadiene) - 126998 - 0.99
Cumene - 98828 - 0.99
Dichlorobenzene (p-) - 106467 - 0.99
Dichloroethane (1,2-) (Ethylene dichloride) - 107062 - 0.99
Dichloroethyl ether (Bis(2-chloroethyl)ether) - 111444 - 0.87
Dichloropropene (1,3-) - 542756 - 0.99
Diethyl sulfate - 64675 - 0.90
Dimethyl sulfate - 77781 - 0.53
Dimethylaniline (N,N-) - 121697 - 0.99
Dimethylhydrazine (1,1-) - 57147 - 0.57
Dinitrophenol (2,4-) - 51285 - 0.99
Dinitrotoluene (2,4-) - 121142 - 0.38
Dioxane (1,4-) (1,4-Diethyleneoxide) - 123911 - 0.37
Epichlorohydrin(1-Chloro-2,3-epoxypropane) - 106898 - 0.91
Ethyl acrylate - 140885 - 0.99
Ethylbenzene - 100414 - 0.99
Ethyl chloride (Chloroethane) - 75003 - 0.99
Ethylene dibromide (Dibromomethane) - 106934 - 0.99
Ethylene glycol dimethyl ether - 110714 - 0.90
Ethylene glycol monobutyl ether acetate - 112072 - 0.76
Ethylene glycol monomethyl ether acetate - 110496 - 0.28
Ethylene oxide - 75218 - 0.98
Ethylidene dichloride (1,1-Dichloroethane) - 75343 - 0.99
Hexachlorobenzene - 118741 - 0.99
Hexachlorobutadiene - 87683 - 0.99
Hexachloroethane - 67721 - 0.99
Hexane - 110543 - 0.99
Isophorone - 78591 - 0.60
Methanol - 67561 - 0.31
Methyl bromide (Bromomethane) - 74839 - 0.99
Methyl chloride (Chloromethane) - 74873 - 0.99
Methyl ethyl ketone (2-Butanone) - 78933 - 0.95
Methyl isobutyl ketone (Hexone) - 108101 - 0.99
Methyl methacrylate - 80626 - 0.98
Methyl tert-butyl ether - 1634044 - 0.99
Methylene chloride (Dichloromethane) - 75092 - 0.99
Naphthalene - 91203 - 0.99
Nitrobenzene - 98953 - 0.80
Nitropropane (2-) - 79469 - 0.98
Phosgene - 75445 - 0.99
Propionaldehyde - 123386 - 0.99

Propylene dichloride (1,2-Dichloropropene) - 78875 - 0.99
Propylene oxide - 75569 - 0.99
Styrene - 100425 - 0.99
Tetrachloromethane (1,1,2,2-) - 79345 - 0.99
Tetrachloroethylene (Perchloroethylene) - 127184 - 0.99
Toluene - 108883 - 0.99
Toluidine (o-) - 95534 - 0.44
Trichlorobenzene (1,2,4-) - 120821 - 0.99
Trichloroethane (1,1,1-) (Methyl chloroform) - 71556 - 0.99
Trichloroethane (1,1,2-) (Vinyl trichloride) - 79005 - 0.99
Trichloroethylene - 79016 - 0.99
Trichlorophenol (2,4,5-) - 95954 - 0.96
Triethylamine - 121448 - 0.99
Trimethylpentane (2,2,4-) - 540841 - 0.99
Vinyl acetate - 108054 - 0.99
Vinyl chloride (Chloroethylene) - 75014 - 0.99
Vinylidene chloride (1,1-Dichloroethylene) - 75354 - 0.99
Xylene (m-) - 108383 - 0.99
Xylene (o-) - 95476 - 0.99
Xylene (p-) - 106423 - 0.99

v. Table 34 - Fraction Measured (Fm) and Fraction Emitted (Fe) For HAP Compounds in Wastewater Streams

Chemical name - CAS Number - Fm - Fe
Acetaldehyde - 75070 - 1.00 - 0.48
Acetonitrile - 75058 - 0.99 - 0.36
Acetophenone - 98862 - 0.31 - 0.14
Acrolein - 107028 - 1.00 - 0.43
Acrylonitrile - 107131 - 1.00 - 0.43
Allyl chloride - 107051 - 1.00 - 0.89
Benzene - 71432 - 1.00 - 0.80
Benzyl chloride - 100447 - 1.00 - 0.47
Biphenyl - 92524 - 0.86 - 0.45
Bromoform - 75252 - 1.00 - 0.49
Butadiene (1,3-) - 106990 - 1.00 - 0.98
Carbon disulfide - 75150 - 1.00 - 0.92
Carbon tetrachloride - 56235 - 1.00 - 0.94
Chlorobenzene - 108907 - 1.00 - 0.73
Chloroform - 67663 - 1.00 - 0.78

Chloroprene (2-Chloro-1,3-butadiene) - 126998 - 1.00 - 0.68
Cumene - 98828 - 1.00 - 0.88
Dichlorobenzene (p-) - 106467 - 1.00 - 0.72
Dichloroethane (1,2-) (Ethylene dichloride) - 107062 - 1.00 - 0.64
Dichloroethyl ether (Bis(2-Chloroethylether)) - 111444 - 0.76 - 0.21
Dichloropropene (1,3-) - 542756 - 1.00 - 0.76
Diethyl sulfate - 64675 - 0.0025 - 0.11
Dimethyl sulfate - 77781 - 0.086 - 0.079
Dimethylaniline (N,N-) - 121697 - 0.00080 - 0.34
Dimethylhydrazine (1,1-)57147 - 0.38 - 0.054
Dinitrophenol (2,4-) - 51285 - 0.0077 - 0.060
Dinitrotoluene (2,4-) - 121142 - 0.085 - 0.18
Dioxane (1,4-) (1,4-Diethyleneoxide) - 123911 - 0.87 - 0.18
Epichlorohydrin(1-Chloro-2,3-epoxypropane) - 106898 - 0.94 - 0.35
Ethyl acrylate - 140885 - 1.00 - 0.48
Ethylbenzene - 100414 - 1.00 - 0.83
Ethyl chloride (Chloroethane) - 75003 - 1.00 - 0.90
Ethylene dibromide (Dibromomethane) - 106934 - 1.00 - 0.57
Ethylene glycol dimethyl ether - 110714 - 0.86 - 0.32
Ethylene glycol monobutyl ether acetate - 112072 - 0.043 - 0.067
Ethylene glycol monomethyl ether acetate - 110496 - 0.093 - 0.048
Ethylene oxide - 75218 - 1.00 - 0.50
Ethylidene dichloride (1,1-Dichloroethane) - 75343 - 1.00 - 0.79
Hexachlorobenzene - 118741 - 0.97 - 0.64
Hexachlorobutadiene - 87683 - 0.88 - 0.86
Hexachloroethane - 67721 - 0.50 - 0.85 Hexane - 110543 - 1.00 - 1.00
Isophorone - 78591 - 0.51 - 0.11
Methanol - 67561 - 0.85 - 0.17
Methyl bromide (Bromomethane) - 74839 - 1.00 - 0.85
Methyl chloride (Chloromethane) - 74873 - 1.00 - 0.84
Methyl ethyl ketone (2-Butanone) - 78933 - 0.99 - 0.48
Methyl isobutyl ketone (Hexone) - 108101 - 0.98 - 0.53
Methyl methacrylate - 80626 - 1.00 - 0.37
Methyl tert-butyl ether - 16340441.00 - 0.57
Methylene chloride (Dichloromethane) - 75092 - 1.00 - 0.77
Naphthalene - 91203 - 0.99 - 0.51
Nitrobenzene - 98953 - 0.39 - 0.23
Nitropropane (2-) - 79469 - 0.99 - 0.44
Phosgene - 75445 - 1.00 - 0.87
Propionaldehyde - 123386 - 1.00 - 0.41
Propylene dichloride (1,2-Dichloropropene) - 78875 - 1.00 - 0.72
Propylene oxide - 75569 - 1.00 - 0.60
Styrene - 100425 - 1.00 - 0.80
Tetrachloromethane (1,1,2,2-) - 79345 - 1.00 - 0.46
Tetrachloroethylene (Perchloroethylene) - 127184 - 1.00 - 0.92
Toluene - 108883 - 1.00 - 0.80

Toluidine (o-) - 95534 - 0.15 - 0.052
Trichlorobenzene (1,2,4-) - 120821 - 1.00 - 0.64
Trichloroethane (1,1,1-) (Methyl chloroform) - 71556 - 1.00 - 0.91
Trichloroethane (1,1,2-) (Vinyl Trichloride) - 79005 - 1.00 - 0.60
Trichloroethylene - 79016 - 1.00 - 0.87
Trichlorophenol (2,4,5-) - 95954 - 0.11 - 0.086
Triethylamine - 121448 - 1.00 - 0.38
Trimethylpentane (2,2,4-) - 540841 - 1.00 - 1.00
Vinyl acetate - 108054 - 1.00 - 0.59
Vinyl chloride (Chloroethylene) - 75014 - 1.00 - 0.97
Vinylidene chloride (1,1-Dichloroethylene) - 75354 - 1.00 - 0.94
Xylene (m-) - 108383 - 1.00 - 0.82
Xylene (o-) - 95476 - 1.00 - 0.79
Xylene (p-) - 106423 - 1.00 - 0.82

vi. Table 35 - Control Requirements for Items of Equipment That Meet the Criteria of A.2.z

(1) Drain or drain hub

(a) Tightly fitting solid cover (TFSC); or
(b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of A.2.r.iii; or
(c) Water seal with submerged discharge or barrier to protect discharge from wind.

(2) Manhole - includes sumps and other points of access to a conveyance system.

(a) TFSC; or
(b) TSFC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of A.2.r.iii; or
(c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.

(3) Lift station

(a) TFSC; or
(b) TFSC with a vent to either a process, or to a fuel gas system, or to a

control device meeting the requirements of A.2.r.iii; or

(c) If the lift station is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter. The lift station shall be level controlled to minimize changes in the liquid level.

(4) Trench

(a) TFSC; or

(b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of A.2.r.iii; or

(c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.

(5) Pipe - Each pipe shall have no visible gaps in joints, seals, or other emission interfaces.

(6) Oil/Water separator

(a) Equip with a fixed roof and route vapors to a process or to a fuel gas system, or equip with a closed vent system that routes vapors to a control device meeting the requirements of A.2.r.iii; or

(b) Equip with a floating roof that meets the equipment specifications of 40 CFR 60.693 (a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4).

(7) Tank - Applies to tanks with capacities of 38 cubic meters or greater.

(a) Maintain a fixed roof. If the tank is sparged (The liquid in the tank is agitated by injecting compressed air or gas) or used for heating or treating by means of an exothermic reaction, a fixed roof and a system shall be maintained that routes the organic HAPs vapors to other process equipment or a fuel gas system, or a closed vent system that routes vapors to a control device.

(b) A fixed roof may have openings necessary for proper venting of the tank, such as pressure/vacuum vent, j-pipe vent.

(8) Where a tightly fitting solid cover is required, it shall be maintained with no visible gaps or openings, except during periods of sampling, inspection, or maintenance.

vii. Table 36 - Compound Lists Used for Compliance Demonstrations for Enhanced Biological Treatment Processes (A.2.v.iii)

List 1

Acetonitrile
Acetophenone
Acrylonitrile
Biphenyl
Chlorobenzene
Dichloroethyl Ether
Diethyl Sulfate
Dimethyl Sulfate
Dimethyl Hydrazine 1,1
Dinitrophenol 2,4
Dinitrotoluene 2,4
Dioxane 1,4
Ethylene Glycol MonobutylEther Acetate
Ethylene Glycol MonomethylEther Acetate
Ethylene Glycol Dimethyl Ether
Hexachlorobenzene
Isophorone
Methanol
Methyl Methacrylate
Nitrobenzene
Toluidine
Trichlorobenzene 1,2,4
Trichlorophenol 2,4,6
Triethylamine

List 2
Acetaldehyde.
Acrolein.
Allyl Chloride.
Benzene.
Benzyl Chloride,
Bromoform.
Bromomethane.
Butadiene 1,3.
Carbon Disulfide.
Carbon Tetrachloride
Chloroethane (ethyl chloride).
Chloroform.
Chloroprene.
Cumene (isopropylbenzene).

Dibromoethane 1,2.
Dichlorobenzene 1,4.
Dichloroethane 1,2.
Dichloroethane 1,1 (ethylidene dichloride).
Dichloroethene 1,1 (vinylidene chloride).
Dichloropropene 1,2.
Dichloropropene 1,3.
Dimethylaniline N,N.
Epichlorohydrin.
Ethyl Acrylate.
Ethylbenzene.
Ethylene Oxide.
Ethylene Dibromide.
Hexachlorobutadiene.
Hexachloroethane.
Hexane-n.
Methyl Isobutyl Ketone.
Methyl Tertiary Butyl Ether.
Methyl Ethyl Ketone, (2-butanone).
Methyl Chloride.
Methylene Chloride (dichloromethane).
Naphthalene.
Nitropropane 2
Phosgene.
Propionaldehyde.
Propylene Oxide.
Styrene.
Tetrachloromethane 1,1,2,2.
TolueneTrichloroethane 1,1,1 (methyl chloroform).
Trichloroethane 1,1,2.
Trichloroethylene.
Trimethylpentane 2,2,4.
Vinyl Chloride.
Vinyl Acetate.
Xylene-m.
Xylene-o.
Xylene-p.

viii. Table 37 - Default Biorates for List 1 Compounds

Compound name - Biorate, K1 L/g MLVSS-hr
Acetonitrile - 0.100
Acetophenone - 0.538
Acrylonitrile - 0.750
Biphenyl - 5.643
Chlorobenzene - 10.000
Dichloroethyl ether - 0.246
Diethyl sulfate - 0.105
Dimethyl hydrazine(1,1) - 0.227
DIMethyl sulfate - 0.178
Dinitrophenol 2,4 - 0.620
Dinitrotoluene(2,4) - 0.784
Dioxane(1,4) - 0.393
Ethylene glycol dimethyl ether - 0.364
Ethylene glycol monomethyl ether acetate - 0.159
Ethylene glycol monobutyl ether acetate - 0.496
Hexachlorobenzene - 16.179
Isophorone - 0.598
Methanol - 0.200
Methyl methacrylate - 4.300
Nitrobenzene(b) - 2.300
Toluidine (-0) - 0.859
Trichlorobenzene 1,2,4 - 4.393
Trichlorophenol 2,4,5 - 4.477
Triethylamine(a) - 1.064

3. [40 CFR Part 63, Subpart H]
Organic HAP leak detection and repair program

3.a [40 CFR 63.160(a)]
The leak detection and repair program requirements specified in section A.3 apply to the following equipment which is intended to operate in organic hazardous air pollution service for greater than 300 hours per year within a source which is subject to sections A.1 or A.2: pumps, compressors, agitators, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this permit.

[40 CFR 63.162(a)]
Compliance with section A.3 shall be demonstrated by review of the records required

by section A.3.zb and the reports required by section A.3.zc, review of performance test results, and by facility inspections.

3.b [40 CFR 63.160(e)]
Lines and equipment not containing process fluids are not considered to be subject to the provisions of A.3. Non-process lines which do not combine their materials with those in the process they serve are not considered part of the process unit.

3.c [40 CFR 63.160(b)(1) and (c)]
For equipment which is subject to the provisions of 40 CFR Part 60, Subpart VV and is also subject to section A.3 of this permit, the permittee is required only to comply with section A.3. The provisions in 40 CFR 63.1(a)(3) of Subpart A do not alter the provisions in this section.

3.d [40 CFR 63.160(c)]
For emissions units which are subject to section A.3 which have equipment which is not subject to sections A.1, A.2 and A.3 but is subject to 40 CFR Part 60, Subpart VV, the permittee may elect to apply the provisions of A.3 to all equipment in the emissions unit. Compliance with section A.3, in this manner, shall be deemed to be compliance with 40 CFR Part 60, Subpart VV.

3.e [40 CFR 63.162(c)]
Each piece of equipment which is subject to section A.3 shall be identified such that it can be distinguished from equipment that is not subject to section A.3. The equipment may be identified on a site plan, in a log, or by physical tagging with weatherproof identification.

3.f [40 CFR 63.162(d)]
Equipment that is in vacuum service is excluded from the requirements of section A.3.

3.g [40 CFR 63.162(e)]
Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of section A.3 if it is identified as required in section A.3.zb.vii.

3.h i. [40 CFR 63.162(f)]
When a leak is detected as specified in A.3.j, A.3.o, A.3.p, A.3.s, and A.3.u:

(1) [40 CFR 63.162(f)(1)]
the permittee shall mark the equipment with a readily visible weatherproof identification including the equipment number;

(2) [40 CFR 63.162(f)(2)]
the permittee may remove the identification on a valve after it has been monitored in accordance with section A.3.o.v and no leak has been detected during the follow up monitoring. If the permittee elects to comply with A.3.u.iii.(1), the identification may be removed after the connector has been monitored in accordance with section A.3.u.iii.(1); and

(3) [40 CFR 63.162(f)(3)]
the identification on equipment which was determined to have a leak may be removed after it has been repaired except for a valve or connector which is subject to the provisions of A.3.u.iii.(1).

ii. [40 CFR 63.162(g)]
Except as provided in section A.3.h.ii.(1), all terms in section A.3 that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement.

(1) [40 CFR 63.162(g)(1)]
If the initial compliance date does not coincide with the beginning of the standard calendar period, the permittee may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of sections A.3.h.ii.(2).

(2) [40 CFR 63.162(g)(3)]
Except as provided in section A.3.h.ii.(1), where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required according to the schedule specified in (a) or (b) below, as appropriate.

(a) [40 CFR 63.162(g)(3)(i)]
Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(b) [40 CFR 63.162(g)(3)(ii)]
In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) [40 CFR 63.162(g)(4)]
In all instances where a provision of section A.3 requires completion of a

task during each of multiple successive periods, the permittee may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

3.i [40 CFR 63.162(h)]
In all cases where the provisions of A.3 require the permittee to repair leaks by a specified time after the leak is detected, it is a violation of section A.3 to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of section A.3. However, if the repairs are unsuccessful, a leak is detected and the permittee shall take further action as required by applicable provisions of section A.3.

3.j [40 CFR 63.163]
Pumps in Light Liquid Service

i. [40 CFR 63.163(a), (a)(1)]
The provisions of this section apply to each pump that is in light liquid service. The provisions are to be implemented on the dates specified in section A.1 in the phases specified below:

(1) [40 CFR 63.163(a)(1)(i)]
For each group of existing process units at existing sources:

(a) Phase I, beginning on the compliance date;

(b) Phase II, beginning no later than 1 year after the compliance date; and

(c) Phase III, beginning no later than 2 years after the compliance date.

(2) [40 CFR 63.163(a)(1)(ii)]
For new sources:

(a) After initial start-up, comply with the Phase II requirements; and

(b) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

ii. [40 CFR 63.163(b)(1)]
The permittee shall monitor each pump monthly to detect leaks by the method specified in A.3.za.ii and shall comply with the requirements of sections A.3.j.i through A.3.j.vi, except as provided in sections A.3.j.vii through A.3.j.xi.

(1) [40 CFR 63.163(b)(2)]

The instrument reading, as determined by the method as specified in A.3.za.ii, that defines a leak in each phase of the standard is:

(a) For Phase I, and instrument reading of 10,000 parts per million or greater.

(b) For Phase II, an instrument reading of 5,000 parts per million or greater.

(c) For Phase III, an instrument reading of:

(i) 5,000 parts per million or greater for pumps handling polymerizing monomers; and

(ii) 1,000 parts per million or greater for all other pumps.

(2) [40 CFR 63.163(b)(3)]
Each calendar week the permittee shall visually inspect each pump for indications of liquids dripping from the pump seal. If any indications of liquid dripping from the seal are present then a leak is detected.

iii. [40 CFR 63.163(c), (c)(1), (c)(2), & (c)(3)]
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 below or in section A.3.r. 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: tightening of packing gland nuts; and ensuring that the seal flush is operating at design pressure and temperature. For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.

iv. [40 CFR 63.163(d)(1)]
In accordance with the HON Implementation Plan, the permittee has elected to calculate pumps on a process unit basis.

v. [40 CFR 63.163(d)(2)]
The permittee shall implement a quality improvement program if the number of pumps which leak, as calculated on a 6-month rolling average, are the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit.

vi. [40 CFR 63.163(d)(3)]
The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.

[40 CFR 63.163(d)(4)]
Percent leaking pumps shall be determined by the following equation:
%PL = ((PL-PS)/(PT-PS))x100
where:
%PL = Percent leaking pumps
PL = Number of pumps found leaking as determined through monthly monitoring as required in A.3.j.i.
PT = Total pumps in organic HAP service, including those meeting the criteria in A.3.j.viii and A.3.j.viii.
PS = Number of pumps leaking within 1 month of start-up during the current monitoring period.

vii. [40 CFR 63.163(e)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of section A.3, provided the requirements of A.3.j.vii.(1) through A.3.j.vii.(6) are met.

(1) [40 CFR 63.163(e)(1)]
Each dual mechanical seal system is either:

(a) Operated with the barrier fluid at a pressure that is at all times greater than the pump 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 A.3.s; or

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

(2) [40 CFR 63.163(e)(2)]
The barrier fluid is not in light liquid service.

(3) [40 CFR 63.163(e)(3)]
Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) [40 CFR 63.163(e)(4), (e)(4)(i), & (e)(4)(ii)]
Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be

monitored as specified in section A.3.za.ii to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.

(5) [40 CFR 63.163(e)(5)]
Each sensor as described in A.3.j.vii.(3) is observed daily or is equipped with an alarm.

(6) [40 CFR 63.163(e)(6)(i), (e)(6)(ii), (e)(6)(iii), & (e)(6)(iv)]
The permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. If indications of liquids dripping from the pump seal exceed the criteria established by the permittee, or if, based on the criteria established by the permittee, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. 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.3.r. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

viii. [40 CFR 63.163(f)]
Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of A.3.j.i, A.3.j.ii, and A.3.j.iii.

ix. [40 CFR 63.163(g)]
Any pump 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.3.s is exempt from the requirements of A.3.j.ii through A.3.j.vii.

x. [40 CFR 63.163(i)]
If more than 90 percent of the pumps at a process unit meet the criteria in either A.3.j.vii or A.3.j.viii, the process unit is exempt from the requirements of A.3.j.iv through A.3.j.vi.

xi. [40 CFR 63.163(j)]
Any pump that is designated, as described in A.3.zb.ii.(7), as an unsafe-to-monitor pump is exempt from the requirements of A.3.j.ii through A.3.j.vii if:

(1) [40 CFR 63.163(j)(1)]

the permittee determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with A.3.j.ii through A.3.j.vii; and

(2) [40 CFR 63.163(j)(2)]
the permittee has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

3.k [40 CFR 63.164]
The permittee has no compressors in gas/vapor service or light liquid service at the time of permit issuance.

3.l [40 CFR 63.165]
Pressure relief devices in gas/vapor service

i. [40 CFR 63.165(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 parts per million above background, as measured by the method specified in A.3.za.iii except as provided in A.3.l.ii.

ii. [40 CFR 63.165(b)(1) & (b)(2)]
After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in A.3.r. 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 parts per million above background, as measured by the method specified in A.3.za.iii.

iii. [40 CFR 63.165(c)]
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 A.3.s of this permit is exempt from the requirements of A.3.l.i and A.3.l.ii.

iv. [40 CFR 63.165(d)(1) & (d)(2)]
Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of A.3.l.i and A.3.l.ii, provided that after each pressure release, the rupture disk located upstream of the pressure relief device shall be replaced as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in A.3.r.

3.m [40 CFR 63.166]
Sampling connection systems

i. [40 CFR 63.166(a)]
The permittee shall equip each sampling connection system with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured.

ii. [40 CFR 63.166(b)]
Each closed-purge, closed-loop, or closed-vent system shall:

(1) [40 CFR 63.166(b)(1)]
return the purged process fluid directly to the process line; or

(2) [40 CFR 63.166(b)(2)]
collect and recycle the purged process fluid to a process; or

(3) [40 CFR 63.166(b)(3)]
be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of A.3.s. of this permit; or

(4) [40 CFR 63.166(b)(4)]
collect, store, and transport the purged process fluid to a system or facility identified below:

(a) a waste management unit which is subject to and operated in compliance with the provisions of A.2 applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of A.2.zc, the waste management unit need not be subject to, and operated in compliance with the requirements of A.2 applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.

(b) a treatment, storage, or disposal facility subject to regulation under 40 CFR Part 262, 264, 265, or 266; or

(c) a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261.

iii. [40 CFR 63.166(c)]
In-situ sampling systems and sampling systems without purges are exempt from the requirements of A.3.m.i and A.3.m.ii.

3.n [40 CFR 63.167]
The provisions of this section apply to open-ended valves or lines.

i. [40 CFR 63.167(a)(1) & (a)(2)]
Each open-ended valve or line shall be equipped with a cap, blind flange, plug,

or a second valve, except as provided in A.3.n.iv and A.3.n.v. 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.

ii. [40 CFR 63.167(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.

iii. [40 CFR 63.167(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.3.n.i at all other times.

iv. [40 CFR 63.167(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.3.n.i through A.3.n.iii.

v. [40 CFR 63.167(e)]
Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in A.3.n.i through A.3.n.iii are exempt from the requirements of A.3.n.i through A.3.n.iii.

3.o [40 CFR 63.168]
The provisions of this section apply to valves that are either in gas service or in light liquid service.

i. [40 CFR 63.168(a) & (a)(1)]
The provisions of this section apply to valves that are either in gas service or in light liquid service. The provisions are to be implemented on the dates set forth in section A.1 as specified in section A.3.o.i.(1) or A.3.o.i.(2).

(1) [40 CFR 63.168(a)(1)(i)]
For each group of existing process units at existing sources subject to the provisions of section A.1, the phases of the standard are:

(a) For Phase I, beginning on the compliance date;

(b) Phase II, beginning no later than 1 year after the compliance date; and

(c) Phase III, beginning no later than 2 years after the compliance date.

(2) [40 CFR 63.168(a)(1)(ii)]
For new sources subject to section A.1, the applicable phases of the standard are:

(a) After initial start-up, comply with the Phase II requirements; and

(b) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(3) [40 CFR 63.168(a)(3)]
The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of A.3.za.ii.(6).

ii. [40 CFR 63.168(b)]
The permittee of a source subject to A.3 shall monitor all valves, except as provided in A.3.o.vii and A.3.o.viii, at the intervals specified in A.3.o.iii and shall comply with all other provisions of section A.3, except as provided in A.3.r.

(1) [40 CFR 63.168(b)(1)]
The valves shall be monitored to detect leaks by the method specified in A.3.za.ii.

(2) [40 CFR 63.168(b)(2)]
The instrument reading that defines a leak is an instrument reading of 500 parts per million or greater.

(3) [40 CFR 63.168(b)(3)]
The instrument reading that defines a leak in each phase of the standard is:

(a) For Phase I, an instrument reading of 10,000 parts per million or greater.

(b) For Phase II, an instrument reading of 500 parts per million or greater.

(c) For Phase III, an instrument reading of 500 parts per million or greater.

iii. [40 CFR 63.168(c) & (d)]
For new sources subject to A.3 each valve shall be monitored quarterly for the first four quarters after initial start-up. For existing sources and for new sources which have been in operation for greater than one year, the permittee shall monitor valves for leaks at the intervals specified in (1) through (4) below:

(1) at process units with 2 percent or greater leaking valves, calculated according to A.3.o.iv, the permittee shall monitor each valve once per month;

(2) at process units with less than 2 percent leaking valves, calculated according to A.3.o.iv, the permittee shall monitor each valve once each quarter;

(3) at process units with less than 1 percent leaking valves, calculated according to A.3.o.iv, the permittee may elect to monitor each valve once every 2 quarters;

(4) at process units with less than 0.5 percent leaking valves, calculated according to A.3.o.iv, the permittee may elect to monitor each valve once every 4 quarters.

iv. [40 CFR 63.168(e)(1)]
Percent leaking valves at a process unit shall be determined by the following equation:
%VL = (VL/(VT+VC))x100
where:
%VL= Percent leaking valves as determined through periodic monitoring required in A.3.o.i through A.3.o.iii.
VL = Number of valves found leaking excluding non-repairables as provided in A.3.o.iv.(2).
VT = Total valves monitored, in a monitoring period excluding valves monitored as required by A.3.o.v.
VC = Optional credit for removed valves=0.67 x net number (i.e., total removed-total added) of valves in organic HAP service removed from the process unit after the date set forth in A.1.h.iii for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then VC=0.

(1) [40 CFR 63.168(e)(2)]
For use in determining monitoring frequency, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.

(2) [40 CFR 63.168(e)(3)(i) & (e)(3)(ii)]
Non-repairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and non-repairable. 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 unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods. If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, 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.

v. [40 CFR 63.168(f)(1), (f)(2), & (f)(3)]
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.3.r. A

first attempt at repair shall be made no later than 5 calendar days after each leak is detected. When a leak has been repaired, the valve shall be monitored as specified in A.3.za.ii and A.3.za.iii at least once within the first 3 months after its repair.

(1) [40 CFR 63.168(f)(3)(i)]
The monitoring shall be conducted as specified in A.3.za.ii and A.3.za.iii, as appropriate, to determine whether the valve has resumed leaking.

(2) [40 CFR 63.168(f)(3)(ii)]
Periodic monitoring required by A.3.o.ii and A.3.o.iii may be used to satisfy the requirements of this section, if the timing of the monitoring period coincides with the time specified in this section. Alternatively, other monitoring may be performed to satisfy the requirements of this section, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this section.

(3) [40 CFR 63.168(f)(3)(iii)]
If a leak is detected by monitoring that is conducted pursuant to this section, the permittee shall follow the provisions of (a) and (b) below, to determine whether that valve must be counted as a leaking valve for purposes of A.3.o.iv.

(a) If the permittee elected to use periodic monitoring required by A.3.o.i through A.3.o.iii to satisfy the requirements of A.3.o.v, then the valve shall be counted as a leaking valve.

(b) If the permittee elected to use other monitoring, prior to the periodic monitoring required by A.3.o.i through A.3.o.iii, to satisfy the requirements of A.3.o.v, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

vi. [40 CFR 63.168(g), (g)(1) through (g)(4)]
First attempts at repair include, but are not limited to tightening of bonnet bolts, replacement of bonnet bolts, tightening of packing gland nuts, and injection of lubricant into lubricated packing.

vii. [40 CFR 63.168(h)]
Any valve that is designated, as described in A.3.zb.ii.(7)(a), as an unsafe-to-

monitor valve is exempt from the requirements of A.3.o.ii through A.3.o.v if:

(1) the permittee of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with A.3.o.i through A.3.o.iii; and

(2) the permittee of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

viii. [40 CFR 63.168(i)]
Any valve that is designated, as described in A.3.zb.ii.(7)(b), as a difficult-to-monitor valve is exempt from the requirements of A.3.o.ii through A.3.o.iii if:

(1) the permittee of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(2) the emissions unit within which the valve is located is an existing source or the permittee designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

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

3.p [40 CFR 63.169]
Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service

i. [40 CFR 63.169(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 A.3.za.ii 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.3.p.iii and A.3.p.iv, it is not necessary to monitor the system for leaks by the method specified in A.3.za.ii.

ii. [40 CFR 63.169(b)]
If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for pumps subject to the 1,000 ppm leak definition in A.3.j.i, or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.

iii. [40 CFR 63.169(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.3.r. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. For equipment identified in A.3.p.i that is not monitored by the method specified in A.3.za.ii, 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.

iv. [40 CFR 63.169(d)]
First attempts at repair include, but are not limited to, the practices described under A.3.j.iii and A.3.o.vi, for pumps and valves, respectively.

3.q [40 CFR 63.170, Table 2, and Table 3]
Each surge control vessel or bottoms receiver that is not routed back to the process and that meets a condition specified in A.3.q.i through A.3.q.iv below shall be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in A.3.s; or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.

i. surge control vessels and bottom receivers at existing sources with a capacity equal to or greater than 75 cubic meters but less than 151 cubic meters with a vapor pressure equal to or greater than 13.1 kilopascals,

ii. surge control vessels and bottom receivers at existing sources with a capacity equal to or greater than 151 cubic meters with a vapor pressure equal to or greater than 5.2 kilopascals,

iii. surge control vessels and bottom receivers at new sources with a capacity equal to or greater than 38 cubic meters but less than 151 cubic meters with a vapor pressure equal to or greater than 13.1 kilopascals, or

iv. surge control vessels and bottom receivers at new sources with a capacity equal to or greater than 151 cubic meters with a vapor pressure equal to or greater than 0.7 kilopascals.

3.r [40 CFR 63.171]
Delay of repair

i. [40 CFR 63.171(a)]
Delay of repair of equipment for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.

ii. [40 CFR 63.171(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.

iii. [40 CFR 63.171(c)]
Delay of repair for valves, connectors, and agitators is also allowed if:

(1) 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

(2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with A.3.s.

iv. [40 CFR 63.171(d)]
Delay of repair for pumps is also allowed if:

(1) repair requires replacing the existing seal design with a dual mechanical seal system that meets the requirements of A.3.j.vii, a pump that meets the requirements of A.3.j.viii, or a closed-vent system and control device that meets the requirements of A.3.j.ix; and

(2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

v. [40 CFR 63.171(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.

3.s [40 CFR 63.172]
Closed-vent systems and control devices

i. [40 CFR 63.172(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of section A.3 shall comply with the provisions of A.3.s.

ii. [40 CFR 63.172(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 parts per million by volume, whichever is less stringent.

iii. [40 CFR 63.172(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 parts per million 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.

iv. [40 CFR 63.172(e)]
The permittee shall monitor the control devices to ensure that they are operated and maintained in conformance with their design for control devices that are used to comply with the provisions of section A.3. The intent of this provision is to ensure proper operation and maintenance of the control device.

v. (1) [40 CFR 63.172(f)]
Except as provided in A.3.s.ix and A.3.s.x, each closed-vent system shall be inspected according to the procedures and schedule specified in (a) or (b) below:

(a) if the closed-vent system is constructed of hard-piping, the permittee shall conduct an initial inspection according to the procedures specified in A.3.za.ii and conduct annual visual inspections for visible, audible, or olfactory indications of leaks; or

(b) if the vapor collection system or closed-vent system is constructed of duct work, the permittee shall conduct an initial inspection and annual inspections according to the procedures specified in A.3.za.ii.

(2) [40 CFR 63.172(g)]
Each closed-vent system shall be inspected according to the procedures in section A.3.za.ii.

vi. [40 CFR 63.172(h), (h)(1), & (h)(2)]
Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in A.3.s.vii.

vii. [40 CFR 63.172(i)]
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.

viii. [40 CFR 63.172(j)]
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 (1) or (2) below, except as provided in (3) below.

(1) 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 A.2.h. The flow indicator shall be installed at the entrance to any bypass line.

(2) 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.

(3) 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 section.

ix. [40 CFR 63.172(k)]
Any parts of the closed-vent system that are designated, as described in A.3.zb.ii.(7)(a), as unsafe to inspect are exempt from the inspection requirements of A.3.s.v if:

(1) the permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with A.3.s.v; and

(2) the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually.

x. [40 CFR 63.172(l), (l)(1), & (l)(2)]
Any parts of the closed-vent system that are designated, as described in A.3.zb.ii.(7)(a), as difficult to inspect are exempt from the inspection requirements of A.3.s.v if the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface and the permittee has a written plan that requires inspection of the equipment at least once every 5 years.

xi. [40 CFR 63.172(m)]
Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of A.3, such system or control device shall be operating.

xii. [40 CFR 63.172(n)]
The permittee of any control device subject to A.3 that is also subject to monitoring, record keeping, and reporting requirements in 40 CFR Part 264, Subpart BB, or is subject to monitoring and record keeping requirements in 40 CFR Part 265, Subpart BB, may elect to comply either with the monitoring, record keeping, and reporting requirements of A.3, or with the monitoring, record

keeping, and reporting requirements in 40 CFR Parts 264 and/or 265, which shall constitute compliance with the monitoring, record keeping and reporting requirements of A.3. The permittee shall identify which option has been chosen, in the next Periodic Report required by A.3.zc.iv.

3.t [40 CFR 63.173]
The permittee has no agitators in gas/vapor service or light liquid service at the time of permit issuance.

3.u [40 CFR 63.174]
Connectors in gas/vapor service and in light liquid service

i. [40 CFR 63.174(a), (a)(1), & (a)(2)]
The permittee shall monitor all connectors in gas/vapor and light liquid service, except as provided in A.3.u.vi through A.3.u.viii, at the intervals specified in A.3.u.ii. The connectors shall be monitored to detect leaks by the method specified in A.3.za.ii. If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.

ii. [40 CFR 63.174(b)]
The permittee shall monitor for leaks at the intervals specified in either (1) or (2) below:

(1) [40 CFR 63.174(b)(2)]
For new sources, within the first 12 months after initial start-up, the permittee shall monitor all connectors as an initial survey, except as provided in A.3.u.vi through A.3.u.viii.

(2) [40 CFR 63.174(b)(3)]
After conducting the initial survey required in A.3.u.ii.(1), the permittee shall perform all subsequent monitoring of connectors at the frequencies specified in (a) through (e) below, except as provided in A.3.u.iii.(2):

(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.

(b) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. The permittee may comply with this section by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.

(c) If the permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors

from the 2-year monitoring period, the permittee may monitor the connectors one time every 4 years. The permittee may comply with the requirements of this section by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.

(d) If a process unit complying with the requirements of A.3.u.ii using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the permittee shall increase the monitoring frequency to one time every 2 years. The permittee may comply with the requirements of this section by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The permittee may again elect to use the provisions of A.3.u.ii.(3)(c) when the percent leaking connectors decreases to less than 0.5 percent.

(e) If a process unit complying with requirements of A.3.u.ii.(3)(c) using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the permittee shall increase the monitoring frequency to one time per year. The permittee may again elect to use the provisions of A.3.u.ii.(3)(c) when the percent leaking connectors decreases to less than 0.5 percent.

(3) [40 CFR 63.174(b)(4)]
The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of A.3.za.ii.(6).

iii. For each connector that has been opened or has otherwise had the seal broken:

(1) [40 CFR 63.174(c)(1)(i)]
Except as provided in A.3.u.iii.(2) below, 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 HAPs service. If the monitoring detects a leak, it shall be repaired according to the provisions of A.3.u.iv, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of A.3.u.ix.

(2) [40 CFR 63.174(c)(1)(ii)]

As an alternative to the requirements in A.3.u.iii.(1), 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 nonrepairable connectors for the purposes of A.3.u.viii.(2). The permittee shall calculate the percent leaking connectors for the monitoring periods described in A.3.u.ii, by setting the nonrepairable component, CAN, in the equation in A.3.u.v.iii.(2) to zero for all monitoring periods.

(3) [40 CFR 63.174(c)(iii)]
The permittee may switch alternatives described in A.3.u.iii.(1) and A.3.u.iii.(2) at the end of the current monitoring period he is in, provided that it is reported as required in A.3.zc 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.

(4) [40 CFR 63.174(c)(2)]
As an alternative to the requirements of A.3.u.ii.(2), each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before April 22, 1994 may:

(a) [40 CFR 63.174(c)(2)(i)]
comply with the requirements of A.3.p, and

(b) [40 CFR 63.174(c)(2)(ii)]
be monitored for leaks within the first 3 months after being returned to organic HAPs service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of A.3.u.iv.

(c) [40 CFR 63.174(c)(2)(iv)]
The provisions of section A.3.u.iii.(4) apply to screwed connectors installed before 12/31/92.

iv. [40 CFR 63.174(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 A.3.u.vi and in A.3.r. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

v. [40 CFR 63.174(f)]
Any connector that is designated, as described in A.3.zb.ii.(7)(a), as an unsafe-to-monitor connector is exempt from the requirements of A.3.u.i if:

(1) the permittee determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with A.3.u.i through A.3.u.iv; and

(2) the permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.

vi. [40 CFR 63.174(g)]
Any connector that is designated, as described in A.3.zc.ii.(7)(b), as an unsafe-to-repair connector is exempt from the requirements of A.3.u.i and A.3.u.iv if:

(1) the permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with A.3.u.iv; and

(2) the connector will be repaired before the end of the next scheduled process unit shutdown.

vii. 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.3.u.i and A.3.u.iii and from the record keeping and reporting requirements of A.3.zb and A.3.zc.

(1) [40 CFR 63.174(h)(1)]
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.

(2) [40 CFR 63.174(h)(2) & (h)(3)]
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 A.3.r and A.3.u.vi. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

viii. [40 CFR 63.174(i)]
For use in determining the monitoring frequency, as specified in A.3.u.ii, the percent leaking connectors shall be calculated as specified in (1) and (2) below:

(1) [40 CFR 63.174(i)(1)]
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.3.u.i and A.3.u.ii.
CL = Number of connectors measured at 500 parts per million or greater, by the method specified in A.3.za.ii.
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 HAPs 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.

(2) [40 CFR 63.174(i)(2)]
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.3.u.i and A.3.u.ii.
CL = Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in A.3.za.ii.
CAN = Number of allowable nonrepairable connectors, as determined by monitoring required in A.3.u.ii.(2) and A.3.u.iii, 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 HAPs 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.

ix. [40 CFR 63.174(j)]
Optional credit for removed connectors. If the permittee eliminates a connector subject to monitoring under A.3.u.ii, the permittee may receive credit for elimination of the connector, as described in A.3.u.viii, provided the

requirements in (1) through (4) below are met.

(1) The connector was welded after 12/31/92.

(2) The integrity of the weld is demonstrated by monitoring it according to the procedures in A.3.za.ii or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.

(3) Welds created after 12/31/92 but before 4/22/94 are monitored or tested by 3 months after the compliance date specified in the applicable subpart.

(4) Welds created after 4/22/94 are monitored or tested within 3 months after being welded.

(5) 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 A.3.

3.v [40 CFR 63.175]
The permittee did not elect to comply with the alternative quality improvement programs for valves.

3.w [40 CFR 63.176]
Quality Improvement Plan for Pumps

i. [40 CFR 63.176(a)]
In Phase III, if, on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the permittee shall comply with the requirements of this section as specified below:

(1) Pumps that are in polymerizing monomer service shall comply with all requirements except for those specified in section A.3.v.iv.(8).

(2) Pumps that are not in polymerizing monomer service shall comply with all requirements of this section.

ii. [40 CFR 63.176(b)]
The permittee shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10 percent of the pumps or

three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the permittee shall comply with the requirements in A.3.j.

iii. [40 CFR 63.176(c)]
If in a subsequent monitoring period, the process unit (or plant site) has greater than 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the permittee shall resume the quality improvement program starting at performance trials.

iv. [40 CFR 63.176(d)]
The quality improvement program shall include the following:

(1) [40 CFR 63.176(d)(1)]
The permittee shall comply with the requirements in A.3.j.

(2) [40 CFR 63.176(d)(2)]
The permittee shall collect the following data, and maintain records as required in A.3.zb.viii.(1), for each pump in each process unit (or plant site) subject to the quality improvement program. The data shall be collected and the records shall be maintained on a process unit basis.

(a) Pump type (e.g., piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g., external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.

(b) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.

(c) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.

(d) If a leak is detected, the repair methods used and the instrument readings after repair.

(e) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The permittee shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.

(4) The permittee shall inspect all pumps or pump seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5) (a) The permittee shall analyze the data collected to comply with the requirements of A.3.w.iv.(2) to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(b) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10 percent for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 10 percent leaking pumps in the process unit.

(c) The analysis shall include consideration of:

(i) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks;

(ii) Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services; and

(iii) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(d) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units.

(e) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in paragraph A.3.w.iv.(6)(e). The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.

(a) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in A.3.zb.viii.(3)(b).

(b) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.

(c) The trial evaluation program shall specify and include documentation of:

(i) The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability;

(ii) The frequency of monitoring or inspection of the equipment;

(iii) The range of operating conditions over which the component will be evaluated; and

(iv) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.

(d) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the permittee shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (d)(6)(vi) of this section. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(e) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.

(f) The permittee who has conducted performance trials on all alternative superior emission performance technologies suitable for the required applications in the process unit may stop conducting

performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The permittee shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) The permittee shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under A.3.w.iv.(5), if applicable, the findings of the trial evaluation required in A.3.w.iv.(6), and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.

(a) The quality assurance program shall:

(i) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(ii) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal;

(iii) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the permittee of the plant site or process unit or by a designated representative; and

(iv) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized.

(b) The quality assurance program shall be established no later than

the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.

(8) Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the permittee shall replace, as described in A.3.w.iv.(8)(a) and A.3.w.iv.(8)(b), the pumps or pump seals that are not superior emission performance technology with pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.

(a) Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of A.3.j are pumps determined to be superior performance technology.

(b) The permittee may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.

(c) The pumps shall be maintained as specified in the quality assurance program.

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3.x [40 CFR 63.177]
The permittee has not applied to use an alternative means of emission limitation under 40 CFR 63.6(g), Subpart A.

3.y [40 CFR 63.178]
The permittee does not operate a batch process subject to the provisions of section A.3.

3.z [40 CFR 63.179]
The permittee does not operate an enclosed-vented process unit subject to the provisions of section A.3.

3.za [40 CFR 63.180]
Test methods and procedures

i. [40 CFR 63.180(a)]
The permittee shall comply with the test methods and procedures requirements provided in A.3.za.

ii. [40 CFR 63.180(b)]
Monitoring, as required under A.3, shall comply with the requirements of A.3.za.ii.(1) through A.3.za.ii.(6) below.

(1) Monitoring shall comply with Method 21 of 40 CFR Part 60, Appendix A.

(2) [40 CFR 63.180(b)(2)(i) & (b)(2)(ii)]
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. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis.

(3) [40 CFR 63.180(b)(3)]

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.

(4) [40 CFR 63.180(b)(4)]
Calibration gases shall be:

(a) [40 CFR 63.180(b)(4)(i)]
zero air (less than 10 parts per million of hydrocarbon in air); and

(b) [40 CFR 63.180(b)(4)(ii)]
mixtures of methane in air at the concentrations specified in (i) and (ii) below. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in A.3.za.ii.(2). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(i) [40 CFR 63.180(b)(4)(ii)(B)]
For the first year of operation of a new source, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million for agitators, 5,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in A.3.za.ii.(4)(b).

(ii) [40 CFR 63.180(b)(4)(ii)(C)]
For all other sources, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps in food/medical service; 5,000 parts per million for pumps in polymerizing monomer service; 1,000 parts per million for all other pumps; and 500 parts per million for all other equipment, except as provided in A.3.za.ii.(4)(b).

(c) [40 CFR 63.180(b)(4)(iii)]
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 parts

per million. 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 parts per million 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 parts per million. 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.

(5) [40 CFR 63.180(b)(5)]
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.

(6) [40 CFR 63.180(b)(6)]
Monitoring data that do not meet the criteria specified in A.3.za.ii.(1) through A.3.za.ii.(5) may be used to qualify for less frequent monitoring under the provisions in A.3.o.iii.(2) and A.3.o.iii.(3) or A.3.u.ii.(2)(b) or A.3.u.ii.(2)(c) provided the data meet the conditions specified in A.3.za.ii.(6)(a) and A.3.za.ii.(6)(b) below:

(a) [40 CFR 63.180(b)(6)(i)]
the data were obtained before April 22, 1994; and

(b) [40 CFR 63.180(b)(6)(ii)]
the departures from the criteria specified in A.3.za.ii.(1) and A.3.za.ii.(2) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21, 40 CFR Part 60, Appendix A instead of A.3.za.ii.(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in these terms and conditions. Failure to use a calibrated instrument is not considered a minor departure.

iii. [40 CFR 63.180(c)]
When equipment is monitored for compliance as required in A.3.l.i and A.3.s.v or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by these terms and conditions, 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.3.za.ii.(1) through A.3.za.ii.(4). 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.3.za.iii.(1) through A.3.za.iii.(4).

(1) [40 CFR 63.180(c)(1)]
The requirements of A.3.za.ii.(1) through A.3.za.ii.(4) shall apply.

(2) [40 CFR 63.180(c)(2)]
The background level shall be determined, using the same procedures

that will be used to determine whether the equipment is leaking.

(3) [40 CFR 63.180(c)(3)]
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.

(4) [40 CFR 63.180(c)(4)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.

iv. [40 CFR 63.180(d)(1) & (d)(4)]
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. Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

v. [40 CFR 63.180(d)(2)(i) & (d)(2)(ii)]
The permittee may use good engineering judgment rather than the procedures in A.3.za.iv to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the USEPA Region V-Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in A.3.za.iv shall be used to resolve the disagreement. 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.

ii [40 CFR 63.180(d)(3)]
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.3.za.iv, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

3.zb [40 CFR 63.181]
Record keeping requirements

i. [40 CFR 63.181(a)]
The permittee may comply with the record keeping requirements for all process units which are subject to A.3 in one record keeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring) for each type of equipment. All records and information required by A.3.zb 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.

ii. [40 CFR 63.181(b)]
The following information pertaining to all equipment in each emissions unit subject to the requirements in section A.3 shall be recorded:

(1) [40 CFR 63.181(b)(1)(i), (b)(1)(ii), & (b)(1)(iii)]
A list of identification numbers for equipment (except connectors exempt from monitoring and record keeping identified in A.3.u and instrumentation systems) subject to the requirements of A.3. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of A.3 are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by A.3.u.ii. A schedule by emission unit for monitoring connectors subject to the provisions of A.3.u.i and valves subject to the provisions of A.3.o.iii. Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of A.3 may be identified on a plant site plan, in log entries, or by other appropriate methods.

(2) [40 CFR 63.181(b)(2)(i), (b)(2)(ii), & (b)(2)(iii)]
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.3.j.ix or A.3.l.ii. A list of identification of surge control vessels or bottoms receivers subject to A.3 that the permittee elects to equip with a closed-vent system and control device, under the provisions of A.3.q. Identification of surge control vessels or bottoms receivers subject to the provisions of A.3 that the permittee elects to equip with a closed-vent system and control device, under the provisions of A.3.q.

(3) [40 CFR 63.181(b)(3)(i) & (b)(3)(ii)]
A list of identification numbers for pressure relief devices subject to the provisions in A.3.l.i. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of A.3.l.iv.

(4) [40 CFR 63.181(b)(4)]
Identification of instrumentation systems subject to the provisions of A.3. Individual components in an instrumentation system need not be identified.

(5) [40 CFR 63.181(b)(5)]
Identification of screwed connectors subject to A.3.u.iii.(4). Identification can be by area or grouping as long as the total number within each group or area is recorded.

(6) [40 CFR 63.181(b)(6), (b)(6)(i), & (b)(6)(ii)]
For each dual mechanical seal system, the permittee shall record the design criteria required in A.3.j.vii.(6) and an explanation of the design criteria and any changes to these criteria and the reasons for the changes.

(7) [40 CFR 63.181(b)(7)]
The following information pertaining to all pumps subject to the provisions of A.3.j.ix, valves subject to A.3.o.vii and A.3.o.viii, and connectors subject to A.3.u.v through A.3.u.vii shall be recorded:

(a) [40 CFR 63.181(b)(7)(i)]
identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment;

(b) [40 CFR 63.181(b)(7)(ii)]
a list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment; and

(c) [40 CFR 63.181(b)(7)(iii)]
a list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8) [40 CFR 63.181(b)(8)(i) & (b)(8)(ii)]
A list of valves removed from and added to the process unit, as described in A.3.o.iv, if the net credits for removed valves is expected to be used. And a list of connectors removed from and added to the process unit, as described in A.3.u.viii.(1), and documentation of the integrity of the weld for any removed connectors, as required in A.3.u.ix. This is not required unless the net credits for removed connectors is expected to be used.

iii. [40 CFR 63.181(c)]
For visual inspections of equipment subject to A.3 (e.g., A.3.j.ii. A.3.j.vii.(4)), the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in A.3.zb.iv.(1) for leaking equipment identified in this inspection. These records shall be retained for 2 years.

iv. (1) [40 CFR 63.181(d)]
When each leak is detected as specified in A.3.j, A.3.o, A.3.p, and A.3.s through A.3.u, the information specified in A.3.zb.iv.(1)(a) through A.3.zb.iv.(1)(h) shall be recorded and kept for 2 years.

(a) [40 CFR 63.181(d)(1)]
The instrument and the equipment identification number and the operator name, initials, or identification number.

(b) [40 CFR 63.181(d)(2)]
The date the leak was detected and the date of first attempt to repair the leak.

(c) [40 CFR 63.181(d)(3)]
The date of successful repair of the leak.

(d) [40 CFR 63.181(d)(4)]
Maximum instrument reading measured by Method 21 of 40 CFR Part 60, Appendix A after it is successfully repaired or determined to be nonrepairable.

(e) [40 CFR 63.181(d)(5), (d)(5)(i), & (d)(5)(ii)]
"Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. 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 for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(f) [40 CFR 63.181(d)(6)]
Dates of process unit shutdowns that occur while the equipment is unrepaired.

(g) [40 CFR 63.181(d)(7)(i) & (d)(7)(ii)]

Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in A.3.u.ii, as described in A.3.u.iii.(1) through A.3.u.iii.(3), unless the permittee elects to comply with the provisions of A.3.u.iii.(2). The date and results of monitoring as required in A.3.u.iii. If identification of connectors that have been opened or otherwise had the seal broken is made by location, then all connectors within the designated location shall be monitored.

(h) [40 CFR 63.181(d)(9)]
Copies of the Periodic Reports as specified in A.3.zc.iii, if records are not maintained on a computerized database capable of generating summary reports from the records.

(2) [40 CFR 63.181(f)]
The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in A.3.l.i and A.3.l.ii. The results shall include: the background level measured during each compliance test; and the maximum instrument reading measured at each piece of equipment during each compliance test.

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

(1) [40 CFR 63.181(g)(1)(i), (g)(1)(ii), & (g)(1)(iv)]
Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams; the dates and descriptions of any changes in the design specifications; and a description of the parameter or parameters monitored, as required in A.3.s.iv, 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.

(2) [40 CFR 63.181(g)(2)(i), (g)(2)(ii), & (g)(2)(iii)]
Records of operation of closed-vent systems and control devices including the dates and durations when the closed-vent systems and control devices required in A.3 are not operated as designed as indicated by the monitored parameters; the dates and durations during which the monitoring system or monitoring device is inoperative; and the dates and durations of start-ups and shutdowns of control devices required in A.3.

vi. [40 CFR 63.181(i)(1), (i)(2), & (i)(3)]
The permittee of equipment in heavy liquid service shall retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service. When requested by the USEPA Region V-Administrator, or the Ohio EPA, Central District Office,, the permittee shall demonstrate that the piece of equipment or process is in heavy liquid service. A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid 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.

vii. [40 CFR 63.181(j)]
Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to A.3.

viii. [40 CFR 63.181(h)]
The permittee of a process unit subject to the requirements of A.3.w shall maintain the records specified in (1) through (6) below for the period of the quality improvement program for the process unit.

(1) [40 CFR 63.181(h)(3)]
The permittee shall maintain the following records when subject to the requirements of the pump quality improvement program as specified in A.3.w:

(a) All data required in A.3.w.iv.(2).

(b) The rolling average percent leaking pumps.

(c) Documentation of all inspections conducted under the requirements of A.3.w.iv.(4), and any recommendations for design or specification changes to reduce leak frequency.

(d) The beginning and ending dates while meeting the requirements of A.3.w.iv.

(2) [40 CFR 63.181(h)(4)]
If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(3) [40 CFR 63.181(h)(5)]
Records of all analyses required in A.3.w.iv. The records will include the following:

(a) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(b) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(c) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under A.3.w.iv.(6)(c).

(d) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(4) [40 CFR 63.181(h)(6)]
All records documenting the quality assurance program for valves or pumps as specified in A.3.w.iv.(7).

(5) [40 CFR 63.181(h)(7)]
Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in A.3.w.iv.(7).

(6) [40 CFR 63.181(h)(8)]
Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in A.3.w.iv.(8).

3.zc [40 CFR 63.182]
Reporting requirements

i. [40 CFR 63.182(a)]
The permittee shall submit the reports listed in A.3.zc.i.(1) through A.3.zc.i.(3).

(1) An Initial Notification described in A.3.zc.ii;

(2) A NCS described in A.3.zc.iii; and

(3) Periodic Reports described in A.3.zc.iv.

ii. [40 CFR 63.182(b)]
The permittee shall submit a written Initial Notification to the USEPA Region V-Administrator, with a copy to the Ohio EPA, Central District Office,, containing the information described in A.3.zc.ii.(1), according to the schedule in A.3.zc.ii.(2). The Initial Notification provisions in 40 CFR Part 63.9(b)(1) through (b)(3) of Subpart A shall not apply.

(1) [40 CFR 63.182(b)(1)]
The Initial Notification shall include the following information:

(a) The name and address of the permittee;

(b) The address (physical location) of the affected source;

(c) An identification of the chemical manufacturing processes subject to A.3; and

(d) A statement of whether the source can achieve compliance by the applicable compliance date specified in section A.1.

(2) [40 CFR 63.182(b)(2)]
The Initial Notification shall be submitted according to the schedule in A.3.zc.ii.(2)(a) or A.3.zc.ii.(2)(b), as applicable.

(a) For an existing source, the Initial Notification shall be submitted within 120 days after 4/22/94.

(b) For a new source that has an initial start-up 90 days after 4/22/94 or later, the application for approval of construction or reconstruction required by 40 CFR 63.5(d) of Subpart A shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after 4/22/94).

iii. [40 CFR 63.182(c)]
The permittee shall submit a NCS within 90 days after the compliance dates specified in A.1, except as provided in A.3.zc.iii.(2).

(1) [40 CFR 63.182(c)(1)]
The notification shall provide the information listed in A.3.zc.iii.(1)(a) through A.3.zc.iii.(1)(d) for each process unit subject to the requirements of A.3.j through A.3.u.

(a) Process unit identification;

(b) Number of each equipment type (e.g., valves, pumps) 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''); and

(d) Planned schedule for each phase of the requirements in A.3.j and A.3.o.

(2) [40 CFR 63.182(c)(4)]
For existing sources subject to section A.1, the NCS shall be submitted for the group of process units with the earliest compliance date specified

in section A.1, by no later than 90 days after the compliance date for that group. The NCS for each subsequent group shall be submitted as part of the first Periodic Report that is due not less than 90 days after the compliance date for that group.

iv. [40 CFR 63.182(d)]
The permittee shall submit Periodic Reports.

(1) [40 CFR 63.182(d)(1)]
A report containing the information in A.3.zc.iv.(2) and A.3.zc.iv.(3) shall be submitted semiannually starting 6 months after the NCS, as required in A.3.zc.iii. The first Periodic Report shall cover the first 6 months after the compliance date specified in A.1. Each subsequent Periodic Report shall cover the 6 month period following the preceding period.

(2) [40 CFR 63.182(d)(2)]
For each process unit complying with the provisions of A.3.j through A.3.u, the summary information listed in A.3.zc.iv.(2)(a) through A.3.zc.iv.(2)(j) for each monitoring period during the 6-month period.

(a) The number of valves for which leaks were detected as described in A.3.o.ii, 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.3.o.v, identifying the number of those that are determined non-repairable;

(c) The number of pumps for which leaks were detected as described in A.3.j.ii, the percent leakers, and the total number of pumps monitored;

(d) The number of pumps for which leaks were not repaired as required in A.3.j.iii;

(e) The number of connectors for which leaks were detected as described in A.3.u.i, the percent of connectors leaking, and the total number of connectors monitored;

(f) The number of connectors for which leaks were not repaired as required in A.3.u.iv, identifying the number of those that are determined non-repairable;

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

(h) The results of all monitoring to show compliance with A.3.l.i and A.3.s.v conducted within the semiannual reporting period;

(i) If applicable, the initiation of a monthly monitoring program under A.3.o.iii.(1);

(j) If applicable, notification of a change in connector monitoring alternatives as described in A.3.u.iii.(3).

(3) [40 CFR 63.182(d)(4)]
The information listed in A.3.zc.iii for the NCS for process units with later compliance dates. Any revisions to items reported in earlier NCS, if the method of compliance has changed since the last report.

4. Subpart EEEE—National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

4.a [§ 63.2338] What parts of my plant does this subpart cover?

(i) The equipment listed in paragraph (1) of this section and used in the identified operations is excluded from the affected source.

(1) Storage tanks, transfer racks, and equipment leak components that are part of an affected source under another 40 CFR part 63 national emission standards for hazardous air pollutants regulation (NESHAP).

5. Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

5.a [§ 63.7485] Am I subject to this subpart?
You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP as defined in §63.2 or §63.761 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in §63.7491.

5.b [§ 63.7490] What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraph (a)(2) of this section.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

5.c [§ 63.7495] When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

5.d [§ 63.7495] When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

Emission Limits and Work Practice Standards

5.e [§ 63.7500] What emission limits, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under §63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

General Compliance Requirements

5.f [§ 63.7505] What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to §63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.

(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) If you have an applicable emission limit or work practice standard, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

Testing, Fuel Analyses, and Initial Compliance Requirements

5.g [§ 63.7510] What are my initial compliance requirements and by what date must I conduct them?

(g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

5.h [§ 63.7525] What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your

boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

5.i [§ 63.7530] How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by conducting initial performance tests and establishing operating limits, as applicable, according to §63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart.

Continuous Compliance Requirements

5.j [§ 63.7535] How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control

system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

5.k [§ 63.7540] How do I demonstrate continuous compliance with the emission limits and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to §63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) During periods of startup, shutdown, and malfunction, you must operate in

accordance with the SSMP as required in §63.7505(e).

(d) Consistent with §§63.6(e)and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

Notification, Reports, and Records

5.l [§ 63.7545] What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(c) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

5.m [§ 63.7550] What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a

description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of §63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of §63.7530, the maximum TSM input operating limit using Equation 6 of §63.7530, or the maximum mercury input operating limit using Equation 7 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this

subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (*i.e.*, what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process

problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

5.n [§ 63.7555] What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel

input, using Equation 6 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

5.o [§ 63.7560] In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

Other Requirements and Information

5.p [§ 63.7565] What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

5.q [§ 63.7575] What definitions apply to this subpart?
Terms used in this subpart are defined in the CAA, in §63.2 (the General Provisions), and in this section as follows:

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.
Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–03a, "Standard Specification for Liquid Petroleum Gases" (incorporated by reference, see §63.14(b)).

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.
Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.
Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

6. [Subpart Db] —Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

6.a [§ 60.40b] Applicability and delegation of authority.

(i) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

6.b [§ 60.41b] Definitions.
As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

High heat release rate means a heat release rate greater than 730,000 J/sec-m ^{3} (70,000 Btu/hour-ft $^{3.}$

Low heat release rate means a heat release rate of 730,000 J/sec-m ^{3} (70,000 Btu/hour-ft ^{3}) or less.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

6.c

[§ 60.44b] Standard for nitrogen oxides.

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following emission limits:

Fuel/Steam generating unit type	Nitrogen oxide emission limits ng/J (lb/million Btu) (expressed as NO2) heat input
(1) Natural gas and distillate oil, except (4):	
(i) Low heat release rate.....	43 (0.10)
(ii) High heat release rate.....	86 (0.20)

h) For purposes of paragraph (i) of this section, the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a Federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil and a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j) (1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 million Btu/hour) or less, are not subject to the nitrogen oxides emission limits under this section.

(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following limits:

(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J_l (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$E_n = [(0.10 * H_{go}) + (0.20 * H_r)]/(H_{go} + H_r)$

Where:

E_n is the NO_X emission limit, (lb/million Btu),

H_{go} is the heat input from combustion of natural gas or distillate oil, and

H_r is the heat input from combustion of any other fuel.

(3) After February 27, 2006, units may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with

this output-based limit must demonstrate compliance according to the procedures of §60.46a (i)(1), and must monitor emissions according to §60.47a(c)(1), (c)(2), (k), and (l).

6.d [§ 60.46b] Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

(c) Compliance with the nitrogen oxides emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(e) To determine compliance with the emission limits for nitrogen oxides required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring nitrogen oxides under §60.48(b).

(1) For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 million Btu/hour) or less and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the nitrogen oxides standards under §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day

rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

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	(shared with storage tanks)	Applicable Rules/Requirements
J001 - Loading Rack controlled by vapor balance and condenser		OAC rule 3745-31-05(A)(3)

	Applicable Emissions Limitations/Control Measures
	Organic compound emissions shall not exceed 4.45 pounds per hour and 1.27 tons per year.
40 CFR Part 63, Subpart A	Compliance with this rule also includes compliance with the requirements of OAC rule 3745-21-09(DD), 40 CFR Part 63, Subparts F, G, and H.
40 CFR Part 63, Subparts F, G, and H	
40 CFR Part 63, Subpart EEEE	See section A.I.2.a below.
	See section A.I.2.b and A.I.2.e below.
40 CFR Part 60, Subpart VV	The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-09(DD)	The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
	The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

Emissions Unit ID: **J001**

2. Additional Terms and Conditions

2.a This emissions unit is subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 63 are also federally enforceable.

2.b The equipment within this chemical manufacturing process unit which is subject to the requirements of 40 CFR Part 63, Subparts F, G, and H is listed below. This represents the emissions unit at the time of permit issuance and is listed for general reference purposes only.

Source Type	Egress Points	Component Equipment
Group 1 Transfer Racks: Rack	Vapor balance/condenser	Methanol Loading
	Vapor balance/condenser rack	Fusel oil loading
Equipment Leaks:	Fugitive	Downstream of storage tanks: Valves, pumps, connectors, closed vent system, open-ended lines, instrumentation systems

2.c In accordance with 40 CFR Part 63, Subparts F, G, and H , the permittee shall maintain a LDAR program for equipment in hazardous air pollutant service within this emissions unit.

The leak detection and repair program pertains to any type of pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in hazardous air pollutant service within this emissions unit.

For equipment which is subject to the provisions of 40 CFR Part 60, Subpart VV and is also subject to 40 CFR Part 63, Subparts F, G, and H, the permittee is required only to comply with 40 CFR Part 63, Subparts F, G, and H. The provisions in 40 CFR 63.1(a)(3) of Subpart A do not alter the provisions in this section.

For equipment in VOC service which is subject to 40 CFR Part 60, Subpart VV but is not subject to section A.3 of Part II - Specific Facility Terms and Conditions, the permittee has elected to apply section A.3 of Part II - Specific Facility Terms and Conditions to all such equipment in the process unit, in

accordance with section A.3.d of Part II - Specific Facility Terms and Conditions. All VOC in such equipment shall be considered, for purposes of applicability and compliance with section A.3 of Part II - Specific Facility Terms and Conditions as if it were organic HAP. Compliance with the provisions of section A.3 of Part II - Specific Facility Terms and Conditions, in the manner described in this section, shall be deemed to constitute compliance with 40 CFR Part 60, Subpart VV.

2.d In accordance with OAC rule 3745-21-09(DD), the permittee shall maintain a LDAR program for equipment in VOC service within this emissions unit.

In lieu of complying with the requirements specified in paragraphs (DD)(2) to (DD)(10) of OAC rule 3745-21-09(DD), the permittee shall comply with the equivalent requirement outlined in.40 CFR Part 63, Subparts F, G, and H.

2.e In accordance with 40 CFR Part 63, Subparts F, G, and H , the permittee shall maintain a leak detection and repair (LDAR) program for equipment in organic hazardous air pollutant (HAP) service within this emissions unit.

The leak detection and repair program pertains to any type of pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic HAP service within this emissions unit.

II. Operational Restrictions

1. The maximum annual methanol production rate for this emissions unit shall not exceed 20 million gallons.

2. [§ 63.126] Transfer operations provisions—reference control technology.]

(a) For each Group 1 transfer rack the owner or operator shall equip each transfer rack with a vapor collection system and control device.

(1) Each vapor collection system shall be designed and operated to collect the organic hazardous air pollutants vapors displaced from tank trucks or railcars during loading, and to route the collected hazardous air pollutants vapors to a process, or to a fuel gas system, or to a control device as provided in paragraph (b) of this section.

(2) Each vapor collection system shall be designed and operated such that organic HAP vapors collected at one loading arm will not pass through another loading arm in the rack to the atmosphere.

(3) Whenever organic hazardous air pollutants emissions are vented to a process, fuel gas system, or control device used to comply with the provisions of this subpart, the process, fuel gas system, or control device shall be operating.

(b) For each Group 1 transfer rack the owner or operator shall comply with paragraph (b)(3)of this section.

(3) Reduce emissions of organic hazardous air pollutants using a vapor balancing system designed and operated to collect organic hazardous air pollutants vapors displaced from tank trucks or railcars during loading; and to route the collected hazardous air pollutants vapors to the storage vessel from which the liquid being loaded originated, or to another storage vessel connected to a common header, or to compress and route to a process collected hazardous air pollutants vapors.

{Comment: 63.126(c) and (d) were deleted as being irrelevant, since they pertain to halogenated vent streams.}

(e) For each Group 1 transfer rack the owner or operator shall load organic HAP's into only tank trucks and railcars which:

(1) Have a current certification in accordance with the U. S. Department of Transportation pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or

(2) Have been demonstrated to be vapor-tight within the preceding 12 months, as determined by the procedures in §63.128(f) of this subpart. Vapor-tight means that the truck or railcar tank will sustain a pressure change of not more than 750 pascals within 5 minutes after it is pressurized to a minimum of 4,500 pascals.

(f) The owner or operator of a transfer rack subject to the provisions of this subpart shall load organic HAP's to only tank trucks or railcars equipped with vapor collection equipment that is compatible with the transfer rack's vapor collection system.

(g) The owner or operator of a transfer rack subject to this subpart shall load organic HAP's to only tank trucks or railcars whose collection systems are connected to the transfer rack's vapor collection systems.

(h) The owner or operator of a transfer rack subject to the provisions of this subpart shall ensure that no pressure-relief device in the transfer rack's vapor collection system or in the organic hazardous air pollutants loading equipment of each tank truck or railcar shall begin to open during loading. Pressure relief devices needed for safety purposes are not subject to this paragraph.

(i) Each valve in the vent system that would divert the vent stream to the atmosphere, either directly or indirectly, shall be secured in a non-diverting position using a carseal or a lock-and-key type configuration, or shall be equipped with a flow indicator. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief devices needed for safety purposes is not subject to this paragraph.

3. [§ 63.162] Standards: General.

(a) Compliance with this subpart will be determined by review of the records required by §63.181 of this subpart and the reports required by §63.182 of this subpart, review of performance test results, and by inspections.

(b) (1) An owner or operator may request a determination of alternative means of emission limitation to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart as provided in §63.177.

(2) If the Administrator makes a determination that a means of emission limitation is a permissible alternative to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart, the owner or operator shall comply with the alternative.

(c) Each piece of equipment in a process unit to which this subpart applies shall be identified such that it can be distinguished readily from equipment that is not subject to this subpart. 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 unit boundaries by some form of weatherproof identification.

(d) Equipment that is in vacuum service is excluded from the requirements of this subpart.

(e) Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of §§63.163 through 63.174 of this subpart and §63.178 of this subpart if it is identified as required in §63.181(j) of this subpart.

(f) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following requirements apply:

(1) Clearly identify the leaking equipment.

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

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

(g) Except as provided in paragraph (g)(1) of this section, all terms in this subpart that define a period of time for completion of required tasks (e.g., weekly, monthly,

quarterly, annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement.

(1) If the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of paragraphs (g)(2) or (g)(3) of this section.

(2) Time periods specified in this subpart for completion of required tasks may be changed by mutual agreement between the owner or operator and the Administrator, as specified in subpart A of this part. For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(3) Except as provided in paragraph (g)(1) or (g)(2) of this section, where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required according to the schedule specified in paragraphs (g)(3)(i) or (g)(3)(ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(4) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

(h) In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this subpart to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of this subpart. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of this subpart.

4. [§ 63.177] Alternative means of emission limitation: General.

(a) Permission to use an alternative means of emission limitation under section 112(h)(3) of the Act shall be governed by the following procedures in paragraphs (b) through (e) of this section.

(b) Where the standard is an equipment, design, or operational requirement:

(1) Each owner or operator applying for permission to use an alternative means of emission limitation under §63.6(g) of subpart A of this part shall be responsible for collecting and verifying emission performance test data for an alternative means of emission limitation.

(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Where the standard is a work practice:

(1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.

(2) For each kind of equipment for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.

(3) For each kind of equipment for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for permission shall commit, in writing, for each kind of equipment to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.

(5) The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of this section.

(6) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same or greater emission reduction as the required work practices of this subpart.

(d) An owner or operator may offer a unique approach to demonstrate the alternative means of emission limitation.

(e) (1) Manufacturers of equipment used to control equipment leaks of an organic HAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the organic HAP achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d) of this section.

{Comment: this emissions unit has no batch processes.}

5. [§ 63.179] Alternative means of emission limitation: Enclosed-vented process units.

Process units enclosed in such a manner that all emissions from equipment leaks are vented through a closed-vent system to a control device meeting the requirements of §63.172 of this subpart are exempt from the requirements of §63.163, through 63.171, and §§63.173 and 63.174 of this subpart. The enclosure shall be maintained under a negative pressure at all times while the process unit is in operation to ensure that all emissions are routed to a control device.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the methanol throughput for this emissions unit.

2. [§ 63.127] Transfer operations provisions—monitoring requirements.

(a) Each owner or operator of a Group 1 transfer rack equipped with a combustion device used to comply with the 98 percent total organic hazardous air pollutants reduction or 20 parts per million by volume outlet concentration requirements in §63.126(b)(1) of this subpart shall install, calibrate, maintain, and operate according to the manufacturers' specifications (or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately) the monitoring equipment specified in paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this section, as appropriate.

(1) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(i) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Where a flare is used, a device (including but not limited to a thermocouple, infrared sensor, or an ultra-violet beam sensor) capable of continuously detecting the presence of a pilot flame is required.

(3) Where a boiler or process heater with a design heat input capacity less than 44 megawatts is used, a temperature monitoring device in the firebox equipped with a continuous recorder is required. Any boiler or process heater in which all

vent streams are introduced with the primary fuel or are used as the primary fuel is exempt from this requirement.

(4) Where a scrubber is used with an incinerator, boiler, or process heater in the case of halogenated vent streams, the following monitoring equipment is required for the scrubber:

(i) A pH monitoring device equipped with a continuous recorder shall be installed to monitor the pH of the scrubber effluent.

(ii) A flow meter equipped with a continuous recorder shall be located at the scrubber influent for liquid flow. Gas stream flow shall be determined using one of the procedures specified in paragraphs (a)(4)(ii)(A) through (a)(4)(ii)(C) of this section.

(A) The owner or operator may determine gas stream flow using the design blower capacity, with appropriate adjustments for pressure drop.

(B) If the scrubber is subject to regulations in 40 CFR parts 264 through 266 that have required a determination of the liquid to gas (L/G) ratio prior to the applicable compliance date for this subpart specified in §63.100(k) of subpart F of this part, the owner or operator may determine gas stream flow by the method that had been utilized to comply with those regulations. A determination that was conducted prior to the compliance date for this subpart may be utilized to comply with this subpart if it is still representative.

(C) The owner or operator may prepare and implement a gas stream flow determination plan that documents an appropriate method which will be used to determine the gas stream flow. The plan shall require determination of gas stream flow by a method which will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than start-ups, shutdowns, or malfunctions. The plan shall include a description of the methodology to be followed and an explanation of how the selected methodology will reliably determine the gas stream flow, and a description of the records that will be maintained to document the determination of gas stream flow. The owner or operator shall maintain the plan as specified in §63.103(c).

(b) Each owner or operator of a Group 1 transfer rack that uses a recovery device or recapture device to comply with the 98-percent organic hazardous air pollutants reduction or 20 parts per million by volume hazardous air pollutants concentration requirements in §63.126(b)(1) of this subpart shall install either an organic monitoring device equipped with a continuous recorder, or the monitoring equipment specified in paragraph (b)(1), (b)(2), or (b)(3) of this section, depending on the type of recovery device or recapture device used. All monitoring equipment shall be installed, calibrated, and maintained according to the manufacturer's specifications or other written

procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(1) Where an absorber is used, a scrubbing liquid temperature monitoring device equipped with a continuous recorder shall be used; and a specific gravity monitoring device equipped with a continuous recorder shall be used.

(2) Where a condenser is used, a condenser exit (product side) temperature monitoring device equipped with a continuous recorder shall be used.

(3) Where a carbon adsorber is used, an integrating regeneration stream flow monitoring device having an accuracy of ±10 percent or better, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed temperature monitoring device, capable of recording the temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle shall be used.

(c) An owner or operator of a Group 1 transfer rack may request approval to monitor parameters other than those listed in paragraph (a) or (b) of this section. The request shall be submitted according to the procedures specified in §63.151(f) or §63.152(e) of this subpart. Approval shall be requested if the owner or operator:

(1) Seeks to demonstrate compliance with the standards specified in §63.126(b) of this subpart with a control device other than an incinerator, boiler, process heater, flare, absorber, condenser, or carbon adsorber; or

(2) Uses one of the control devices listed in paragraphs (a) and (b) of this section, but seeks to monitor a parameter other than those specified in paragraphs (a) and (b) of this subpart.

(d) The owner or operator of a Group 1 transfer rack using a vent system that contains by-pass lines that could divert a vent stream flow away from the control device used to comply with §63.126(b) of this subpart shall comply with paragraph (d)(1) or (d)(2) of this section. 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.

(1) Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in §63.130(b) of this subpart. The flow indicator shall be installed at the entrance to any by-pass line that could divert the vent stream away from the control device to the atmosphere; or

(2) Secure the by-pass line valve in the closed position with a car-seal or a lock-and-key type configuration.

(i) 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 by-pass line.

(ii) If a car-seal has been broken or a valve position changed, the owner or operator shall record that the vent stream has been diverted. The car-seal or lock-and-key combination shall be returned to the secured position as soon as practicable but not later than 15 calendar days after the change in position is detected.

(e) The owner or operator shall establish a range that indicates proper operation of the control device for each parameter monitored under paragraphs (a), (b), and (c) of this section. In order to establish the range, the information required in §63.152(b)(2) of this subpart shall be submitted in the Notification of Compliance Status or the operating permit application or amendment.

3. [§ 63.130] Transfer operations provisions—periodic recordkeeping and reporting.

(a) Each owner or operator using a control device to comply with §63.126(b)(1) or (b)(2) of this subpart shall keep the following up-to-date, readily accessible records:

(1) While the transfer vent stream is being vented to the control device, continuous records of the equipment operating parameters specified to be monitored under §63.127 of this subpart, and listed in table 7 of this subpart or specified by the Administrator in accordance with §§63.127(c) and 63.129(b). For flares, the hourly records and records of pilot flame outages specified in table 7 shall be maintained in place of continuous records.

(2) Records of the daily average value of each monitored parameter for each operating day determined according to the procedures specified in §63.152(f), except as provided in paragraphs (a)(2)(i) through (a)(2)(iii) of this section.

(i) For flares, records of the times and duration of all periods during which the pilot flame is absent shall be kept rather than daily averages.

(ii) If carbon adsorber regeneration stream flow and carbon bed regeneration temperature are monitored, the records specified in table 7 of this subpart shall be kept instead of the daily averages.

(iii) Records of the duration of all periods when the vent stream is diverted through by-pass lines shall be kept rather than daily averages.

(3) For boilers or process heaters, records of any changes in the location at which the vent stream is introduced into the flame zone as required under the reduction of total organic HAP emissions in §63.126(b)(1) of this subpart.

(b) If a vapor collection system containing valves that could divert the emission stream away from the control device is used, each owner or operator of a Group 1 transfer rack subject to the provisions of §63.127(d) of this subpart shall keep up-to-date, readily accessible records of:

(1) Hourly records of whether the flow indicator specified under §63.127(d)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.

(2) Where a seal mechanism is used to comply with §63.127(d)(2), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the by-pass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken, as listed in table 7 of this subpart.

(c) Each owner or operator of a Group 1 transfer rack who uses a flare to comply with §63.126(b)(2) of this subpart shall keep up-to-date, readily accessible records of the flare pilot flame monitoring specified under §63.127(a)(2) of this subpart.

(e) The owner or operator of a Group 1 transfer rack shall record that the verification of DOT tank certification or Method 27 testing, required in §63.126(e) of this subpart, has been performed. Various methods for the record of verification can be used, such as: A check off on a log sheet; a list of DOT serial numbers or Method 27 data; or a position description for gate security, showing that the security guard will not allow any trucks on site that do not have the appropriate documentation.

(f) Each owner or operator of a Group 1 or Group 2 transfer rack shall record, update annually, and maintain the information specified in paragraphs (f)(1) through (f)(3) of this section in a readily accessible location on site:

(1) An analysis demonstrating the design and actual annual throughput of the transfer rack;
(2) An analysis documenting the weight-percent organic HAP's in the liquid loaded. Examples of acceptable documentation include but are not limited to analyses of the material and engineering calculations.

(3) An analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack.

(i) For Group 2 transfer racks that are limited to transfer of organic HAP's with partial pressures less than 10.3 kilopascals, documentation is required of the organic HAP's (by compound) that are transferred. The rack weighted average partial pressure does not need to be calculated.

(ii) For racks transferring one or more organic HAP's with partial pressures greater than 10.3 kilopascals, as well as one or more organic HAP's with partial pressures less than 10.3 kilopascals, a rack weighted partial pressure shall be documented. The rack weighted average HAP partial pressure shall be weighted by the annual throughput of each chemical transferred.

4. [§ 63.163] Standards: Pumps in light liquid service.
(a) The provisions of this section apply to each pump that is in light liquid service.
(1) The provisions are to be implemented on the dates specified in the specific

subpart in 40 CFR part 63 that references this subpart in the phases specified below:

(i) For each group of existing process units at existing sources subject to the provisions of subparts F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than 2 1/2 years after the compliance date.

(ii) For new sources subject to the provisions of subparts F or I of this part, the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

(B) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(2) The owner or operator of a source subject to the provisions of subparts F or I of this part may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(b) (1) The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section, except as provided in §63.162(b) of this subpart and paragraphs (e) through (j) of this section.

(2) The instrument reading, as determined by the method as specified in §63.180(b) of this subpart, that defines a leak in each phase of the standard is:

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) For Phase II, an instrument reading of 5,000 parts per million or greater.

(iii) For Phase III, an instrument reading of:

(A) 5,000 parts per million or greater for pumps handling polymerizing monomers;

(B) 2,000 parts per million or greater for pumps in food/medical

service; and

(C) 1,000 parts per million or greater for all other pumps.

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

(c) (1) 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 paragraph (c)(3) of this section or §63.171 of this subpart.

(2) 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.

(3) For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.

(d) (1) The owner or operator shall decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the owner or operator has decided, all subsequent percent calculations shall be made on the same basis.

(2) If, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of §63.176 of this subpart.

(3) The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.

(4) Percent leaking pumps shall be determined by the following equation:

$$\%P_L=((P_L-P_S)/(P_T-P_S))\times 100$$

where:

$\%P_L$=Percent leaking pumps

P_L=Number of pumps found leaking as determined through monthly monitoring as required in paragraphs (b)(1) and (b)(2) of this section.

P_T=Total pumps in organic HAP service, including those meeting the criteria in paragraphs (e) and (f) of this section.

P_S=Number of pumps leaking within 1 month of start-up during the current monitoring period.

(e) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) through (d) of this section, provided the following requirements are met:

(1) Each dual mechanical seal system is:

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

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of §63.172 of this subpart; or

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

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

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

(4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

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

(ii) If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.

(5) Each sensor as described in paragraph (e)(3) of this section is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.

(6) (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

(ii) If indications of liquids dripping from the pump seal exceed the criteria established in paragraph (e)(6)(i) of this section, or if, based on the criteria established in paragraph (e)(6)(i) of this section, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(iii) 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 §63.171 of this subpart.

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

(f) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of paragraphs (a) through (c) of this section.

(g) Any pump equipped with a closed-vent system capable of capturing and

transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §63.172 of this subpart is exempt from the requirements of paragraphs (b) through (e) of this section.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(3) and (e)(4) of this section, and the daily requirements of paragraph (e)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

(i) If more than 90 percent of the pumps at a process unit meet the criteria in either paragraph (e) or (f) of this section, the process unit is exempt from the requirements of paragraph (d) of this section.

(j) Any pump that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor pump is exempt from the requirements of paragraphs (b) through (e) of this section if:

(1) The owner or operator of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

{Comment: There are no compressors ion this emissions unit}

5. [§ 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 parts per million above background except as provided in paragraph (b) of this section, as measured by the method specified in §63.180(c) of this subpart.

(b) (1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §63.171 of this subpart.

(2) 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 parts per million above background, as measured by the method specified in §63.180(c) of this subpart.

(c) 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 §63.172 of this subpart is exempt from the requirements of paragraphs (a) and (b) of this section.

(d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) 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 §63.171 of this subpart.

6. [§ 63.166] Standards: Sampling connection systems.

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

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid to a process; or

(3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of §63.172 of this subpart; or

(4) Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (b)(4)(i), (ii), or (iii) of this section.

(i) A waste management unit as defined in §63.111 of subpart G of this part, if the waste management unit is subject to, and operated in compliance with the provisions of subpart G of this part applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of subpart G of part 63, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, subpart G applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

(c) *In-situ* sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

7. [§ 63.167] Standards: Open-ended valves or lines.

(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §63.162(b) of this subpart and paragraphs (d) and (e) of this section.

(2) 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.

(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 paragraph (a) of this section 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 paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraph (a) through (c) of this section.

8. [§ 63.168] 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 service or in light liquid service.

(1) The provisions are to be implemented on the dates set forth in the specific subpart in 40 CFR part 63 that references this subpart as specified in paragraph (a)(1)(i), (a)(1)(ii), or (a)(1)(iii) of this section.

(i) For each group of existing process units at existing sources subject to the provisions of subpart F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than 2 ½ years after the compliance date.

(ii) For new sources subject to the provisions of subpart F or I of this part,

the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

(B) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(iii) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(2) The owner or operator of a source subject to this subpart may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6) of this subpart.

(b) The owner or operator of a source subject to this subpart shall monitor all valves, except as provided in §63.162(b) of this subpart and paragraphs (h) and (i) of this section, at the intervals specified in paragraphs (c) and (d) of this section and shall comply with all other provisions of this section, except as provided in §63.171, §63.177, §63.178, and §63.179 of this subpart.

(1) The valves shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

(2) The instrument reading that defines a leak in each phase of the standard is:

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) For Phase II, an instrument reading of 500 parts per million or greater.

(iii) For Phase III, an instrument reading of 500 parts per million or greater.

(c) In Phases I and II, each valve shall be monitored quarterly.

(d) In Phase III, the owner or operator shall monitor valves for leaks at the intervals specified below:

(1) At process units with 2 percent or greater leaking valves, calculated according to paragraph (e) of this section, the owner or operator shall either:

(i) Monitor each valve once per month; or

(ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves that complies with the requirements of §63.175 (d) or (e) of this subpart and monitor quarterly.

(2) At process units with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in paragraphs (d)(3) and (d)(4) of this section.

(3) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters.

(4) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

(e) (1) Percent leaking valves at a process unit shall be determined by the following equation:

$\%V_L=(V_L/(V_T+V_C))\times100$

where:

$\%V_L$=Percent leaking valves as determined through periodic monitoring required in paragraphs (b) through (d) of this section.

V_L=Number of valves found leaking excluding nonrepairables as provided in paragraph (e)(3)(i) of this section.

V_T=Total valves monitored, in a monitoring period excluding valves monitored as required by (f)(3) of this section.

V_C=Optional credit for removed valves=0.67 × net number (i.e., total removed−-total added) of valves in organic HAP service removed from process unit after the date set forth in §63.100(k) of subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then V_C=0.

(2) For use in determining monitoring frequency, as specified in paragraph (d) of this section, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.

(3) (i) 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 paragraph (e)(3)(ii) of this section. 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 unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

(ii) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, 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.

(f) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §63.171 of this subpart.

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

(3) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.

(i) The monitoring shall be conducted as specified in §63.180 (b) and (c), as appropriate, to determine whether the valve has resumed leaking.

(ii) Periodic monitoring required by paragraphs (b) through (d) of this

section may be used to satisfy the requirements of this paragraph (f)(3), if the timing of the monitoring period coincides with the time specified in this paragraph (f)(3). Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph (f)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph (f)(3).

(iii) If a leak is detected by monitoring that is conducted pursuant to paragraph (f)(3) of this section, the owner or operator shall follow the provisions of paragraphs (f)(3)(iii)(A) and (f)(3)(iii)(B) of this section, to determine whether that valve must be counted as a leaking valve for purposes of §63.168(e) of this subpart.

(A) If the owner or operator elected to use periodic monitoring required by paragraphs (b) through (d) of this section to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve.

(B) If the owner or operator elected to use other monitoring, prior to the periodic monitoring required by paragraphs (b) through (d) of this section, to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

(g) First attempts at repair include, but are not limited to, the following practices where practicable:

(1) Tightening of bonnet bolts,

(2) Replacement of bonnet bolts,

(3) Tightening of packing gland nuts, and

(4) Injection of lubricant into lubricated packing.

(h) Any valve that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b) through (f) of this section if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

(i) Any valve that is designated, as described in §63.181(b)(7)(ii) of this subpart, as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b) through (d) of this section if:

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(2) The process unit within which the valve is located is an existing source or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(j) Any equipment located at a plant site with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in paragraph (d)(1) of this section. Instead, the owner or operator shall monitor each valve in organic HAP service for leaks once each quarter, or comply with paragraph (d)(3) or (d)(4) of this section except as provided in paragraphs (h) and (i) of this section.

9. [§ 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 §63.180(b) of this subpart 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 paragraphs (c) and (d) of this section, it is not necessary to monitor the system for leaks by the method specified in §63.180(b) of this subpart.

(b) If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.

(c) (1) 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 §63.171 of this subpart.

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

(3) For equipment identified in paragraph (a) of this section that is not monitored by the method specified in §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

§§63.163(c)(2) and 63.168(g) of this subpart, for pumps and valves, respectively.

10. [§ 63.170] Standards: Surge control vessels and bottoms receivers.

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

11. [§ 63.171] Standards: Delay of repair.

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

(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:

(1) The owner or operator 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

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §63.172 of this subpart.

(d) Delay of repair for pumps is also allowed if:

(1) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of §63.176(d) of this subpart will provide better performance or:

(i) A dual mechanical seal system that meets the requirements of §63.163(e) of this subpart,

(ii) A pump that meets the requirements of §63.163(f) of this subpart, or

(iii) A closed-vent system and control device that meets the requirements of §63.163(g) of this subpart; and

(2) 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.

12. [§ 63.172] Standards: Closed-vent systems and control devices.

(a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in §63.162(b) of this subpart.

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

(c) Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million 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) Flares used to comply with this subpart shall comply with the requirements of §63.11(b) of subpart A of this part.

(e) Owners or operators of control devices that are used to comply with the provisions of this subpart 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.

(f) Except as provided in paragraphs (k) and (l) of this section, each closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If the closed-vent system is constructed of hard-piping, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, and

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

(2) If the vapor collection system or closed-vent system is constructed of duct work, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, and

(ii) Conduct annual inspections according to the procedures in paragraph (g) of this section.

(g) Each closed-vent system shall be inspected according to the procedures in §63.180(b) of this subpart.

(h) Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in paragraph (i) of this section.

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

(2) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in paragraph (i) of this section.

(i) 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 owner or operator 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.

(j) 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 owner or operator shall comply with the provisions of either paragraph (j)(1) or (j)(2) of this section, except as provided in paragraph (j)(3) of this section.

(1) 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 §63.118(a)(3) of subpart G of this part. The flow indicator shall be installed at the entrance to any bypass line; or

(2) 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.

(3) 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.

(k) Any parts of the closed-vent system that are designated, as described in paragraph 63.181(b)(7)(i), as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of this section if:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (f)(1) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not

more frequently than annually.

(l) Any parts of the closed-vent system that are designated, as described in §63.181 (b)(7)(i) of this subpart, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of this section if:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.

(m) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of this subpart, such system or control device shall be operating.

(n) After the compliance dates specified in §63.100 of subpart F of this part, the owner or operator of any control device subject to this subpart that is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart BB, or is subject to monitoring and recordkeeping requirements in 40 CFR part 265, subpart BB, may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart, or with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart. The owner or operator shall identify which option has been chosen, in the next periodic report required by §63.182(d).

Comment: There are no agitators in this emissions unit.}

13. [§ 63.174] Standards: Connectors in gas/vapor service and in light liquid service.

(a) The owner or operator of a process unit subject to this subpart shall monitor all connectors in gas/vapor and light liquid service, except as provided in §63.162(b) of this subpart, and in paragraphs (f) through (h) of this section, at the intervals specified in paragraph (b) of this section.

(1) The connectors shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

(2) If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.

(b) The owner or operator shall monitor for leaks at the intervals specified in either paragraph (b)(1) or (b)(2) of this section and in paragraph (b)(3) of this section.

(1) For each group of existing process units within an existing source, by no later

than 12 months after the compliance date, the owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(2) For new sources, 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 owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(3) After conducting the initial survey required in paragraph (b)(1) or (b)(2) of this section, the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(3)(i) through (b)(3)(v) of this section, except as provided in paragraph (c)(2) of this section:

(i) 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.

(ii) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. An owner or operator may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.

(iii) If the owner or operator of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the owner or operator may monitor the connectors one time every 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.

(iv) If a process unit complying with the requirements of paragraph (b) of this section using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the owner or operator shall increase the monitoring frequency to one time every 2 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(v) If a process unit complying with requirements of paragraph (b)(3)(iii) of this section using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(4) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6).

(c) (1) (i) Except as provided in paragraph (c)(1)(ii) of this section, 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 hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of this section, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of paragraph (i)(2) of this section.

(ii) As an alternative to the requirements in paragraph (c)(1)(i) of this section, an owner or operator may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the owner or operator may not count nonrepairable connectors for the purposes of paragraph (i)(2) of this section. The owner or operator shall calculate the percent leaking connectors for the monitoring periods described in paragraph (b) of this section, by setting the nonrepairable component, C_{AN}, in the equation in paragraph (i)(2) of this section to zero for all monitoring periods.

(iii) An owner or operator may switch alternatives described in paragraphs (c)(1) (i) and (ii) of this section at the end of the current monitoring period he is in, provided that it is reported as required in §63.182 of this subpart 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.

(2) As an alternative to the requirements of paragraph (b)(3) of this section, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in paragraph (c)(2)(iii) or (c)(2)(iv) of this section may:

(i) Comply with the requirements of §63.169 of this subpart, and

(ii) Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of this section.

(iii) For sources subject to subparts F and I of this part, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before December 31, 1992.

(iv) For sources not identified in paragraph (c)(2)(iii) of this section, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before the date of proposal of the applicable subpart of this part that references this subpart.

(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 paragraph (g) of this section and in §63.171 of this subpart. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(e) [Reserved]

(f) Any connector that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor connector is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraphs (a) through (e) of this section; and

(2) The owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.

(g) Any connector that is designated, as described in §63.181(b)(7)(iii) of this subpart, as an unsafe-to-repair connector is exempt from the requirements of paragraphs (a), (d), and (e) of this section if:

(1) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (d) of this section; and

(2) The connector will be repaired before the end of the next scheduled process unit shutdown.

(h) (1) 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 paragraphs (a) and (c) of this section and from the recordkeeping and reporting requirements of §63.181 and §63.182 of this subpart. An inaccessible connector is one that is:

(i) Buried;

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

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

(iv) 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;

(v) 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

(vi) 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.

(2) 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 §63.171 of this subpart and paragraph (g) of this section.

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

(i) For use in determining the monitoring frequency, as specified in paragraph (b) of this section, the percent leaking connectors shall be calculated as specified in paragraphs (i)(1) and (i)(2) of this section.

(1) For the first monitoring period, use the following equation:

$\% C_L = C_L/(C_t + C_C) \times 100$

where:

$\% C_L$= Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.

C_L= Number of connectors measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.

C_t= Total number of monitored connectors in the process unit.

C_C= Optional credit for removed connectors = 0.67 × 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 C_C= 0.

(2) For subsequent monitoring periods, use the following equation:

$\% C_L = [(C_L - C_{AN})/(C_t + C_C)] \times 100$

where:

$\% C_L$= Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.

C_L= Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.

C_{AN}= Number of allowable nonrepairable connectors, as determined by monitoring required in paragraphs (b)(3) and (c) of this section, not to exceed 2 percent of the total connector population, C_t.

C_t= Total number of monitored connectors, including nonrepairables, in the process unit.

C_C= Optional credit for removed connectors = 0.67 × 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 C_C= 0.

(j) Optional credit for removed connectors. If an owner or operator eliminates a connector subject to monitoring under paragraph (b) of this section, the owner or operator may receive credit for elimination of the connector, as described in paragraph (i) of this section, provided the requirements in paragraphs (j)(1) through (j)(4) are met.

(1) The connector was welded after the date of proposal of the specific subpart that references this subpart.

(2) The integrity of the weld is demonstrated by monitoring it according to the procedures in §63.180(b) of this subpart or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.

(3) 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.

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

(5) 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.

14. [§ 63.175] Quality improvement program for valves.

(a) In Phase III, an owner or operator may elect to comply with one of the alternative quality improvement programs specified in paragraphs (d) and (e) of this section. The decision to use one of these alternative provisions to comply with the requirements of §63.168(d)(1)(ii) of this subpart must be made during the first year of Phase III for existing process units and for new process units.

(b) An owner or operator of a process unit subject to the requirements of paragraph (d) or (e) of this section shall comply with those requirements until the process unit has fewer than 2 percent leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in §63.168(e) of this subpart.

(c) After the process unit has fewer than 2 percent leaking valves, the owner or operator may elect to comply with the requirements in §63.168 of this subpart, to

continue to comply with the requirements in paragraph (e) (or (d), if appropriate) of this section, or comply with both the requirements in §63.168 and §63.175.

(1) If the owner or operator elects to continue the quality improvement program, the owner or operator is exempt from the requirements for performance trials as specified in paragraph (e)(6) of this section, or further progress as specified in paragraph (d)(4) of this section, as long as the process unit has fewer than 2 percent leaking valves calculated according to §63.168(e).

(2) If the owner or operator elects to comply with both paragraph (e) of this section and §63.168 of this subpart, he may also take advantage of the lower monitoring frequencies associated with lower leak rates in §63.168 (d)(2), (d)(3), and (d)(4) of this subpart.

(3) If the owner or operator elects not to continue the quality improvement program, the program is no longer an option if the process unit again exceeds 2 percent leaking valves, and in such case, monthly monitoring will be required.

(d) The following requirements shall be met if an owner or operator elects to use a quality improvement program to demonstrate further progress:

(1) The owner or operator shall continue to comply with the requirements in §63.168 of this subpart except each valve shall be monitored quarterly.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(1) of this subpart, for each valve in each process unit subject to the quality improvement program:

(i) The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation.

(ii) Whether the valve is in gas or light liquid service.

(iii) If a leak is detected, the repair methods used and the instrument readings after repair.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of paragraph (d) of this section, except as provided in paragraphs (d)(4)(ii) and (d)(4)(iii) of this section.

(i) Demonstration of progress shall mean that for each quarter there is at least a 10-percent reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated using the rolling average percent leaking valves, according to the following:

$\%LV_R = (\%LV_{AVG1} -- \%LV_{AVG2} / \%LV_{AVG1} \times 100$

where:

$\%LV_R$=Percent leaking valve reduction.

$\%LV_{AVG1}$=($\%V_{Li}$ + %VLi=1)/2.

$\%LV_{AVG2}$=(%VLi=1 + %VLi=2)/2.

where:

$\%V_{Li}$, %VLi=1, %VLi=2 are percent leaking valves calculated for subsequent monitoring periods, i, i+1, i+2.

(ii) An owner or operator who fails for two consecutive rolling averages to demonstrate at least a 10-percent reduction per quarter in percent leaking valves, and whose overall average percent reduction based on two or more rolling averages is less than 10 percent per quarter, shall either comply with the requirements in §63.168(d)(1)(i) of this subpart using monthly monitoring or shall comply using a quality improvement program for technology review as specified in paragraph (e) of this section. If the owner or operator elects to comply with the requirements of paragraph (e) of this section, the schedule for performance trials and valve replacements remains as specified in paragraph (e) of this section.

(iii) As an alternative to the provisions in paragraph (d)(4)(i), an owner or operator may use the procedure specified in paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B) of this section to demonstrate progress in reducing the percent leaking valves.

(A) The percent reduction that must be achieved each quarter shall be calculated as follows:

%RR = percent reduction required each quarter, as calculated according to §63.168(e)

$\%V_L$ = percent leaking valves, calculated according to §63.168(e), at the time elected to use provisions of §63.168(d)(1)(ii)

(B) The owner or operator shall achieve less than 2 percent leaking valves no later than 2 years after electing to use the demonstration of progress provisions in §63.175(d) of this subpart.

(e) The following requirements shall be met if an owner or operator elects to use a quality improvement program of technology review and improvement:

(1) The owner or operator shall comply with the requirements in §63.168 of this subpart except the requirement for monthly monitoring in §63.168(d)(1)(i) of this subpart does not apply.

(2) The owner or operator shall collect the data specified below, and maintain records as required in §63.181(h)(2), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following:

(i) Valve type (e.g., ball, gate, check); valve manufacturer; valve design (e.g., external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed.

(ii) Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity.

(iii) Whether the valve is in gas or light liquid service.

(iv) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number, and date of the observation.

(v) If a leak is detected, the repair methods used and the instrument readings after repair.

(vi) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5) (i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (e)(2) of this section to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to identify any superior performing valve technologies that are applicable to the service(s), operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2 percent for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission

performance and as being capable of achieving less than 2 percent leaking valves in the process unit.

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of valves removed from the process unit due to leaks,

(B) Information from the available literature and from the experience of other plant sites that will identify valve designs or technologies and operating conditions associated with low emission performance for specific services, and

(C) Information on limitations on the service conditions for the valve design and operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of Phase III. The first analysis shall be performed using a minimum of two quarters of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify superior performing valve designs or technologies that can be applied to the operating conditions and services identified as having poorer than average performance, except as provided in paragraph (e)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit the valve designs or technologies that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of valves or operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 2 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing valve technologies is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii) of this subpart.

(ii) The number of valves in the trial evaluation program shall be the lesser of 1 percent or 20 valves for programs involving single process units and the lesser of 1 percent or 50 valves for programs involving groups of process units.

(iii) The trial evaluation program shall specify and include documentation

of:

(A) The candidate superior performing valve designs or technologies to be evaluated, the stages for evaluating the identified candidate valve designs or technologies, including the estimated time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial valves.

(iv) The performance trials shall initially be conducted for, at least, a 6-month period beginning not later than 18 months after the start of Phase III. Not later than 24 months after the start of Phase III, the owner or operator shall have identified valve designs or technologies that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (e)(6)(vi) of this section. The compilation of candidate and demonstrated superior emission performance valve designs or technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 total employees shall be exempt from trial evaluations of valves. Plant sites exempt from the trial evaluations of valves shall begin the program at the start of the fourth year of Phase III.

(vi) An owner or operator who has conducted performance trials on all candidate superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible candidate superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator who elects to use a quality improvement program for

technology review and improvement shall prepare and implement a valve quality assurance program that details purchasing specifications and maintenance procedures for all valves in the process unit. The quality assurance program may establish any number of categories, or classes, of valves as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (e)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (e)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be reviewed and, as appropriate, updated each year as long as the process unit has 2 percent or more leaking valves.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of valves. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the valve;

(C) Include a written procedure for bench testing of valves that specifies performance criteria for acceptance of valves and specifies criteria for the precision and accuracy of the test apparatus. All valves repaired off-line after preparation of the quality assurance plan shall be bench-tested for leaks. This testing may be conducted by the owner or operator of the process unit, by the vendor, or by a designated representative. The owner or operator shall install only those valves that have been documented through bench-testing to be nonleaking.

(D) Require that all valves repaired on-line be monitored using the method specified in §63.180(b) of this subpart for leaks for 2 successive months, after repair.

(E) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the process unit or by a designated representative.

(F) Detail off-line valve maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished valves will meet the design specifications for the valve type and will operate such that emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of Phase III for plant sites with 400 or more valves or

owned by a corporation with 100 or more employees; and no later than the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees.

(8) Beginning at the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees and at the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees, each valve that is replaced for any reason shall be replaced with a new or modified valve that complies with the quality assurance standards for the valve category and that is identified as superior emission performance technology. Superior emission performance technology means valves or valve technologies identified with emission performance that, combined with appropriate process, operating, and maintenance practices, will result in less than 2 percent leaking valves for specific applications in a large population, except as provided in paragraph (e)(8)(ii) of this section.

(i) The valves shall be maintained as specified in the quality assurance program.

(ii) If a superior emission performance technology cannot be identified, then valve replacement shall be with one of (if several) the lowest emission performance technologies that has been identified for the specific application.

15. [§ 63.176] Quality improvement program for pumps.

(a) In Phase III, if, on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the owner or operator shall comply with the requirements of this section as specified below:

(1) Pumps that are in food/medical service or in polymerizing monomer service shall comply with all requirements except for those specified in paragraph (d)(8) of this section.

(2) Pumps that are not in food/medical or polymerizing monomer service shall comply with all requirements of this section.

(b) The owner or operator shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the owner or operator shall comply with the requirements in §63.163 of this subpart.

(c) If in a subsequent monitoring period, the process unit (or plant site) has greater than 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the owner or operator shall resume the quality improvement program starting at performance trials.

(d) The quality improvement program shall include the following:

(1) The owner or operator shall comply with the requirements in §63.163 of this

subpart.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(3), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis.

(i) Pump type (e.g., piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g., external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.

(ii) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.

(iii) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.

(iv) If a leak is detected, the repair methods used and the instrument readings after repair.

(v) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.

(4) The owner or operator shall inspect all pumps or pump seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5) (i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (d)(2) of this section to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the

service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10 percent for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 10 percent leaking pumps in the process unit (or plant site).

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks;

(B) Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services; and

(C) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in paragraph (d)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the

candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii).

(ii) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.

(iii) The trial evaluation program shall specify and include documentation of:

(A) The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.

(iv) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the owner or operator shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (d)(6)(vi) of this section. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.

(vi) An owner or operator who has conducted performance trials on all alternative superior emission performance technologies suitable for the

required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (d)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (d)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal;

(C) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the plant site or process unit or by a designated representative; and

(D) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that

emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.

(8) Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the owner or operator shall replace, as described in paragraphs (d)(8)(i) and (d)(8)(ii) of this section, the pumps or pump seals that are not superior emission performance technology with pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.

(i) Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of §63.163 of this subpart are pumps determined to be superior performance technology.

(ii) The owner or operator may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.

(iii) The pumps shall be maintained as specified in the quality assurance program.

16. [§ 63.181] Recordkeeping requirements.
(a) An owner or operator of more than one process unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) 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) Except as provided in paragraph (e) of this section, the following information

pertaining to all equipment in each process unit subject to the requirements in §§63.162 through 63.174 of this subpart shall be recorded:

(1) (i) A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in §63.174 of this subpart and instrumentation systems) subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174 (b)(1) or (b)(2) of this subpart.

(ii) A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of this subpart and valves subject to the provisions of §63.168(d) of this subpart.

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

(2) (i) A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of this subpart.

(ii) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of §63.164(i) of this subpart.

(iii) Identification of surge control vessels or bottoms receivers subject to the provisions of this subpart that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.170 of this subpart.

(3) (i) A list of identification numbers for pressure relief devices subject to the provisions in §63.165(a) of this subpart.

(ii) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of §63.165(d) of this subpart.

(4) Identification of instrumentation systems subject to the provisions of this subpart. Individual components in an instrumentation system need not be identified.

(5) Identification of screwed connectors subject to the requirements of §63.174(c)(2) of this subpart. Identification can be by area or grouping as long as the total number within each group or area is recorded.

(6) The following information shall be recorded for each dual mechanical seal system:

(i) Design criteria required in §§63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) of this subpart and an explanation of the design criteria; and

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

(7) The following information pertaining to all pumps subject to the provisions of §63.163(j), valves subject to the provisions of §63.168(h) and (i) of this subpart, agitators subject to the provisions of §63.173(h) through (j), and connectors subject to the provisions of §63.174(f) and (g) of this subpart shall be recorded:

(i) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

(ii) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

(iii) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8) (i) A list of valves removed from and added to the process unit, as described in §63.168(e)(1) of this subpart, if the net credits for removed valves is expected to be used.

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

(9) (i) For batch process units that the owner or operator elects to monitor as provided under §63.178(c) of this subpart, a list of equipment added to batch product process units since the last monitoring period required in §63.178(c)(3)(ii) and (3)(iii) of this subpart.

(ii) Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch 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 owner or operator does not adjust monitoring frequency by the time in use, as provided in §63.178(c)(3)(iii) of this subpart.

(10) For any leaks detected as specified in §§63.163 and 63.164; §§63.168 and

63.169; and §§63.172 through 63.174 of this subpart, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(c) For visual inspections of equipment subject to the provisions of this subpart (e.g., §63.163(b)(3), §63.163(e)(4)(i)), the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this inspection, except as provided in paragraph (e) of this section. These records shall be retained for 2 years.

(d) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following information shall be recorded and kept for 2 years:

(1) The instrument and the equipment identification number and the operator name, initials, or identification number.

(2) The date the leak was detected and the date of first attempt to repair the leak.

(3) The date of successful repair of the leak.

(4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

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

(i) The owner or operator 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 §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

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

(6) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(7) (i) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of this subpart, as described in §63.174(c)(1) of this subpart, unless the owner or operator elects to comply with the provisions of §63.174(c)(1)(ii) of this subpart.

(ii) The date and results of monitoring as required in §63.174(c) of this subpart. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph

(d)(7)(i) of this section, then all connectors within the designated location shall be monitored.

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

(9) Copies of the periodic reports as specified in §63.182(d) of this subpart, if records are not maintained on a computerized database capable of generating summary reports from the records.

(e) The owner or operator of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance with this subpart is exempt from the requirements of paragraphs (b), (c), (d), and (f) of this section. Instead, the owner or operator shall maintain records of the following information:

(1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.

(2) [Reserved]

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

(4) The dates of each pressure test required in §63.178(b) of this subpart, the test pressure, and the pressure drop observed during the test.

(5) Records of any visible, audible, or olfactory evidence of fluid loss.

(6) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

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

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

(iii) The reason for the delay of repair.

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

(v) The date of successful repair.

(f) The dates and results of each compliance test required for compressors subject to the provisions in §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 §§63.165 (a) and (b) of this subpart. The results shall include:

(1) The background level measured during each compliance test.

(2) The maximum instrument reading measured at each piece of equipment during each compliance test.

(g) The owner or operator shall maintain records of the information specified in paragraphs (g)(1) through (g)(3) of this section for closed-vent systems and control devices subject to the provisions of §63.172 of this subpart. The records specified in paragraph (g)(1) of this section shall be retained for the life of the equipment. The records specified in paragraphs (g)(2) and (g)(3) of this section shall be retained for 2 years.

(1) The design specifications and performance demonstrations specified in paragraphs (g)(1)(i) through (g)(1)(iv) of this section.

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

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

(iii) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by §63.11(b) of subpart A of this part.

(iv) A description of the parameter or parameters monitored, as required in §63.172(e) of this subpart, 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.

(2) Records of operation of closed-vent systems and control devices, as specified in paragraphs (g)(2)(i) through (g)(2)(iii) of this section.

(i) Dates and durations when the closed-vent systems and control devices required in §§63.163 through 63.166, and §63.170 of this subpart are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

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

(iii) Dates and durations of start-ups and shutdowns of control devices required in §§63.163 through 63.166, and §63.170 of this subpart.

(3) Records of inspections of closed-vent systems subject to the provisions of §63.172 of this subpart, as specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart 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.

(ii) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart during which leaks were detected, the information specified in paragraph (d) of this section shall be recorded.

(h) Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of this subpart shall maintain the records specified in paragraphs (h)(1) through (h)(9) of this section for the period of the quality improvement program for the process unit.

(1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of this subpart:

(i) All data required in §63.175(d)(2) of this subpart.

(ii) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.

(iii) The beginning and ending dates while meeting the requirements of §63.175(d) of this subpart.

(2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of this subpart:

(i) All data required in §63.175(e)(2) of this subpart.

(ii) The percent leaking valves observed each quarter.

(iii) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.175(e) of this subpart.

(3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of this subpart:

(i) All data required in §63.176(d)(2) of this subpart.

(ii) The rolling average percent leaking pumps.

(iii) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.176(d) of this subpart.

(4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(5) Records of all analyses required in §§63.175(e) and 63.176(d) of this subpart. The records will include the following:

(i) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(ii) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(iii) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of this subpart.

(iv) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of this subpart.

(7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of this subpart.

(8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of this subpart.

(9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.

(i) The owner or operator of equipment in heavy liquid service shall comply with the requirements of either paragraph (i)(1) or (i)(2) of this section, as provided in paragraph (i)(3) of this section.

(1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid 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.

(j) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of

this subpart under §63.160 of this subpart.

(k) Owners and operators choosing to comply with the requirements of §63.179 of this subpart shall maintain the following records:

(1) Identification of the process unit(s) and the organic HAP's they handle.

(2) A schematic of the process unit, enclosure, and closed-vent system.

(3) 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.

IV. Reporting Requirements

1. The permittee shall submit annual reports that identify any exceedances of the methanol throughput rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

2. [§ 63.130] Transfer operations provisions—periodic recordkeeping and reporting.

   (d) Each owner or operator of a transfer rack subject to the requirements of §63.126 of this subpart shall submit to the Administrator Periodic Reports of the following information according to the schedule in §63.152(c) of this subpart:

   (1) Reports of daily average values of monitored parameters for all operating days when the daily average values were outside the range established in the Notification of Compliance Status or operating permit.

   (2) Reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in §63.152(c)(2)(ii)(A) of this subpart.

   (3) Reports of the times and durations of all periods recorded under paragraph (b)(1) of this section when the vent stream was diverted from the control device.

   (4) Reports of all times recorded under paragraph (b)(2) of this section when maintenance is performed on car-sealed valves, when the car seal is broken, when the by-pass line valve position is changed, or the key for a lock-and-key type configuration has been checked out.

   (5) Reports of the times and durations of all periods recorded under paragraph (a)(2)(i) of this section in which all pilot flames of a flare were absent.

   (6) Reports of all carbon bed regeneration cycles during which the parameters recorded under paragraph (a)(2)(vi) of this section were outside the ranges established in the Notification of Compliance Status or operating permit.

3. [63.129] Transfer operations provisions—reporting and recordkeeping for performance tests and notification of compliance status.

   (a) Each owner or operator of a Group 1 transfer rack shall:

   (1) Keep an up-to-date, readily accessible record of the data specified in paragraphs (a)(4) through (a)(8) of this section, as applicable.

   (2) Include the data specified in paragraphs (a)(4) through (a)(7) of this section in the Notification of Compliance Status report as specified in §63.152(b) of this subpart.

   (3) If any subsequent performance tests are conducted after the Notification of

Compliance Status has been submitted, report the data in paragraphs (a)(4) through (a)(7) of this section in the next Periodic Report as specified in §63.152(c) of this subpart.

(4) Record and report the following when using a control device other than a flare to achieve a 98 weight percent reduction in total organic HAP or a total organic HAP concentration of 20 parts per million by volume, as specified in §63.126(b)(1) of this subpart:

(i) The parameter monitoring results for thermal incinerators, catalytic incinerators, boilers or process heaters, absorbers, condensers, or carbon adsorbers specified in table 7 of this subpart, recorded during the performance test, and averaged over the time period of the performance testing.

(ii) The percent reduction of total organic HAP or TOC achieved by the control device determined as specified in §63.128(a) of this subpart, or the concentration of total organic HAP or TOC (parts per million by volume, by compound) determined as specified in §63.128(a) of this subpart at the outlet of the control device. For combustion devices, the concentration shall be reported on a dry basis corrected to 3 percent oxygen.

(iii) The parameters shall be recorded at least every 15 minutes.

(iv) For a boiler or process heater, a description of the location at which the vent stream is introduced into the boiler or process heater.

(5) Record and report the following when using a flare to comply with §63.126(b)(2) of this subpart:

(i) Flare design (i.e., steam-assisted, air-assisted, or non-assisted);

(ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by §63.128(b) of this subpart; and

(iii) All periods during the compliance determination when the pilot flame is absent.

(6) Record and report the following when using a scrubber following a combustion device to control a halogenated vent stream, as specified in §63.126(d) of this subpart:

(i) The percent reduction or scrubber outlet mass emission rate of total hydrogen halides and halogens determined according to the procedures in §63.128(d) of this subpart;

(ii) The parameter monitoring results for scrubbers specified in table 7 of this subpart, and averaged over the time period of the performance test; and

(iii) The parameters shall be recorded at least every 15 minutes.

(7) Record and report the halogen concentration in the vent stream determined according to the procedures as specified in §63.128(d) of this subpart.

(8) Report that the emission stream is being routed to a fuel gas system or a process, when complying using §63.126(b)(4).

(b) If an owner or operator requests approval to use a control device other than those listed in table 7 of this subpart or to monitor a parameter other than those specified in table 7 of this subpart, the owner or operator shall submit a description of planned reporting and recordkeeping procedures as required under §63.151(f) or §63.152(e) of this subpart. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the permit application or by other appropriate means.

(c) For each parameter monitored according to table 7 of this subpart or paragraph (b) of this section, the owner or operator shall establish a range for the parameter that indicates proper operation of the control device. In order to establish the range, the information required in §63.152(b)(2) of this subpart shall be submitted in the Notification of Compliance Status or the operating permit application or amendment.

(d) Each owner or operator shall maintain a record describing in detail the vent system used to vent each affected transfer vent stream to a control device. This document shall list all valves and vent pipes that could vent the stream to the atmosphere, thereby by-passing the control device; identify which valves are secured by car-seals or lock-and-key type configurations; and indicate the position (open or closed) of those valves which have car-seals. Equipment leaks 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.

(e) An owner or operator meeting the requirements of §63.128(h) of this subpart shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in §63.128(h)(1) of this subpart.

(f) An owner or operator meeting the requirements of §63.128(h) of this subpart shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the operating range for each monitoring parameter identified for each control device.

4. [§ 63.182] Reporting requirements.

(a) Each owner or operator of a source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (a)(5) of this section. Owners or operators requesting an extension of compliance shall also submit the report listed in paragraph (a)(6) of this section.

(1) An Initial Notification described in paragraph (b) of this section, and

(2) A Notification of Compliance Status described in paragraph (c) of this section,

(3) Periodic Reports described in paragraph (d) of this section, and

(4)–(5) [Reserved]

(6) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing an existing source up to 1 additional year beyond the compliance date specified in the subpart that references this subpart.

(i) For purposes of this subpart, a request for an extension shall be submitted to the operating permit authority as part of the operating permit application. If the State in which the source is located does not have an approved operating permit program, a request for an extension shall be submitted to the Administrator as a separate submittal. The dates specified in §63.6(i) of subpart A of this part for submittal of requests for extensions shall not apply to sources subject to this subpart.

(ii) A request for an extension of compliance must include the data described in §63.6(i)(6)(i) (A), (B), and (D) of subpart A of this part.

(iii) The requirements in §63.6(i)(8) through (i)(14) of subpart A of this part will govern the review and approval of requests for extensions of compliance with this subpart.

(b) Each owner or operator of an existing or new source subject to the provisions of this subpart shall submit a written Initial Notification to the Administrator, containing the information described in paragraph (b)(1), according to the schedule in paragraph (b)(2) of this section. The Initial Notification provisions in §63.9(b)(1) through (b)(3) of subpart A of this part shall not apply to owners or operators of sources subject to this subpart.

(1) The Initial Notification shall include the following information:

(i) The name and address of the owner or operator;

(ii) The address (physical location) of the affected source;

(iii) An identification of the chemical manufacturing processes subject to this subpart; and

(iv) A statement of whether the source can achieve compliance by the applicable compliance date specified in the subpart in 40 CFR part 63 that references this subpart.

(2) The Initial Notification shall be submitted according to the schedule in paragraph (b)(2)(i), (b)(2)(ii), or (b)(2)(iii) of this section, as applicable.

(i) For an existing source, the Initial Notification shall be submitted within 120 days after the date of promulgation of the subpart that references this subpart.

(ii) For a new source that has an initial start-up 90 days after the date of promulgation of this subpart or later, the application for approval of construction or reconstruction required by §63.5(d) of subpart A of this part shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references this subpart).

(iii) For a new source that has an initial start-up prior to 90 days after the date of promulgation of the applicable subpart, the Initial Notification shall be submitted within 90 days after the date of promulgation of the subpart that references this subpart.

(c) Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status within 90 days after the compliance dates specified in the subpart in 40 CFR part 63 that references this subpart, except as provided in paragraph (c)(4) of this section.

(1) The notification shall provide the information listed in paragraphs (c)(1)(i) through (c)(1)(iv) of this section for each process unit subject to the requirements of §63.163 through §63.174 of this subpart.

(i) Process unit identification.

(ii) Number of each equipment type (e.g., valves, pumps) excluding equipment in vacuum service.

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

(iv) Planned schedule for each phase of the requirements in §63.163 and §63.168 of this subpart.

(2) The notification shall provide the information listed in paragraphs (c)(2)(i) and (c)(2)(ii) of this section for each process unit subject to the requirements of §63.178(b) of this subpart.

(i) Batch products or product codes subject to the provisions of this subpart, and

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

(3) The notification shall provide the information listed in paragraphs (c)(3)(i) and (c)(3)(ii) of this section for each process unit subject to the requirements in §63.179 of this subpart.

(i) Process unit identification.

(ii) 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 §63.172 of this subpart.

(4) For existing sources subject to subpart F of this part, the Notification of Compliance Status shall be submitted for the group of process units with the earliest compliance date specified in §63.100(k) of subpart F of this part, by no later than 90 days after the compliance date for that group. The Notification of Compliance Status for each subsequent group shall be submitted as part of the first periodic report that is due not less than 90 days after the compliance date for that group.

(d) The owner or operator of a source subject to this subpart shall submit Periodic Reports.

(1) A report containing the information in paragraphs (d)(2), (d)(3), and (d)(4) of this section shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in paragraph (c) of this section. The first periodic report shall cover the first 6 months after the compliance date specified in §63.100(k)(3) of subpart F. Each subsequent periodic report shall cover the 6 month period following the preceding period.

(2) For each process unit complying with the provisions of §63.163 through §63.174 of this subpart, the summary information listed in paragraphs (i) through (xvi) of this paragraph for each monitoring period during the 6-month period.

(i) The number of valves for which leaks were detected as described in §63.168(b) of this subpart, the percent leakers, and the total number of valves monitored;

(ii) The number of valves for which leaks were not repaired as required in §63.168(f) of this subpart, identifying the number of those that are determined nonrepairable;

(iii) The number of pumps for which leaks were detected as described in §63.163(b) of this subpart, the percent leakers, and the total number of pumps monitored;

(iv) The number of pumps for which leaks were not repaired as required in §63.163(c) of this subpart;

(v) The number of compressors for which leaks were detected as described in §63.164(f) of this subpart;

(vi) The number of compressors for which leaks were not repaired as required in §63.164(g) of this subpart;

(vii) The number of agitators for which leaks were detected as described in §63.173(a) and (b) of this subpart;

(viii) The number of agitators for which leaks were not repaired as required in §63.173(c) of this subpart;

(ix) The number of connectors for which leaks were detected as described in §63.174(a) of this subpart, the percent of connectors leaking, and the

total number of connectors monitored;

(x) [Reserved]

(xi) The number of connectors for which leaks were not repaired as required in §63.174(d) of this subpart, identifying the number of those that are determined nonrepairable;

(xii) [Reserved]

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

(xiv) The results of all monitoring to show compliance with §§63.164(i), 63.165(a), and 63.172(f) of this subpart conducted within the semiannual reporting period.

(xv) If applicable, the initiation of a monthly monitoring program under §63.168(d)(1)(i) of this subpart, or a quality improvement program under either §§63.175 or 63.176 of this subpart.

(xvi) If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of this subpart.

(xvii) If applicable, the compliance option that has been selected under §63.172(n).

(3) For owners or operators electing to meet the requirements of §63.178(b) of this subpart, the report shall include the information listed in paragraphs (i) through (v) of this paragraph for each process unit.

(i) Batch product process equipment train identification;

(ii) The number of pressure tests conducted;

(iii) The number of pressure tests where the equipment train failed the pressure test;

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

(v) The results of all monitoring to determine compliance with §63.172(f) of this subpart.

(4) The information listed in paragraph (c) of this section for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

V. Testing Requirements

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

   a. Emission Limitation: Organic compound emissions shall not exceed 1.27 tons per year.

      Applicable Compliance Method: Compliance with the annual allowable organic compound emissions limit shall be determined by the following worst case calculation

      L , in lbs per 1000 gallons of liquid loaded, = 12.46 (SPM)/T where

      T= temperature of bulk liquid loaded, in Rankin, which equals 511.42;
      S= saturation factor, which equals 1 as per AP-42, table 5.2-1;
      P= true vapor pressure of liquid loaded, in lbs per square inch absolute, which equals 1.1254; and
      M = molecular weight of vapors, in pounds per pound mole, which equals 32.04 per AP-42, table 7.1-3

      L = 0.88 lbs OC/1000 gallons of liquid loaded

      The Vapor Balance Collection control efficiency of 90% is then applied to the product of the
      uncontrolled emission factor 0.88 lbs OC/1000 gallons of liquid loaded times the maximum annual loading rate, which results in an annual emission rate of 0.88 tons of OC. A return vapor loss of 0.4 tons from the condensers is then added to derive the total annual organic compound emission rate of 1.27 tons per year, based upon a maximum annual throughput of 20 million gallons. The Vapor Balance Collection control efficiency of 90% is based upon AP-42 Section 5.2.2.1-1.

   b. Emission Limitation: Organic compound emissions shall not exceed 3.07 pounds per hour.

      Applicable Compliance Method: Compliance with the hourly allowable organic compound emissions limit shall be determined by the above worst case calculation and a maximum hourly throughput of 35,000 gallons.

2. [§ 63.128] Transfer operations provisions—test methods and procedures.

   (c) An owner or operator is not required to conduct a performance test when any of the conditions specified in paragraphs (c)(1) through (c)(7) of this section are met.
   (1) When a boiler or process heater with a design heat input capacity of 44 megawatts or greater is used.

(2) When a boiler or process heater burning hazardous waste is used for which the owner or operator:

(i) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(ii) Has certified compliance with the interim status requirements of 40 CFR part 266 subpart H.

(3) When emissions are routed to a fuel gas system or when a boiler or process heater is used and the vent stream is introduced with the primary fuel.

(4) When a vapor balancing system is used.

(5) When emissions are recycled to a chemical manufacturing process unit.

(6) When a transfer rack transfers less than 11.8 million liters per year and the owner or operator complies with the requirements in paragraph (h) of this section or uses a flare to comply with §63.126(b)(2) of this subpart.

(7) When a hazardous waste incinerator is used for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements 40 CFR part 265, subpart O.

3. [§ 63.180] Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Monitoring, as required under this subpart, shall comply with the following requirements:

(1) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A.

(2) (i) Except as provided for in paragraph (b)(2)(ii) of this section, 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.

(ii) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (b)(2)(i) of this section, 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 paragraph (b)(2)(i) of this section.

(3) 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.

(4) Calibration gases shall be:

(i) Zero air (less than 10 parts per million of hydrocarbon in air); and

(ii) Mixtures of methane in air at the concentrations specified in paragraphs (b)(4)(ii)(A) through (b)(4)(ii)(C) of this section. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (b)(2)(i) of this section. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(A) For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 parts per million.

(B) For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million for agitators, 5,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(C) For Phase III, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps in food/medical service; 5,000 parts per million for pumps in polymerizing monomer service; 1,000 parts per million for all other pumps; and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(iii) 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 parts per million. 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 parts per million 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 parts per million. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(5) 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.

(6) Monitoring data that do not meet the criteria specified in paragraphs (b)(1) through (b)(5) of this section may be used to qualify for less frequent monitoring under the provisions in §63.168(d)(2) and (d)(3) or §63.174(b)(3)(ii) or (b)(3)(iii) of this subpart provided the data meet the conditions specified in paragraphs (b)(6)(i) and (b)(6)(ii) of this section.

(i) The data were obtained before April 22, 1994.

(ii) The departures from the criteria specified in paragraphs (b)(1) through (b)(5) of this section or from the specified monitoring frequency of §63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of paragraph (b)(2) of this section, or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

(c) When equipment is monitored for compliance as required in §§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 owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects to not adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (b)(1) through (b)(4) of this section. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (c)(1) through (c)(4) of this section.

(1) The requirements of paragraphs (b) (1) through (4) of this section shall apply.

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

(3) 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.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million

for determining compliance.

(d) (1) 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 an owner or operator 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.

(2) (i) An owner or operator may use good engineering judgment rather than the procedures in paragraph (d)(1) of this section to determine that the percent organic HAP content does not exceed 5 percent by weight. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (d)(1) of this section shall be used to resolve the disagreement.

(ii) Conversely, the owner or operator 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.

(3) If an owner or operator determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (d)(1) of this section, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(4) 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) When a flare is used to comply with §63.172(d), the owner or operator shall comply with paragraphs (e)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in §63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in §63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either §63.11(b)(7)(i) (and §63.11(b)(7)(iii), where applicable) or §63.11(b)(8), as appropriate.

(f) 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 §63.178(b)(3)(i) of this subpart.

(1) 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.

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

(3) 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:

where:

Δ? P/t=Change in pressure, psig/hr.

P_f=Final pressure, psig.

P_i=Initial pressure, psig.

t_f−-t_i=Elapsed time, hours.

(4) The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeter 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 owner or operator 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.

(5) An alternative procedure may be used for leak testing the equipment if the owner or operator demonstrates the alternative procedure is capable of detecting a pressure loss or rise.

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

(1) 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.

(2) 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.

(3) 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.

(4) An alternative procedure may be used for leak testing the equipment, if the owner or operator demonstrates the alternative procedure is capable of

detecting losses of fluid.

VI. Miscellaneous Requirements

1. [§ 63.110] Applicability.

(a) This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams, and in-process equipment subject to §63.149 within a source subject to subpart F of this part.

2.

Table 1A to Subpart G of Part 63—Applicable 40 CFR Part 63 General Provisions

40 CFR part 63, subpart A, provisions applicable to subpart G
§ 63.1(a)(1), (a)(2), (a)(3), (a)(13), (a)(14), (b)(2) and (c)(4)
§ 63.2
§ 63.5(a)(1), (a)(2), (b), (d)(1)(ii), (d)(3)(i), (d)(3)(iii) through (d)(3)(vi), (d)(4), (e), (f)(1), and (f)(2)
§ 63.6(a), (b)(3), (c)(5), (i)(1), (i)(2), (i)(4)(i)(A), (i)(5) through (i)(14), (i)(16) and (j)
§ 63.9(a)(2), (b)(4)(i)\a\, (b)(4)(ii), (b)(4)(iii), (b)(5)\a\, (c), (d)
§ 63.10(d)(4)
§ 63.12(b)

\a\ The notifications specified in § 63.9(b)(4)(i) and (b)(5) shall be submitted at the times specified in 40 CFR part 65.

3.

Table 7 to Subpart G of Part 63—Transfer Operations—Monitoring, Recordkeeping, and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic Hazardous Air Pollutants Emissions or a Limit of 20 Parts Per Million by Volume

Control device	Parameters to be monitored a	Recordkeeping and reporting requirements for monitored parameters
Thermal incinerator.....	Firebox temperature b [63.127(a)(1)(i)].	1. Continuous records c during loading. 2. Record and report the firebox temperature averaged over the full period of the performance test_NCS.d 3. Record the daily average firebox temperature for each operating day e

		4. Report daily average temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PRg
Catalytic incinerator.....	Temperature upstream and downstream of the catalyst bed [63.127(a)(1)(ii)].	1. Continuous records during loading. 2. Record and report the upstream and downstream temperatures and the temperature difference across the catalyst bed averaged over the full period of the performance test_NCS. 3. Record the daily average upstream temperature and temperature difference across catalyst bed for each operating day.e 4. Report all daily average upstream temperatures that are outside the range established in the NCS or operating permit_PR. 5. Report all daily average temperature differences across the catalyst bed that are outside the range established in the NCS or operating permit_PR. 6. Report all operating days when insufficient monitoring data are collected.f
Boiler or process heater with a design heat input capacity less than 44 megawatts and vent stream is not introduced with or as the primary fuel.	Firebox temperature b [63.127(a)(3)].	1. Continuous records during loading. 2. Record and report the firebox temperature averaged over the full period of the performance test_NCS. 3. Record the daily average firebox temperature for each operating day.e 4. Report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient data are collectedf_PR.
Flare.....	Presence of a flame at the pilot light [63.127(a)(2)].	1. Hourly records of whether the monitor was continuously operating and whether the pilot flame was continuously present during each hour. 2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination_NCS. 3. Record the times and durations of all periods when all pilot flames are absent or the monitor is not operating. 4. Report the duration of all periods when all pilot flames of a flare are absent_PR.
Scrubber for halogenated vent streams (Note: Controlled by a combustion device other than a flare).	pH of scrubber effluent [63.127(a)(4)(i)], and.	1. Continuous records during loading. 2. Record and report the pH of the scrubber effluent averaged over the full period of the performance test_NCS. 3. Record the daily average pH of the scrubber effluent for each operating day.e 4. Report all daily average pH values of the scrubber effluent that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PR.
	Scrubber liquid and gas flow rates [63.127(a)(4)(ii)].	1. Continuous records during loading of scrubber liquid flow rate. 2. Record and report the scrubber liquid/gas ratio averaged over the full period of the performance test_NCS. 3. Record the daily average scrubber liquid/gas ratio for each operating day.e 4. Report all daily average scrubber liquid/gas ratios that are outside the range established in the NCS or

		operating permit and all operating days when insufficient monitoring data are collected f_PR.
Absorber h.....	Exit temperature of the absorbing liquid [63.127(b)(1)], and.	1. Continuous records during loading. 2. Record and report the exit temperature of the absorbing liquid averaged over the full period of the performance test_NCS. 3. Record the daily average exit temperature of the absorbing liquid for each operating day.e 4. Report all daily average exit temperatures of the absorbing liquid that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PR.
	Exit specific gravity [63.127(b)(1)].	1. Continuous records during loading. 2. Record and report the exit specific gravity averaged over the full period of the performance test_NCS. 3. Record the daily average exit specific gravity for each operating day.e 4. Report all daily average exit specific gravity values that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PR.
Condenser h.....	Exit (product side) temperature [63.127(b)(2)].	1. Continuous records during loading. 2. Record and report the exit temperature averaged over the full period of the performance test_NCS. 3. Record the daily average exit temperature for each operating day.e 4. Report all daily average exit temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PR.
Carbon adsorberh.....	Total regeneration stream mass or volumetric or volumetric flow during carbon bed regeneration cycle(s) [63.127(b)(3)], and.	1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the performance test_NCS. 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collectedf_PR.
	Temperature of the carbon bed after regeneration [and within 15 minutes of completing any cooling cycle(s)] [63.127(b)(3)].	1. Records of the temperature of the carbon bed after each regeneration. 2. Record and report the temperature of the carbon bed after each regeneration during the period of the performance test_NCS. 3. Report all the carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration is outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collectedf_PR.
All recovery devices (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device [63.127(b)].	1. Continuous records during loading. 2. Record and report the concentration level or reading averaged over the full period of the performance test_NCS.

		3. Record the daily average concentration level or reading for each operating day.d 4. Report all daily average concentration levels or readings that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected f_PR.
All control devices and vapor balancing systems.	Presence of flow diverted to the atmosphere from the control device [63.127(d)(1)] or.	1. Hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour. 2. Record and report the duration of all periods when the vent stream is diverted through a bypass line or the monitor is not operating_PR.
	Monthly inspections of sealed valves [63.127(d)(2)].	1. Records that monthly inspections were performed. 2. Record and report all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

a Regulatory citations are listed in brackets.
b Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.
c ``Continuous records'' is defined in § 63.111 of this subpart.
d NCS = Notification of Compliance Status described in § 63.152 of this subpart.
e The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.
f The periodic reports shall include the duration of periods when monitoring data are not collected for each excursion as defined in § 63.152(c)(2)(ii)(A) of this subpart.
g PR = Periodic Reports described in § 63.152 of this subpart.
h Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table under ``All Recovery Devices.''

4.

Table 4 to Subpart H of Part 63—Applicable 40 CFR Part 63 General Provisions

40 CFR part 63, subpart A, provisions applicable to subpart H
§ 63.1(a)(1), (a)(2), (a)(3), (a)(13), (a)(14), (b)(2) and (c)(4)
§ 63.2
§ 63.5(a)(1), (a)(2), (b), (d)(1)(ii), (d)(4), (e), (f)(1) and (f)(2)
§ 63.6(a), (b)(3), (c)(5), (i)(1), (i)(2), (i)(4)(i)(A), (i)(5) through (i)(14), (i)(16) and (j)
§ 63.9(a)(2), (b)(4)(i)\a\, (b)(4)(ii), (b)(4)(iii), (b)(5)a, (c) and (d)
§ 63.10(d)(4)
§ 63.12(b)

\a\ The notifications specified in § 63.9(b)(4)(i) and (b)(5) shall be submitted at the times specified in 40 CFR part 65.

Emissions Unit ID: **J001**

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
J001 - Loading Rack	None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: P001

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
P001 - Methanol production process made up of a 147 mmBTU/hr Reformer heating Unit, Reformer/Steam system, Reactor vessel and purifier.	OAC rule 3745-31-05(A)(3)

		Applicable Emissions Limitations/Control Measures
	40 CFR Part 63, Subpart A 40 CFR Part 63, Subpart DDDDD	Particulate emissions from the reformer stack shall not exceed 2.4 pounds per hour and 10.5 tons per year. Sulfur dioxide emissions from the reformer stack shall not exceed 0.02 pound per hour and 0.088 ton per year.
	40 CFR Part 60, Subpart F, G and H	Nitrogen Oxides emissions from the reformer stack shall not exceed 15.8 pounds per hour and 69.2 tons per year.
	40 CFR Part 60, Subpart VV 40 CFR Part 60, Subpart NNN	Nitrogen Oxides emissions from the reformer stack shall not exceed 70 PPM by volume, corrected to 3% oxygen.
	40 CFR Part 60, Subpart RRR	Carbon monoxide emissions from the reformer stack shall not exceed 11.05 pounds per hour and 48.4 tons per year.
	OAC rule 3745-21-09(DD) OAC rule 3745-18-06	Carbon monoxide emissions from the reformer stack shall not exceed 75 PPM by volume, corrected to 3% oxygen
OAC rule 3745-17-07(A) 40 CFR Part 60, Subpart Db		Lead emissions from the reformer stack shall not exceed 0.000079 pound per hour and 0.0003 ton per year. Arsenic emissions from the reformer stack shall not exceed 0.000032 pound per hour and 0.00014 ton per year.
OAC rule 3745-21-08(B) OAC rule 3745-23-06(B) OAC rule 3745-17-10(B)(1)		Beryllium emissions from the reformer stack shall not exceed 0.000002 pound per hour and 0.000009 ton per year. Cadmium emissions from the reformer

stack shall not exceed 0.000174 pound per hour and 0.0008 ton per year. Chromium emissions from the reformer stack shall not exceed 0.000221 pound per hour and 0.001 ton per year. Manganese emissions from the reformer stack shall not exceed 0.00006 pound per hour and 0.00026 ton per year. Mercury emissions from the reformer stack shall not exceed 0.000041 pound per hour and 0.00018 ton per year. Nickel emissions from the reformer stack shall not exceed 0.000332 pound per hour and 0.0015 ton per year. Selenium emissions from the reformer stack shall not exceed 0.000004 pound per hour and 0.000018 ton per year. Organic compound emissions from the reformer stack shall not exceed 4.75 pounds per hour and 20.8 tons per year.	Organic compound emissions from the De aerator shall not exceed 0.536 pound per hour and 2.35 tons per year. Carbon monoxide emissions from the De aerator shall not exceed 0.6 pound per hour and 2.63 tons per year. Fugitive Organic compound emissions shall not exceed 0.0345 pound per hour and 0.151 ton per year. Visible particulate emissions from the reformer stack shall not exceed 10% opacity. Compliance with this rule also includes compliance with the requirements of OAC rule 3745-21-09(DD) and 40 CFR Part 63, Subparts F, G, and H, and 40 CFR Part 60, Subparts NNN, VV, and RRR. The emission limitations specified by this rule are equivalent to or less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.a and A.I.2.r below. The emission limitations established pursuant to OAC rule	3745-31-05(A)(3) are more stringent than the emission limitations established by this rule. See section A.I.2.b below. The emission limitations specified by this rule are equivalent to or less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3). See section Part II, A.5. See sections A.I.2.c - A.I.2.e below. See section A.I.2.j below. See section A.I.2.f - A.I.2.i below. See section A.I.2.m - A.I.2.p below. See section A.I.2.k below. See section A.I.2.l below.

Emissions Unit ID: P001

2. Additional Terms and Conditions

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

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

2.b This emissions unit is subject to the applicable provisions of the National Emission Standards for Hazardous Air pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 63 are also federally enforceable.

2.c The equipment within this chemical manufacturing process unit which is subject to the requirements of sections A.1 and A.2 of Part II - Specific Facility Terms and Conditions is listed below. This represents the emissions unit at the time of permit issuance and is listed for general reference purposes only.

Source Type	Egress Points	Component Equipment
Group 1 Process Vents:	Heater firebox Atmosphere	V-432, V430, V404, V-433, V-106
Group 1 Process Vents:	Fuel gas system	V-204,V-205, R-201
Group 1 Storage Vessels:	Condenser Atmosphere	TK-253, TK-254, TK-255 TK-252
Group 1 Transfer Racks:	Vapor balance/condenser Atmosphere	Methanol Loading Rack Fusel Oil Loading Rack
Surge Control Vessels:	Landfill Flare	TK 251
Bottoms Receiver Tanks:	Landfill Flare	TK 251
Group 1 Wastewater Streams: None		
Group 2 Wastewater Streams: Blow Down Drum		V-108, V-107,

V-203

Heat Exchangers:	None	Non-tower cooling system
Drain Hubs:	None	

2.d In accordance with section A.3 of Part II - Facility Specific Terms and Conditions, the permittee shall maintain a leak detection and repair (LDAR) program for equipment in organic hazardous air pollutant (HAP) service within this emissions unit.

The leak detection and repair program pertains to any type of pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic HAP service within this emissions unit.

2.e In accordance with section A.2.c.ii of Part II - Specific Facility Terms and Conditions, for all Group 1 process vent streams, the emissions of total organic HAPs shall be sent to a fuel gas system, or shall be reduced by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. The emission reduction or concentration shall be calculated on a dry basis, corrected to 3% oxygen.

2.f The requirements of 40 CFR Part 60, Subpart NNN applies to the following distillation units and associated recovery equipment within this process unit, except those distillation units which have Group 1 process vents as defined in 40 CFR Part 63 Section 111.:

Egress Point	Distillation Column, Recovery Device (equipment number)
Heater Firebox	V-430, through V-432
Heater Firebox	V-433, through V-404
Atmosphere	V-106

2.g [40 CFR 60.660(c)(6)]
The equipment subject to 40 CFR Part 60, Subpart NNN that have a vent stream flow rate less than 0.008 standard cubic meter per minute are exempt from the requirements of 40 CFR Part 60, Subpart NNN except for the requirements specified in 60.664(g) and 60.665(i), 60.665(l)(5), and 60.665(o). In accordance

with the permittee's permit application, the following distillation columns have a flow rate less than 0.008 standard cubic meter per minute: none.

2.h [40 CFR 60.662]
The equipment subject to 40 CFR Part 60, Subpart NNN with a TRE index of less than 8.0 and a flow rate greater than 0.008 standard cubic meter per minute shall comply with one of the following:

i. reduce the emissions of total organic compounds (TOC) by 98%, by weight, or to a concentration of 20 ppmv TOC, on a dry basis corrected to 3% oxygen;

ii. combust the emissions in a flare that meets the requirements of 40 CFR 60.18; or

iii. maintain a TRE index value greater than 1.0 without the use of VOC emission control devices.

2.i [40 CFR 60.660(c)(4)]
The equipment subject to 40 CFR Part 60, NNN that have a total resource effectiveness (TRE) index value of greater than 8.0 are exempt from the requirements of 40 CFR Part 60, Subpart NNN except for the requirements specified in 60.662, 60.664(d), 60.664(e), and 60.664(f), 60.665(h), and 60.665(l). In accordance with the permittee's permit application, the following distillation columns have a TRE index value greater than 8.0: none.

2.j In accordance with 40 CFR Part 60, Subpart VV, the permittee shall maintain a LDAR program for equipment in volatile organic compound (VOC) service within this emissions unit.

The leak detection and repair program pertains to any type of pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in volatile organic compound service within this emissions unit.

For equipment which is subject to the provisions of 40 CFR Part 60, Subpart VV and is also subject to section A.3 of Part II - Specific Facility Terms and Conditions, the permittee is required only to comply with section A.3 of Part II - Specific Facility Terms and Conditions. The provisions in 40 CFR 63.1(a)(3) of Subpart A do not alter the provisions in this section.

For equipment in VOC service which is subject to 40 CFR Part 60, Subpart VV but is not subject to section A.3 of Part II - Specific Facility Terms and

Conditions, the permittee has elected to apply section A.3 of Part II - Specific Facility Terms and Conditions to all such equipment in the process unit, in accordance with section A.3.d of Part II - Specific Facility Terms and Conditions. All VOC in such equipment shall be considered, for purposes of applicability and compliance with section A.3 of Part II - Specific Facility Terms and Conditions as if it were organic HAP. Compliance with the provisions of section A.3 of Part II - Specific Facility Terms and Conditions, in the manner described in this section, shall be deemed to constitute compliance with 40 CFR Part 60, Subpart VV.

2.k In accordance with OAC rule 3745-21-09(DD), the permittee shall maintain a LDAR program for equipment in VOC service within this emissions unit.

In lieu of complying with the requirements specified in paragraphs (DD)(2) to (DD)(10) of OAC rule 3745-21-09(DD), the permittee shall comply with the equivalent requirement outlined in section A.3 of Part II - Specific Facility Terms and Conditions.

2.l The process heater is fueled with purified methane gas and process vent gas only and has no process weight as defined in OAC rule 3745-18-01(B)(13). Therefore, this emissions unit is exempt from the emission limitation established in OAC rule 3745-18-06(E).

2.m The requirements of 40 CFR Part 60, Subpart RRR applies to the following reactor processes and associated recovery equipment within this process unit, except those distillation units which have Group 1 process vents as defined in 40 CFR Part 63 Section 111.:

Egress Point	Methanol Sysnthesis Reactor (equipment number)
Fuel Gas System and Heater Primary Burners to Atmosphere	R-201, through V-204 and V-205

2.n [40 CFR 60.700(c)(4)]
The equipment subject to 40 CFR Part 60, Subpart RRR that have a vent stream flow rate less than 0.011 standard cubic meter per minute are exempt from the requirements of 40 CFR Part 60, Subpart RRR except for the requirements specified in 60.704(g) and 60.705(h), 60.705(l)(4), and 60.705(o). In accordance with the permittee's permit application, the following distillation

columns have a flow rate less than 0.011 standard cubic meter per minute: none.

2.o [40 CFR 60.702]
The equipment subject to 40 CFR Part 60, Subpart RRR with a TRE index of less than 8.0 and a flow rate greater than 0.011 standard cubic meter per minute shall comply with one of the following:

i. reduce the emissions of total organic compounds (TOC) by 98%, by weight, or to a concentration of 20 ppmv TOC, on a dry basis corrected to 3% oxygen;

ii. combust the emissions in a flare that meets the requirements of 40 CFR 60.18; or

iii. maintain a TRE index value greater than 1.0 without the use of VOC emission control devices.

2.p [40 CFR 60.700(c)(2)]
The equipment subject to 40 CFR Part 60, RRR that have a total resource effectiveness (TRE) index value of greater than 8.0 are exempt from the requirements of 40 CFR Part 60, Subpart RRR except for the requirements specified in 60.702(c), 60.704(d), 60.704(e), and 60.704(f), 60.705(g), and 60.665(l)(1), (l)(6) and (t). In accordance with the permittee's permit application, the following distillation columns have a TRE index value greater than 8.0: none.

2.q The permittee shall develop and implement a Startup, Shutdown and Malfunction (SSM) plan in accordance with 40 CFR Part 63.7505(e).

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

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall operate low NOx burners and employ flue gas re-circulation at all times this emissions unit is in operation.

2. The permittee shall install, operate and maintain equipment to continuously monitor

and record the opacity of the particulate emissions from this emissions unit .

3. The permittee shall install, operate and maintain equipment to continuously monitor and record the NOx emissions from this emissions unit.

4. The permittee shall install, operate and maintain equipment to continuously monitor and record the CO emissions from this emissions unit.

5. The permittee shall burn only process vent gases from the methanol synthesis reactor (R-201) and from the crude methanol distillation units (V-430 and V-433) and/or purified methane gas in the reformer reactor heaters (R101A and R101B).

6. Each surge control vessel or bottoms receiver tank that meets one of the conditions listed in section A.3.q of Part II - Specific Facility Terms and Conditions shall be equipped with a closed vent system that routes the organic vapors from the surge control vessel or bottoms receiver tank back to the process or to a control device that complies with the requirements of section A.3.s of Part II - Specific Facility Terms and Conditions or shall be equipped with a fixed roof and an internal floating roof or an external floating roof.

   In accordance with the permittee's permit application, the following surge control vessels and bottoms receiver tanks, do not exceed the threshold triggers of A.3.q.i through A.3.q.iv of Part II - Specific Facility Terms and Conditions. Therefore, these vessels are not required to meet the conditions listed in section A.3.q of Part II - Specific Facility Terms and Conditions at the time of permit issuance: none

7. In accordance with the permittee's permit application, the permittee has committed to route the organic vapors from Group 1 process vents from this emissions unit to process heaters (R-101A and R101B) in order to comply with the percent reduction requirement or concentration limit specified in section A.2.c.ii of Part II - Specific Facility Terms and Conditions. The minimum firebox temperature of the process heaters shall be no lower than the temperature observed during the most recent compliance demonstration that demonstrated compliance with the allowable emission limits.

8. The permittee shall operate according to the SSM plan during periods of SSM in accordance with 40 CFR Part 63.7540(c).

III. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P001

1. For each day during which the permittee burns a fuel other than purified methane gas the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. The permittee shall collect and record the following information for the purpose of determining annual mass emissions:

   a. the amounts of purified methane gas used (in million cubic feet);

   b. the annual emissions of each pollutant listed in term A.I.1 emitted from this emissions unit, in tons.

3. The permittee shall properly operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

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

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

4. Within 180 days of startup of this emissions unit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that the requirements specified in section 8 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

5. The permittee shall properly operate and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of the applicable standard(s) when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. Each continuous monitoring system consists of all the equipment used to

acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the Ohio EPA that the continuous NOx monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous NOx monitoring system: emissions of NOx in PPM by volume, corrected to 3% oxygen, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

6. Within 180 days of startup of this emissions unit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

7. The permittee shall properly operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit, in units of the applicable standard(s) when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

   The permittee shall maintain on-site documentation from the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

   The permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in PPM by volume, corrected to 3% oxygen, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. Within 180 days of startup of this emissions unit, the permittee shall develop a written

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

9. Monitoring for the LDAR program shall comply with Method 21 of 40 CFR Part 60, Appendix A, as specified in section A.3.za of Part II - Specific Facility Terms and Conditions.

   The permittee shall maintain records for the LDAR program in accordance with the requirements of section A.3.zb of Part II - Specific Facility Terms and Conditions.

10. The permittee shall maintain a temperature monitoring device, equipped with a continuous recorder, in the firebox of the reformer reactor heaters (R101A and R101B) in accordance with the requirements of section A.2.d.i of Part II - Specific Facility Terms and Conditions.

    The permittee shall maintain records of the reformer reactor heaters (R101A and R101B) firebox temperature in accordance with section A.2.h.i of Part II - Specific Facility Terms and Conditions.

11. The permittee shall monitor any bypass line(s) that could divert a vent stream away from the reformer reactor heaters (R101A and R101B) in accordance with section A.2.d.iv of Part II - Specific Facility Terms and Conditions. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to section A.2.d.iv of Part II - Specific Facility Terms and Conditions.

    a. Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in section A.2.h.i.(3) of Part II - Specific Facility Terms and Conditions. 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 non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

    The permittee shall maintain records of the flow indicator requirements for bypass lines that could divert a vent stream away from the reformer reactor heaters (R101A and R101B) in accordance with sections A.2.h.i.(3) and A.2.h.i.(4) of Part II - Specific Facility Terms and Conditions.

12. Whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent, the permittee shall recalculate the TRE index value, flow, or organic HAP concentration as necessary to determine if the vent is Group 1 or Group 2 in accordance with section A.2.e.v of Part II - Specific Facility Terms and Conditions.

    The permittee shall maintain records of process vent group determinations in accordance with sections A.2.g, A.2.h.iii, A.2.h.iv, and A.2.h.v of Part II - Specific Facility Terms and Conditions.

13. For each Group 2 process wastewater stream, the permittee shall comply with the record keeping requirements of section A.2.x.vi of Part II - Specific Facility Terms and Conditions.

14. The permittee shall maintain procedures for the management of maintenance wastewater in accordance with section A.1.o of Part II - Specific Facility Terms and Conditions.

15. [40 CFR 60.664(h)]
    The permittee shall use Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A for determination of the flow rate to demonstrate compliance with 40 CFR 60.660(c)(6).

16. [40 CFR 60.665(i)]
    The permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.660(c)(6):

    a. that the vent stream flow rate is less than 0.008 standard cubic meter per minute; and

    b. any change in equipment or process operation that increases the vent stream flow rate including a measurement of the new vent stream flow rate.

17. For each day during which the permittee burns a fuel other than process vent gases and/or purified methane gas in the reformer reactor heaters (R101A and R101B), the permittee shall maintain a record of the type and quantity of fuel burned.

18. [Subpart NNN § 60.663(c) Monitoring of emissions and operations.]
The owner or operator of an affected facility that uses a boiler or process heater to seek to comply with §60.662(a) shall install, calibrate, maintain and operate according to the manufacturer's specifications the following equipment:

    a. A flow indicator that provides a record of vent stream flow to the boiler or process heater at least once every hour for each affected facility. The flow indicator shall be installed in the vent stream from each distillation unit within an affected facility at a point closest to the inlet of each boiler or process heater and before being joined with any other vent stream.

    b. A temperature monitoring device in the firebox equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 °C, whichever is greater, for boilers or process heaters of less than 44 MW (150 million Btu/hr) heat input design capacity.

19. [Subpart RRR § 60.703 Monitoring of emissions and operations.]

    a. The owner or operator of an affected facility that uses a boiler or process heater to seek to comply with §60.702(a) shall install, calibrate, maintain and operate according to the manufacturer's specifications the following equipment:

        (1) A flow indicator that provides a record of vent stream flow diverted from being routed to the boiler or process heater at least once every 15 minutes for each affected facility, except as provided in paragraph (c)(1)(ii) of this section.

            (i) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream from being routed to the boiler or process heater, resulting in its emission to the atmosphere.

            (ii) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required. 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.

        (2) A temperature monitoring device in the firebox equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.5 °C, whichever is greater, for boilers or process heaters of less than 44 MW (150 million Btu/hr) design heat input capacity. Any vent stream introduced with primary fuel into a boiler or process heater is exempt from

this requirement.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than purified methane gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting all instances of opacity valued in excess of the limitations specified above, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each one-minute block average above the applicable opacity limitation(s).

   The reports shall also identify any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions until and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.
   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

   These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective action(s) taken (if any), of all NOx values in excess of the applicable NOx emission rate (PPM).

   The reports shall also identify any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s)

taken for each time period of emissions until and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. The permittee shall submit annual reports that specify the total particulate, SO2, VOC, NOx and CO emissions and purified methane gas usages for this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

5. The permittee shall submit semi-annual reports for the LDAR program for equipment in accordance with the requirements of section A.3.zc.iv of Part II - Specific Facility Terms and Conditions.

6. Reports required by sections A.1, A.2, and A.3 of Part II - Specific Facility Terms and Conditions shall be submitted to USEPA Region 5, with a copy to the Central District Office, in accordance with section A.1.m.iii of Part II - Specific Facility Terms and Conditions.

7. The permittee shall submit Periodic Reports in accordance with section A.2.zb.iii of Part II - Specific Facility Terms and Conditions. The Periodic Reports shall be submitted semi-annually no later than 60 calendar days after the end of each 6-month period. The reports shall include all information specified in A.2.g and A.2.h of Part II - Specific Facility Terms and Conditions for process vents, all information specified in A.2.w of Part II - Specific Facility Terms and Conditions for process wastewater, including reports of periods when monitored parameters are outside their established ranges (process heater firebox temperature and bypass line flow measurements).

8. The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.10(d)(5) and section A.2.zb.iv of Part II - Specific Facility Terms and Conditions. The semi-annual start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under

A.3.zb.iii of Part II - Specific Facility Terms and Conditions instead of the schedule specified in 40 CFR 63.10(d)(5).

9. Whenever the recalculations (performed whenever process changes are made that could reasonably be expected to change a Group 2 process vent to a Group 1 process vent) determine one of the criteria below have been met, the permittee shall submit a report as specified in A.2.h.vii through A.2.h.x of Part II - Specific Facility Terms and Conditions and the permittee shall comply with the appropriate provisions in section A.2.c of Part II - Specific Facility Terms and Conditions by the dates specified in A.1 of Part II - Specific Facility Terms and Conditions.

   a. the recalculated TRE index value is less than or equal to 1.0;

   b. the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0;

   c. the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute; or

   d. the recalculated concentration is greater than or equal to 50 parts per million by volume.

10. The permittee shall submit reports of any fuels burned in the reformer reactor heaters (R101A and R101B) other than process vent gases and/or purified methane gas within thirty (30) days to the Ohio EPA, Central District Office, including the date, type, and amount of any such fuel burned.

11. [§ 60.665 (e)]
Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 MW (150 million Btu/hour) or greater to comply with §60.662(a) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State or Federal regulatory requirements.)

12. [§ 60.705 (c)(4)]

    For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under §60.702(a).

13. The permittee shall comply with the Notice of Compliance Status requirements in accordance with 40 CFR part 63.7545(e).

14. The permittee shall submit the required semi annual compliance reports in accordance with 40 CFR part 63.7550(c).

V. Testing Requirements

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

   Emission Limitations:

   Particulate emissions from the reformer stack shall not exceed 2.4 pounds per hour. Sulfur dioxide emissions from the reformer stack shall not exceed 0.02 pound per hour. Nitrogen Oxides emissions from the reformer stack shall not exceed 15.8 pounds per hour. Carbon monoxide emissions from the reformer stack shall not exceed 11.05 pounds per hour. Lead emissions from the reformer stack shall not exceed 0.000079 pound per hour.
   Arsenic emissions from the reformer stack shall not exceed 0.000032 pound per hour. Beryllium emissions from the reformer stack shall not exceed 0.000002 pound per hour. Cadmium emissions from the reformer stack shall not exceed 0.000174 pound per hour. Chromium emissions from the reformer stack shall not exceed 0.000221 pound per hour. Manganese emissions from the reformer stack shall not exceed 0.00006 pound per hour.
   Mercury emissions from the reformer stack shall not exceed 0.000041 pound per hour. Nickel emissions from the reformer stack shall not exceed 0.000332 pound per hour. Selenium emissions from the reformer stack shall not exceed 0.000004 pound per hour. Organic compound emissions from the reformer stack shall not exceed 4.75 pound per hour.

   Applicable Compliance Method:

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Metals, PM, VOC, CO, NOx and SO2.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

      For PM, Methods 1-5 of 40 CFR Part 60, Appendix A.

      For NOx, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

      For SO2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

For CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

For VOC, Methods 1-4 of 40 CFR Part 60, Appendix A and Method 320 of 40 CFR Part 63

For Metals, Methods 1-4 and 29 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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

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

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

e. Emission Limitations:

Particulate emissions from the reformer stack shall not exceed 10.5 tons per year.

Sulfur dioxide emissions from the reformer stack shall not exceed 0.088 ton per year. Lead emissions from the reformer stack shall not exceed 0.0003 ton per year.
Arsenic emissions from the reformer stack shall not exceed 0.00014 ton per year.
Beryllium emissions from the reformer stack shall not exceed 0.000009 ton per year. Cadmium emissions from the reformer stack shall not exceed 0.0008 ton per year. Chromium emissions from the reformer stack shall not exceed 0.001 ton per year. Manganese emissions from the reformer stack shall not exceed 0.00026 ton per year. Mercury emissions from the reformer stack shall not exceed 0.00018 ton per year.
Nickel emissions from the reformer stack shall not exceed 0.0015 ton per year. Selenium emissions from the reformer stack shall not exceed 0.000018 ton per year. Organic compound from the reformer stack emissions shall not exceed 20.8 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

2. Emission Limitation: Visible particulate emissions from the stack shall not exceed 10% opacity.

   Applicable Compliance Method: Compliance may be determined by data collected and recorded for the COM. Compliance shall be determined by visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

3. Emission Limitation: Nitrogen Oxides emissions from the reformer stack shall not exceed 69.2 tons per year.

   Applicable Compliance Method: Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM.

4. Emission Limitation: Carbon monoxide emissions from the reformer stack shall not exceed 48.4 tons per year.

   Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM.

5. Emission Limitation: Nitrogen Oxides emissions from the reformer stack shall not exceed 70.0 PPM by volume, corrected to 3% oxygen.

   Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM and by the NOx emissions testing required above.

6. Emission Limitation: Carbon monoxide emissions from the reformer stack shall not exceed 75.0 PPM by volume, corrected to 3% oxygen.

   Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM and by the CO emissions testing required above.

7. Emission Limitation: Organic compound emissions from the Deaerator shall not exceed 0.536 pound per hour .

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

   a.. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for organic compounds.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for VOC: Methods 1-4 and 18 of 40 CFR Part 60, Appendix A.

   d. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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

      Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and

information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

8. Emission Limitation: Organic compound emissions from the Deaerator shall not exceed 2.35 tons per year.

   Applicable Compliance Method: Compliance with the annual limitations shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

9. Emission Limitation: Fugitive Organic compound emissions shall not exceed 0.0345 pound per hour.

   Applicable Compliance Method: Compliance shall be determined in accordance with the calculations submitted with the permit to install application on October 5, 2005.

10. Emission Limitation: Fugitive Organic compound emissions shall not exceed 0.151 ton per year.

    Applicable Compliance Method: Compliance with the annual limitations shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

11. Emission Limitation: Carbon monoxide emissions from the Deaerator shall not exceed 0.6 pound per hour.

    Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

12. Emission Limitation: Carbon monoxide emissions from the Deaerator shall not exceed 2.63 tons per year.

    Applicable Compliance Method: Compliance with the annual limitations shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing

by 2000).

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
P001 - Methanol production process made up of a 147 mmBTU/hr Reformer heating Unit, Reformer/Steam system, Reactor vessel and purifier	None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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	Applicable Emissions Limitations/Control Measures
T001 - 50,000 gallon fixed roof methanol storage tank number 1 controlled by a condenser	OAC rule 3745-31-05(A)(3)	Volatile organic compound emissions shall not exceed 0.06 ton per year.
	40 CFR Part 63, Subparts F, G, and H	See section A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a This Group 1 storage vessel is subject to the provisions of 40 CFR Part 60, Subpart Kb but is required to comply only with 40 CFR Part 60, Subparts F, G and H.

2.b The closed vent system for storage tanks T001-T003 shall be designed to collect all VOC vapors and gases discharged from the storage vessels operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV.

In accordance with 40 CFR Part 60, Subpart VV, the permittee shall maintain a leak detection and repair (LDAR) program for equipment in volatile organic compound service within this emissions unit.

The leak detection and repair program pertains to any type of pump,

compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in volatile organic compound service within this emissions unit.

II. Operational Restrictions

1. The permittee shall control VOC emissions from this emissions unit through the use of a condenser with a minimum control efficiency of 95%.

2. [§ 63.119] Storage vessel provisions—reference control technology.

(a) For each storage vessel to which this subpart applies, the owner or operator shall comply with the requirements of paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section according to the schedule provisions of §63.100 of subpart F of this part.

(1) For each Group 1 storage vessel (as defined in table 5 of this subpart for existing sources and table 6 of the subpart for new sources) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the owner or operator shall reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in paragraph (b), (c), (d), (e), (f), or (g) of this section, or equivalent as provided in §63.121 of this subpart.

{Comment: 63.119(a)(2) was deleted, due to storage pressure being less than 11 psia.}
{Comment: 63.119(a)(3) and (4) were deleted, due to vessel size and material vapor pressure qualifying the storage vessel as Group 1.}
{Comment: 63.119(b) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.119(c) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.119(d) was deleted, due to the storage vessel not having a floating roof.}
(e) The owner or operator who elects to use a closed vent system and control device, as defined in §63.111 of this subpart, to comply with the requirements of paragraph (a)(1) or (a)(2) of this section shall comply with the requirements specified in paragraphs (e)(1) through (e)(5) of this section.

(1) Except as provided in paragraph (e)(2) of this section, the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of §63.11(b) of subpart A of this part.

(2) If the owner or operator can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater.

(3) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraph (e)(1) or (e)(2) of this section, as applicable, shall not exceed 240 hours per year.

(4) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during periods of planned routine maintenance.

(5) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during a control system malfunction.

(6) An owner or operator may use a combination of control devices to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(1) of this section. An owner or operator may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(2) of this section.
{Comment: 63.119(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}
{Comment: 63.119(g) was deleted, due to the storage vessel not being filled from railcars, tank truck or barges.}

3. [§ 63.120] Storage vessel provisions—procedures to determine compliance.

{Comment: 63.120(a), (b) and (c) were deleted, due to the storage vessel not having a floating roof.}

(d) To demonstrate compliance with §63.119(e) of this subpart (storage vessel equipped with a closed vent system and control device) using a control device other than a flare, the owner or operator shall comply with the requirements in paragraphs (d)(1) through (d)(7) of this section, except as provided in paragraph (d)(8) of this section.

(1) The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph (d)(1)(i) of this section, or submit the results of a performance test as described in paragraph (d)(1)(ii) of this

section.

(i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(E) of this section, as applicable.

(A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.

(B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in §63.119 (e)(1) or (e)(2), as applicable, documentation that those conditions exist is sufficient to meet the requirements of paragraph (d)(1)(i) of this section.

(C) Except as provided in paragraph (d)(1)(i)(B) of this section, for thermal incinerators, the design evaluation shall include the autoignition temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature.

(D) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.

(E) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.

(ii) If the control device used to comply with §63.119(e) of this subpart is also used to comply with §63.113(a)(2), §63.126(b)(1), or §63.139(c) of this subpart, the performance test required by §63.116(c), §63.128(a), or §63.139(d)(1) of this subpart is acceptable to demonstrate compliance with §63.119(e) of this subpart. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (d)(1)(i) of this section, if the performance tests meets the criteria specified in paragraphs (d)(1)(ii)(A) and (d)(1)(ii)(B) of this section.

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in §63.119 (e)(1) or (e)(2) of this subpart, as applicable; and

(B) The performance test is submitted as part of the Notification of Compliance Status required by §63.151(b) of this subpart.

(2) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.151 (b) of this subpart, a monitoring plan containing the information specified in paragraph (d)(2)(i) of this section and in either (d)(2)(ii) or (d)(2)(iii) of this section.

(i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and either

(ii) The documentation specified in paragraph (d)(1)(i) of this section, if the owner or operator elects to prepare a design evaluation; or

(iii) The information specified in paragraph (d)(2)(iii) (A) and (B) of this section if the owner or operator elects to submit the results of a performance test.

(A) Identification of the storage vessel and control device for which the performance test will be submitted, and

(B) Identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted.

(3) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraphs (d)(3)(i) and, if applicable, (d)(3)(ii) of this section.

(i) The operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained.

(ii) Results of the performance test described in paragraph (d)(1)(ii) of this section.

(4) The owner or operator shall demonstrate compliance with the requirements of §63.119(e)(3) of this subpart (planned routine maintenance of a control device, during which the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by §63.152(c) of this subpart the information specified in §63.122(g)(1) of this subpart.

(5) The owner or operator shall monitor the parameters specified in the Notification of Compliance Status required in §63.152(b) of this subpart or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status.

(6) Except as provided in paragraph (d)(7) of this section, each closed vent system shall be inspected as specified in §63.148 of this subpart. The initial and annual inspections required by §63.148(b) of this subpart shall be done during filling of the storage vessel.

(7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in §63.148 of this subpart.

(8) A design evaluation or performance test is not required, if the owner or operator uses a combustion device meeting the criteria in paragraph (d)(8)(i), (d)(8)(ii), (d)(8)(iii), or (d)(8)(iv) of this section.

(i) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(ii) A boiler or process heater burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(iv) A boiler or process heater into which the vent stream is introduced with the primary fuel.

{Comment: 63.120(e) was deleted, due to storage vessel emissions not being routed to a flare.}

{Comment: 63.120(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the record keeping requirements for group 2 storage

vessels of section A.2.i. of Part II - Specific Facility Terms and Conditions.

2. Monitoring for the LDAR program shall comply with Method 21 of 40 CFR Part 60, Appendix A, as specified in section A.3.za of Part II - Specific Facility Terms and Conditions.

   The permittee shall maintain records for the LDAR program in accordance with the requirements of section A.3.zb of Part II - Specific Facility Terms and Conditions.

3. [§ 63.123] Storage vessel provisions—recordkeeping.

   (a) Each owner or operator of a Group 1 vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

   (b) [Reserved]

   (f) An owner or operator who elects to comply with §63.119(e) of this subpart shall keep in a readily accessible location the records specified in paragraphs (f)(1) and (f)(2) of this section.

   (1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5) of this subpart.

   (2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to the planned routine maintenance. Such a record shall include the information specified in paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

   (i) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were not met at the beginning of the planned routine maintenance, and

   (ii) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were met at the conclusion of the planned routine maintenance.

   {Comment: 63.119(g) and 63.123(i) pertain only to storage vessels which are filled from railcars, tank trucks and barges.}

   (i) An owner or operator who elects to comply with §63.119(g) shall keep the records specified in paragraphs (i)(1) through (3) of this section.

   (1) A record of the U.S. Department of Transportation certification required by §63.119(g)(2).

   (2) A record of the pressure relief vent setting specified in §63.119(g)(5).

   (3) If complying with §63.119(g)(6)(ii), keep the records specified in paragraphs (i)(3)(i) and (ii) of this section.

(i) A record of the equipment to be used and the procedures to be followed when reloading the railcar, tank truck, or barge and displacing vapors to the storage tank from which the liquid originates.

(ii) A record of each time the vapor balancing system is used to comply with §63.119(g)(6)(ii).

IV. Reporting Requirements

1. [§ 63.122] Storage vessel provisions—reporting.

(a) For each Group 1 storage vessel, the owner or operator shall comply with the requirements of paragraphs (a)(1) through (a)(5) of this section.

(1) The owner or operator shall submit an Initial Notification as required by §63.151(b) of this subpart.

(2) [Reserved]

(3) The owner or operator shall submit a Notification of Compliance Status as required by §63.152(b) of this subpart and shall submit as part of the Notification of Compliance Status the information specified in paragraph (c) of this section.

(4) The owner or operator shall submit Periodic Reports as required by §63.152(c) of this subpart and shall submit as part of the Periodic Reports the information specified in paragraphs (d), (e), (f), and (g) of this section.

(5) The owner or operator shall submit, as applicable, other reports as required by §63.152(d) of this subpart, containing the information specified in paragraph (h) of this section.

(b) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in §63.120(d)(2)(i) of this subpart and the information specified in either §63.120(d)(2)(ii) of this subpart or §63.120(d)(2)(iii) of this subpart.

(c) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in either paragraph (c)(1) or (c)(2) of this section. An owner or operator who elects to comply with §63.119(f) of this subpart by routing emissions to a process or to a fuel gas system shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraph (c)(3) of this section.

(1) If a control device other than a flare is used, the owner or operator shall submit the information specified in §63.120(d)(3)(i) and, if applicable, (d)(3)(ii) of this subpart.

(2) If a flare is used, the owner or operator shall submit the information specified in §63.120(e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this subpart.

(3) If emissions are routed to a process, the owner or operator shall submit the information specified in §63.120(f). If emissions are routed to a fuel gas system,

the owner or operator shall submit a statement that the emission stream is connected to the fuel gas system and whether the conveyance system is subject to the requirements of §63.148.

{Comment: 63.122(d) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(e) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(f) was deleted, due to the storage vessel not having a floating roof.}
(g) An owner or operator who elects to comply with §63.119(e) of this subpart by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by §63.152(c) of this subpart, the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) As required by §63.120(d)(4) and §63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable.

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

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance.

(2) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(i) Identification of the control device for which the measured parameters were outside of the established ranges, and

(ii) Cause for the measured parameters to be outside of the established ranges.

{Comment: 63.122(h) was deleted, due to the storage vessel not having a floating roof.}

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
Emission Limitation**:**
VOC emissions shall not exceed 0.06 ton per year.

Emissions Unit ID: T001

Applicable Compliance Method:
VOC emissions due to standing and withdrawal losses from the storage tanks shall be determined using the most recent version of USEPA's "Tanks" program and the control efficiency of the condenser observed during the most recent compliance demonstration that demonstrated the emission unit was in compliance. Prior to the initial compliance demonstration, the controlled VOC emission rate shall be calculated based upon an assumed 95% overall control efficiency for the condenser.

VI. Miscellaneous Requirements

1. [§ 63.110 Applicability.]

(a) This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams, and in-process equipment subject to §63.149 within a source subject to subpart F of this part.

(b) *Overlap with other regulations for storage vessels.*

(1) A Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR part 60, subpart Kb is required to comply only with the provisions of this subpart.

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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
T001 - 50,000 gallon fixed roof methanol storage tank number 1 controlled by a condenser		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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	Applicable Emissions Limitations/Control Measures
T002 - 50,000 gallon fixed roof methanol storage tank number 2 controlled by a condenser	OAC rule 3745-31-05(A)(3)	Volatile organic compound emissions shall not exceed 0.06 ton per year.
	40 CFR Part 63, Subparts F, G, and H	See section A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a This Group 1 storage vessel is subject to the provisions of 40 CFR Part 60, Subpart Kb but is required to comply only with 40 CFR Part 60, Subparts F, G and H.

2.b The closed vent system for storage tanks T001-T003 shall be designed to collect all VOC vapors and gases discharged from the storage vessels operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV.

In accordance with 40 CFR Part 60, Subpart VV, the permittee shall maintain a leak detection and repair (LDAR) program for equipment in volatile organic compound service within this emissions unit.

The leak detection and repair program pertains to any type of pump,

compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in volatile organic compound service within this emissions unit.

Emissions Unit ID: T002

II. Operational Restrictions

1. The permittee shall control VOC emissions from this emissions unit through the use of a condenser with a minimum control efficiency of 95%.

2. [§ 63.119] Storage vessel provisions—reference control technology.

   (a) For each storage vessel to which this subpart applies, the owner or operator shall comply with the requirements of paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section according to the schedule provisions of §63.100 of subpart F of this part.

   (1) For each Group 1 storage vessel (as defined in table 5 of this subpart for existing sources and table 6 of the subpart for new sources) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the owner or operator shall reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in paragraph (b), (c), (d), (e), (f), or (g) of this section, or equivalent as provided in §63.121 of this subpart.

   {Comment: 63.119(a)(2) was deleted, due to storage pressure being less than 11 psia.}
   {Comment: 63.119(a)(3) and (4) were deleted, due to vessel size and material vapor pressure qualifying the storage vessel as Group 1.}
   {Comment: 63.119(b) was deleted, due to the storage vessel not having a floating roof.}
   {Comment: 63.119(c) was deleted, due to the storage vessel not having a floating roof.}
   {Comment: 63.119(d) was deleted, due to the storage vessel not having a floating roof.}
   (e) The owner or operator who elects to use a closed vent system and control device, as defined in §63.111 of this subpart, to comply with the requirements of paragraph (a)(1) or (a)(2) of this section shall comply with the requirements specified in paragraphs (e)(1) through (e)(5) of this section.

   (1) Except as provided in paragraph (e)(2) of this section, the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of §63.11(b) of subpart A of this part.

   (2) If the owner or operator can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent

or greater.

(3) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraph (e)(1) or (e)(2) of this section, as applicable, shall not exceed 240 hours per year.

(4) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during periods of planned routine maintenance.

(5) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during a control system malfunction.

(6) An owner or operator may use a combination of control devices to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(1) of this section. An owner or operator may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(2) of this section.
{Comment: 63.119(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}
{Comment: 63.119(g) was deleted, due to the storage vessel not being filled from railcars, tank truck or barges.}

3. [§ 63.120] Storage vessel provisions—procedures to determine compliance.

{Comment: 63.120(a), (b) and (c) were deleted, due to the storage vessel not having a floating roof.}

(d) To demonstrate compliance with §63.119(e) of this subpart (storage vessel equipped with a closed vent system and control device) using a control device other than a flare, the owner or operator shall comply with the requirements in paragraphs (d)(1) through (d)(7) of this section, except as provided in paragraph (d)(8) of this section.

(1) The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph (d)(1)(i) of this section, or submit the results of a performance test as described in paragraph (d)(1)(ii) of this section.

(i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(E) of this section, as applicable.

(A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject

to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.

(B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in §63.119 (e)(1) or (e)(2), as applicable, documentation that those conditions exist is sufficient to meet the requirements of paragraph (d)(1)(i) of this section.

(C) Except as provided in paragraph (d)(1)(i)(B) of this section, for thermal incinerators, the design evaluation shall include the autoignition temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature.

(D) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.

(E) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.

(ii) If the control device used to comply with §63.119(e) of this subpart is also used to comply with §63.113(a)(2), §63.126(b)(1), or §63.139(c) of this subpart, the performance test required by §63.116(c), §63.128(a), or §63.139(d)(1) of this subpart is acceptable to demonstrate compliance with §63.119(e) of this subpart. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (d)(1)(i) of this section, if the performance tests meets the criteria specified in paragraphs (d)(1)(ii)(A) and (d)(1)(ii)(B) of this section.

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in §63.119 (e)(1) or (e)(2) of this subpart, as applicable; and

(B) The performance test is submitted as part of the Notification of Compliance Status required by §63.151(b) of this subpart.

(2) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.151 (b) of this subpart, a monitoring plan containing the information specified in paragraph (d)(2)(i) of this section and in either (d)(2)(ii) or (d)(2)(iii) of this section.

(i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and either

(ii) The documentation specified in paragraph (d)(1)(i) of this section, if the owner or operator elects to prepare a design evaluation; or

(iii) The information specified in paragraph (d)(2)(iii) (A) and (B) of this section if the owner or operator elects to submit the results of a performance test.

(A) Identification of the storage vessel and control device for which the performance test will be submitted, and

(B) Identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted.

(3) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraphs (d)(3)(i) and, if applicable, (d)(3)(ii) of this section.

(i) The operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained.

(ii) Results of the performance test described in paragraph (d)(1)(ii) of this section.

(4) The owner or operator shall demonstrate compliance with the requirements of §63.119(e)(3) of this subpart (planned routine maintenance of a control device, during which the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by §63.152(c) of this subpart the information specified in §63.122(g)(1) of this subpart.

(5) The owner or operator shall monitor the parameters specified in the Notification of Compliance Status required in §63.152(b) of this subpart or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status.

(6) Except as provided in paragraph (d)(7) of this section, each closed vent

system shall be inspected as specified in §63.148 of this subpart. The initial and annual inspections required by §63.148(b) of this subpart shall be done during filling of the storage vessel.

(7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in §63.148 of this subpart.

(8) A design evaluation or performance test is not required, if the owner or operator uses a combustion device meeting the criteria in paragraph (d)(8)(i), (d)(8)(ii), (d)(8)(iii), or (d)(8)(iv) of this section.

(i) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(ii) A boiler or process heater burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(iv) A boiler or process heater into which the vent stream is introduced with the primary fuel.

{Comment: 63.120(e) was deleted, due to storage vessel emissions not being routed to a flare.}

{Comment: 63.120(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the record keeping requirements for group 2 storage vessels of section A.2.i. of Part II - Specific Facility Terms and Conditions.

2. Monitoring for the LDAR program shall comply with Method 21 of 40 CFR Part 60, Appendix A, as specified in section A.3.za of Part II - Specific Facility Terms and Conditions.

   The permittee shall maintain records for the LDAR program in accordance with the requirements of section A.3.zb of Part II - Specific Facility Terms and Conditions.

3. [§ 63.123] Storage vessel provisions—recordkeeping.

Emissions Unit ID: T002

(a) Each owner or operator of a Group 1 vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

(b) [Reserved]

(f) An owner or operator who elects to comply with §63.119(e) of this subpart shall keep in a readily accessible location the records specified in paragraphs (f)(1) and (f)(2) of this section.

(1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5) of this subpart.

(2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to the planned routine maintenance. Such a record shall include the information specified in paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

(i) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were not met at the beginning of the planned routine maintenance, and

(ii) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were met at the conclusion of the planned routine maintenance.

{Comment: 63.119(g) and 63.123(i) pertain only to storage vessels which are filled from railcars, tank trucks and barges.}

(i) An owner or operator who elects to comply with §63.119(g) shall keep the records specified in paragraphs (i)(1) through (3) of this section.

(1) A record of the U.S. Department of Transportation certification required by §63.119(g)(2).

(2) A record of the pressure relief vent setting specified in §63.119(g)(5).

(3) If complying with §63.119(g)(6)(ii), keep the records specified in paragraphs (i)(3)(i) and (ii) of this section.

(i) A record of the equipment to be used and the procedures to be followed when reloading the railcar, tank truck, or barge and displacing vapors to the storage tank from which the liquid originates.

(ii) A record of each time the vapor balancing system is used to comply with §63.119(g)(6)(ii).

IV. Reporting Requirements

1. [§ 63.122] Storage vessel provisions—reporting.

(a) For each Group 1 storage vessel, the owner or operator shall comply with the requirements of paragraphs (a)(1) through (a)(5) of this section.

(1) The owner or operator shall submit an Initial Notification as required by §63.151(b) of this subpart.

(2) [Reserved]

(3) The owner or operator shall submit a Notification of Compliance Status as required by §63.152(b) of this subpart and shall submit as part of the Notification of Compliance Status the information specified in paragraph (c) of this section.

(4) The owner or operator shall submit Periodic Reports as required by §63.152(c) of this subpart and shall submit as part of the Periodic Reports the information specified in paragraphs (d), (e), (f), and (g) of this section.

(5) The owner or operator shall submit, as applicable, other reports as required by §63.152(d) of this subpart, containing the information specified in paragraph (h) of this section.

(b) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in §63.120(d)(2)(i) of this subpart and the information specified in either §63.120(d)(2)(ii) of this subpart or §63.120(d)(2)(iii) of this subpart.

(c) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in either paragraph (c)(1) or (c)(2) of this section. An owner or operator who elects to comply with §63.119(f) of this subpart by routing emissions to a process or to a fuel gas system shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraph (c)(3) of this section.

(1) If a control device other than a flare is used, the owner or operator shall submit the information specified in §63.120(d)(3)(i) and, if applicable, (d)(3)(ii) of this subpart.

(2) If a flare is used, the owner or operator shall submit the information specified in §63.120(e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this subpart.

(3) If emissions are routed to a process, the owner or operator shall submit the information specified in §63.120(f). If emissions are routed to a fuel gas system,

the owner or operator shall submit a statement that the emission stream is connected to the fuel gas system and whether the conveyance system is subject to the requirements of §63.148.

{Comment: 63.122(d) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(e) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(f) was deleted, due to the storage vessel not having a floating roof.}

(g) An owner or operator who elects to comply with §63.119(e) of this subpart by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by §63.152(c) of this subpart, the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) As required by §63.120(d)(4) and §63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable.

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

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance.

(2) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(i) Identification of the control device for which the measured parameters were outside of the established ranges, and

(ii) Cause for the measured parameters to be outside of the established ranges.

{Comment: 63.122(h) was deleted, due to the storage vessel not having a floating roof.}

V. Testing Requirements

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

Emission Limitation**:**
VOC emissions shall not exceed 0.06 ton per year.

Applicable Compliance Method:
VOC emissions due to standing and withdrawal losses from the storage tanks shall be determined using the most recent version of USEPA's "Tanks" program and the control efficiency of the condenser observed during the most recent compliance demonstration that demonstrated the emission unit was in compliance. Prior to the initial compliance demonstration, the controlled VOC emission rate shall be calculated based upon an assumed 95% overall control efficiency for the condenser.

VI. Miscellaneous Requirements

1. [§ 63.110] Applicability.

(a) This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams, and in-process equipment subject to §63.149 within a source subject to subpart F of this part.

(b) *Overlap with other regulations for storage vessels.*

(1) A Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR part 60, subpart Kb is required to comply only with the provisions of this subpart.

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Emissions Unit ID: T002

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
T002 - 50,000 gallon fixed roof methanol storage tank number 2 controlled by a condenser		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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	Applicable Emissions Limitations/Control Measures
T003 - 50,000 gallon fixed roof methanol storage tank number 3 controlled by a condenser	OAC rule 3745-31-05(A)(3)	Volatile organic compound emissions shall not exceed 0.06 ton per year.
	40 CFR Part 63, Subparts F, G, and H	See section A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a This Group 1 storage vessel is subject to the provisions of 40 CFR Part 60, Subpart Kb but is required to comply only with 40 CFR Part 60, Subparts F, G and H.

2.b The closed vent system for storage tanks T001-T003 shall be designed to collect all VOC vapors and gases discharged from the storage vessels operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV.

In accordance with 40 CFR Part 60, Subpart VV, the permittee shall maintain a leak detection and repair (LDAR) program for equipment in volatile organic compound service within this emissions unit.

The leak detection and repair program pertains to any type of pump,

compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in volatile organic compound service within this emissions unit.

II. Operational Restrictions

1. The permittee shall control VOC emissions from this emissions unit through the use of a condenser with a minimum control efficiency of 95%.

2. [§ 63.119] Storage vessel provisions—reference control technology.

(a) For each storage vessel to which this subpart applies, the owner or operator shall comply with the requirements of paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section according to the schedule provisions of §63.100 of subpart F of this part.

(1) For each Group 1 storage vessel (as defined in table 5 of this subpart for existing sources and table 6 of the subpart for new sources) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the owner or operator shall reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, a closed vent system and control device, routing the emissions to a process or a fuel gas system, or vapor balancing in accordance with the requirements in paragraph (b), (c), (d), (e), (f), or (g) of this section, or equivalent as provided in §63.121 of this subpart.

{Comment: 63.119(a)(2) was deleted, due to storage pressure being less than 11 psia.}
{Comment: 63.119(a)(3) and (4) were deleted, due to vessel size and material vapor pressure qualifying the storage vessel as Group 1.}
{Comment: 63.119(b) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.119(c) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.119(d) was deleted, due to the storage vessel not having a floating roof.}
(e) The owner or operator who elects to use a closed vent system and control device, as defined in §63.111 of this subpart, to comply with the requirements of paragraph (a)(1) or (a)(2) of this section shall comply with the requirements specified in paragraphs (e)(1) through (e)(5) of this section.

(1) Except as provided in paragraph (e)(2) of this section, the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of §63.11(b) of subpart A of this part.

(2) If the owner or operator can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater.

(3) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraph (e)(1) or (e)(2) of this section, as applicable, shall not exceed 240 hours per year.

(4) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during periods of planned routine maintenance.

(5) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during a control system malfunction.

(6) An owner or operator may use a combination of control devices to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(1) of this section. An owner or operator may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(2) of this section.
{Comment: 63.119(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}
{Comment: 63.119(g) was deleted, due to the storage vessel not being filled from railcars, tank truck or barges.}

3. [§ 63.120] Storage vessel provisions—procedures to determine compliance.

{Comment: 63.120(a), (b) and (c) were deleted, due to the storage vessel not having a floating roof.}

(d) To demonstrate compliance with §63.119(e) of this subpart (storage vessel equipped with a closed vent system and control device) using a control device other than a flare, the owner or operator shall comply with the requirements in paragraphs (d)(1) through (d)(7) of this section, except as provided in paragraph (d)(8) of this section.

(1) The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph (d)(1)(i) of this section, or submit the results of a performance test as described in paragraph (d)(1)(ii) of this section.

(i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device,

including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(E) of this section, as applicable.

(A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.

(B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in §63.119 (e)(1) or (e)(2), as applicable, documentation that those conditions exist is sufficient to meet the requirements of paragraph (d)(1)(i) of this section.

(C) Except as provided in paragraph (d)(1)(i)(B) of this section, for thermal incinerators, the design evaluation shall include the autoignition temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature.

(D) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.

(E) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.

(ii) If the control device used to comply with §63.119(e) of this subpart is also used to comply with §63.113(a)(2), §63.126(b)(1), or §63.139(c) of this subpart, the performance test required by §63.116(c), §63.128(a), or §63.139(d)(1) of this subpart is acceptable to demonstrate compliance with §63.119(e) of this subpart. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (d)(1)(i) of this section, if the performance tests meets the criteria specified in paragraphs (d)(1)(ii)(A) and (d)(1)(ii)(B) of this section.

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in §63.119 (e)(1) or (e)(2) of this subpart, as applicable; and

(B) The performance test is submitted as part of the Notification of Compliance Status required by §63.151(b) of this subpart.

(2) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.151 (b) of this subpart, a monitoring plan containing the information specified in paragraph (d)(2)(i) of this section and in either (d)(2)(ii) or (d)(2)(iii) of this section.

(i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and either

(ii) The documentation specified in paragraph (d)(1)(i) of this section, if the owner or operator elects to prepare a design evaluation; or

(iii) The information specified in paragraph (d)(2)(iii) (A) and (B) of this section if the owner or operator elects to submit the results of a performance test.

(A) Identification of the storage vessel and control device for which the performance test will be submitted, and

(B) Identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted.

(3) The owner or operator shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraphs (d)(3)(i) and, if applicable, (d)(3)(ii) of this section.

(i) The operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained.

(ii) Results of the performance test described in paragraph (d)(1)(ii) of this section.

(4) The owner or operator shall demonstrate compliance with the requirements of §63.119(e)(3) of this subpart (planned routine maintenance of a control device, during which the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by §63.152(c) of this subpart the information specified in §63.122(g)(1) of this subpart.

(5) The owner or operator shall monitor the parameters specified in the

Notification of Compliance Status required in §63.152(b) of this subpart or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status.

(6) Except as provided in paragraph (d)(7) of this section, each closed vent system shall be inspected as specified in §63.148 of this subpart. The initial and annual inspections required by §63.148(b) of this subpart shall be done during filling of the storage vessel.

(7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in §63.148 of this subpart.

(8) A design evaluation or performance test is not required, if the owner or operator uses a combustion device meeting the criteria in paragraph (d)(8)(i), (d)(8)(ii), (d)(8)(iii), or (d)(8)(iv) of this section.

(i) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(ii) A boiler or process heater burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(iv) A boiler or process heater into which the vent stream is introduced with the primary fuel.

{Comment: 63.120(e) was deleted, due to storage vessel emissions not being routed to a flare.}

{Comment: 63.120(f) was deleted, due to storage vessel emissions not being routed to a fuel gas system or to a process.}

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the record keeping requirements for group 2 storage vessels of section A.2.i. of Part II - Specific Facility Terms and Conditions.

2. Monitoring for the LDAR program shall comply with Method 21 of 40 CFR Part 60, Appendix A, as specified in section A.3.za of Part II - Specific Facility Terms and Conditions.

The permittee shall maintain records for the LDAR program in accordance with the requirements of section A.3.zb of Part II - Specific Facility Terms and Conditions.

3. [§ 63.123] Storage vessel provisions—recordkeeping.

(a) Each owner or operator of a Group 1 vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

(b) [Reserved]

(f) An owner or operator who elects to comply with §63.119(e) of this subpart shall keep in a readily accessible location the records specified in paragraphs (f)(1) and (f)(2) of this section.

(1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5) of this subpart.

(2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to the planned routine maintenance. Such a record shall include the information specified in paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

(i) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were not met at the beginning of the planned routine maintenance, and

(ii) The first time of day and date the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, were met at the conclusion of the planned routine maintenance.

{Comment: 63.119(g) and 63.123(i) pertain only to storage vessels which are filled from railcars, tank trucks and barges.}

(i) An owner or operator who elects to comply with §63.119(g) shall keep the records specified in paragraphs (i)(1) through (3) of this section.

(1) A record of the U.S. Department of Transportation certification required by §63.119(g)(2).

(2) A record of the pressure relief vent setting specified in §63.119(g)(5).

(3) If complying with §63.119(g)(6)(ii), keep the records specified in paragraphs (i)(3)(i) and (ii) of this section.

(i) A record of the equipment to be used and the procedures to be followed when

reloading the railcar, tank truck, or barge and displacing vapors to the storage tank from which the liquid originates.

(ii) A record of each time the vapor balancing system is used to comply with §63.119(g)(6)(ii).

IV. Reporting Requirements

1. [§ 63.122] Storage vessel provisions—reporting.

(a) For each Group 1 storage vessel, the owner or operator shall comply with the requirements of paragraphs (a)(1) through (a)(5) of this section.

(1) The owner or operator shall submit an Initial Notification as required by §63.151(b) of this subpart.

(2) [Reserved]

(3) The owner or operator shall submit a Notification of Compliance Status as required by §63.152(b) of this subpart and shall submit as part of the Notification of Compliance Status the information specified in paragraph (c) of this section.

(4) The owner or operator shall submit Periodic Reports as required by §63.152(c) of this subpart and shall submit as part of the Periodic Reports the information specified in paragraphs (d), (e), (f), and (g) of this section.

(5) The owner or operator shall submit, as applicable, other reports as required by §63.152(d) of this subpart, containing the information specified in paragraph (h) of this section.

(b) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in §63.120(d)(2)(i) of this subpart and the information specified in either §63.120(d)(2)(ii) of this subpart or §63.120(d)(2)(iii) of this subpart.

(c) An owner or operator who elects to comply with §63.119(e) of this subpart by using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in either paragraph (c)(1) or (c)(2) of this section. An owner or operator who elects to comply with §63.119(f) of this subpart by routing emissions to a process or to a fuel gas system shall submit, as part of the Notification of Compliance Status required by §63.152(b) of this subpart, the information specified in paragraph (c)(3) of this section.

(1) If a control device other than a flare is used, the owner or operator shall submit the information specified in §63.120(d)(3)(i) and, if applicable, (d)(3)(ii) of this subpart.

(2) If a flare is used, the owner or operator shall submit the information specified in §63.120(e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this subpart.

(3) If emissions are routed to a process, the owner or operator shall submit the information specified in §63.120(f). If emissions are routed to a fuel gas system,

the owner or operator shall submit a statement that the emission stream is connected to the fuel gas system and whether the conveyance system is subject to the requirements of §63.148.

{Comment: 63.122(d) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(e) was deleted, due to the storage vessel not having a floating roof.}
{Comment: 63.122(f) was deleted, due to the storage vessel not having a floating roof.}

(g) An owner or operator who elects to comply with §63.119(e) of this subpart by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by §63.152(c) of this subpart, the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) As required by §63.120(d)(4) and §63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable.

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

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance.

(2) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(i) Identification of the control device for which the measured parameters were outside of the established ranges, and

(ii) Cause for the measured parameters to be outside of the established ranges.

{Comment: 63.122(h) was deleted, due to the storage vessel not having a floating roof.}

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of the terms and

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conditions of this permit shall be determined in accordance with the following methods:

Emission Limitation**:**
VOC emissions shall not exceed 0.06 ton per year.

Applicable Compliance Method:
VOC emissions due to standing and withdrawal losses from the storage tanks shall be determined using the most recent version of USEPA's "Tanks" program and the control efficiency of the condenser observed during the most recent compliance demonstration that demonstrated the emission unit was in compliance. Prior to the initial compliance demonstration, the controlled VOC emission rate shall be calculated based upon an assumed 95% overall control efficiency for the condenser.

VI. Miscellaneous Requirements

1. § 63.110 Applicability.

(a) This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams, and in-process equipment subject to §63.149 within a source subject to subpart F of this part.

(b) *Overlap with other regulations for storage vessels.*

(1) A Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR part 60, subpart Kb is required to comply only with the provisions of this subpart.

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
T003 - 50,000 gallon fixed roof methanol storage tank number 3 controlled by a condenser		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None