



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY
Application No: 04-01298**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
subpart CC	MACT
subparts Kb and V V	NSPS
subpart FF	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 8/27/2002

USFilter Scaltech Division
Kathleen Murray
87 Oates Road Building 1
Houston, TX 77013

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

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

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

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

Very truly yours,

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

cc: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 8/27/2002
Effective Date: 8/27/2002**

FINAL PERMIT TO INSTALL 04-01298

Application Number: 04-01298

APS Premise Number: 0448011640

Permit Fee: **\$800**

Name of Facility: USFilter Scaltech Division

Person to Contact: Kathleen Murray

Address: 87 Oates Road Building 1
Houston, TX 77013

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1800 Woodville Rd.
Toledo, Ohio**

Description of proposed emissions unit(s):

Processes slop oil and oily emulsions to produce Scalfuel; equipment includes, (3) 11000 gallon tanks, (2) 430 gallon holding tanks, 1500 high energy mix tank and slurry dryer.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

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

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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. Termination of Permit To Install

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

5. Construction of New Sources(s)

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

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	0.73

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

Sunoco, Inc. refinery is the generator of waste streams for which the total annual benzene quality exceeds 10 megagrams per year (11 tons per year), so 40 CFR 61, subpart FF is applicable to the Sunoco refinery. TWO LLC/US Filter and US Filter Scaltech are independent companies which, by contract, are responsible to treat the Sunoco refinery waste streams. Portions of 40 CFR 61, subpart FF are applicable to the operations of both TWO LLS/US Filter and US Filter Scaltech. TWO LLC/US Filter and US Filter Scaltech will be responsible to the extent of their control of the benzene treatment process.

The relation of these three firms is described below.

- Sunoco, Inc., a refinery operating in Lucas County, contracts the treatment of it's wastewater to TWO LLC/US Filter.
- TWO LLC/US Filter owns and operates an API oil-water separator and other wastewater treatment equipment which accepts wastewater which originates, at this time, exclusively from the Sunoco related facilities. TWO LLC/US Filter and Sunoco occupy adjacent and separate areas within the refinery boundaries. TWO LLC/US Filter produces treated water and oil which are returned to Sunoco as separate streams; and a mixture of oil, water, and solids ("sludge") which are sent to US Filter Scaltech for further processing.
- US Filter Scaltech operates sludge processing equipment as a part of the wastewater treatment process and occupies adjacent separate areas within the refinery boundaries to both TWO LLC/US Filter and Sunoco. US Filter Scaltech receives oil, water and solid mixtures from TWO LLC/US Filter or from Sunoco, exclusively (at this time). US Filter Scaltech separates these waste streams into a water and oil mixture, which is returned to TWO LLC/US Filter, oil which is returned to Sunoco, and a high solids slurry which is loaded into tanker trucks and ~~sent~~ *used* as a fuel product.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Wastewater sludge dewatering process comprised of the following components: centrifuge, cake auger, slurry dryer, oil/water separator, condenser, (7) pumps, 430 gallon oil tank, 430 gallon water tank, 1,500 gallon HEMT tank, 11,000 gallon stabilization tank, 8,600 water clarification tank, 11,000 gallon oily sludge tank and 11,000 oil buffer tank controlled by a closed vent system, condenser and a carbon adsorber	OAC rule 3745-31-05(A)(3) 40 CFR 63, subpart CC 40 CFR 63, subpart A 40 CFR 61, subpart FF* OAC rule 3745-21-09(L)(2)(a) OAC rule 3745-21-09(M)(2)	0.73 tons of volatile organic compounds (VOC) per year from the control device, see section A.I.2.a. see section A.I.2.b. see section A.I.2.c. see section A.I.2.d. see Note below at '*' see section A.I.2.e. see section A.I.2.f.
equipment leaks (for VOC)	40 CFR 63, subpart CC 40 CFR 63, subpart A OAC rule 3745-21-09(T)	see section A.I.2.g. see section A.I.2.c. see section A.I.2.h.
(3) 11,000 gallon process tanks (Group 2 storage vessels)	40 CFR 60, subpart Kb	see section A.I.2.i.

***NOTE:** see Part II, section A of this permit for the relationship between Sunoco refinery, TWO LLC/US Filter and US Filter Scaltech in regards to treating the waste streams from the refinery.

2. Additional Terms and Conditions

- 2.a**
- i. The requirements of this rule also include compliance with the requirements of 40 CFR 63, subpart CC; 40 CFR 63, subpart A; 40 CFR 61, subpart FF; 40 CFR 60, subpart QQQ; 40 CFR 60, subpart Kb; and OAC rule 21-09(L).
 - ii. The annual emission limitations were established for PTI purposes to reflect the potential to emit from all of the equipment comprising this process unit while utilizing a 98% effective VOC control device. Therefore, if adequate monitoring, recordkeeping and reporting requirements are maintained to demonstrate compliance with 98% effective VOC control efficiency requirement, compliance will be also demonstrated with the hourly and annual emission limitations.
- 2.b**
- i. [63.640(c)]
For the purpose of 40 CFR part 63 subpart CC, the affected source shall comprise all emission points, in combination, listed in 63.640(c)(1) through (c)(7) that are located at a single refinery plant site, i.e., [63.640(c)(3)] all wastewater streams and treatment operations associated with petroleum refining process units; [63.640(c)(4)] all equipment leaks and [63.640(c)(2)] all storage vessels.
 - ii. [63.640(e)(1)]
Where a storage vessel is used exclusively by a process unit, the storage vessel shall be considered part of that process unit.
 - iii. [63.640(n)(1)]
A Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR 60, subpart Kb, is required to comply only with the requirements of 40 CFR 60, subpart Kb, except as provided in 40 CFR 63.640(n)(8).
 - iv. [63.647(a)]
For every Group 1 wastewater stream, the permittee shall comply with the requirements of 61.340 through 61.355 of 40 CFR 61, subpart FF.
 - v. [63.647(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR Part 61.341 in subpart FF.
- 2.c**
- [63.642(c)]
The permittee shall comply with the applicable portions 40 CFR 63 subpart A as specified in Table 6 of 40 CFR 63 subpart CC.

- 2.d**
- i. The permittee shall comply with the applicable portions of 40 CFR 61 subpart FF for the following affected sources: tanks [61.343], containers [61.345], individual drain systems [61.346], oil water separators [61.347], treatment processes [61.348], and closed-vent systems and control devices [61.349].
 - ii. [61.340(b)] APPLICABILITY
The provisions of 40 CFR 61, subpart FF apply to the permittee of hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by a petroleum refinery. The waste streams at hazardous waste treatment, storage, and disposal facilities subject to the provisions of this 40 CFR 61, subpart FF are the benzene-containing hazardous wastes from the petroleum refinery. A hazardous waste treatment, storage, and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.
 - iii. [61.343(a)(1)] STANDARDS: TANKS
The permittee shall operate and maintain a fixed roof and closed-vent system that routes all organic vapors to a control device.
 - iv. [61.347(a)(1)] STANDARDS: OIL-WATER SEPARATORS
The permittee shall operate and maintain a fixed roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device
 - v. [61.348(a)(1)(i)] STANDARDS: TREATMENT PROCESSES
Except as otherwise provided in 40 CFR 61.348, the permittee shall operate, and maintain a treatment process that removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis.
 - vi. [61.349(a)(1)(i)] STANDARDS: CLOSED-VENT SYSTEMS AND CONTROL DEVICES
The closed vent system shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background.
 - vii. [61.349(a)(2) and (a)(2)(ii)] STANDARDS: CLOSED-VENT SYSTEMS & CONTROL DEVICES
The control device shall be designed and operated in accordance with the following condition: a vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.
- 2.e** VOC control equipment exemption, based on a tank capacity of less than 40,000 gallons.
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- 2.g** [63.648(a)]
The permittee shall comply with the provisions of 40 CFR Part 60, subpart VV and 63.648(b) except as provided in 63.648(a)(1), (a)(2) and 40 CFR Part 63.648(c) through (i).
- i. [63.648(a)(1)]
For purposes of compliance with 40 CFR part 63, subpart CC, the provisions of 40 CFR part 60, subpart VV apply only to equipment in organic HAP service, as defined in 40 CFR 63.641.
- ii. [63.648(a)(2)]
Calculation of percentage leaking equipment components for subpart VV of 40 CFR part 60 may be done on a process unit basis or a source-wide basis. Once the permittee has decided, all subsequent calculations shall be on the same basis unless a permit change is made.
- 2.h** i. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, subpart CC.
- ii. The permittee shall comply with the VOC leak detection and repair program requirements of OAC rule 3745-21-09(T) by maintaining compliance with the operational restrictions, monitoring, record keeping and reporting requirements of 40 CFR Part 63, subpart CC for all VOC process equipment leaks.
- 2.i** [60.110b(b)]
Except as specified in 60.116b(a) and (b) [see section A.III.], storage vessels with design capacity less than 75 m³ (19,813 gallons) are exempt from the General Provisions of 40 CFR 60, subpart A and from the provisions of 40 CFR 60, subpart Kb.

II. Operational Restrictions

1. [63.642] GENERAL STANDARDS - 40 CFR 63, subpart CC
- a. [63.642(a)]
The permittee is required to apply for a part 70 or part 71 operating permit from the appropriate permitting authority. If the EPA has approved a State operating permit program under part 70, the permit shall be obtained from the State authority. If the State operating permit program has not been approved, the source shall apply to the EPA Regional Office pursuant to part 71.

- b. [63.642(g)]

The permittee of an existing source shall control emissions of organic HAP's to the level represented by the equation stated in 40 CFR 63.642(g). 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.
 - c. [63.642(k)]

The permittee shall demonstrate compliance with the emission standard in 63.642(g) [paragraph b. of this section] by complying with the wastewater provisions in 63.647 [see section A.I.2.] for all emission points.
 - i. [63.642(k)(1)]

The permittee shall also comply with the requirements of 63.654 [see sections A.III. and A.IV.] as applicable.
 - ii. [63.642(k)(2)]

The permittee using this compliance approach is not required to calculate the annual emission rate specified in 63.642(g) [paragraph b. of this section].
2. [61.342] GENERAL STANDARDS - 40 CFR 61, subpart FF
NOTE: see Part II, section A of this permit for the relationship between Sunoco refinery, TWO LLC/US Filter and US Filter Scaltech in regards to treating the waste streams from the refinery.
- a. [61.342(c)]

The permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in 40 CFR 61.342(a) shall manage and treat the facility waste as follows:

 - i. [61.342(c)(1)]

For each waste stream that contains benzene, including (but not limited to) organic waste streams that contain less than 10 percent water and aqueous waste streams, even if the wastes are not discharged to an individual drain system, the permittee shall:

 - (a) [61.342(c)(1)(i)]

Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 61.348 [see section A.III.].
 - (b) [61.342(c)(1)(ii)]

Comply with the standards specified in 61.343 through 61.347 [see section A.III.] of this subpart for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with 61.342(c)(1)(i) [paragraph a.i.(a) of this section].
 - (c) [61.342(c)(1)(iii)]

Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in 61.343 through 61.347 [see section A.III.]. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to 61.342(c) [paragraph a. of this section].

- ii. [61.342(c)(2)]
A waste stream is exempt from 61.342(c)(1) [paragraph a.i. of this section] provided that the permittee demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than 10 ppmw as determined by the procedures specified in 40 CFR 61.355(c)(2) or 61.355(c)(3).
 - iii. [61.342(c)(3)]
A waste stream is exempt from 61.342(c)(1) [paragraph a.i. of this section] provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either 61.342(c)(3)(i) or 61.342(c)(3)(ii) [paragraphs a.iii.(a) or a.iii.(b) of this section] are met.
 - (a) [61.342(c)(3)(i)]
The waste stream is process wastewater that has a flow rate less than 0.02 liters per minute (0.005 gallons per minute) or an annual wastewater quantity of less than 10 Mg/yr (11 ton/yr); or
 - (b) [61.342(c)(3)(ii)]
All of the following conditions are met:
 - (i) [61.342(c)(3)(ii)(A)]
The permittee does not choose to exempt process wastewater under 61.342(c)(3)(i) [paragraph a.iii.(a) of this section],
 - (ii) [61.342(c)(3)(ii)(B)]
The total annual benzene quantity in all waste streams chosen for exemption in 61.342(c)(3)(ii) [paragraph a.iii.(b) of this section] does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 40 CFR 61.355(j), and
 - (iii) [61.342(c)(3)(ii)(C)]
The total annual benzene quantity in a waste stream chosen for exemption, including process unit turnaround waste, is determined for the year in which the waste is generated.
- b. [61.342(f)]
Rather than treating the waste onsite, the permittee may elect to comply with 61.342(c)(1)(i) [paragraph a.i.(a) of this section] by transferring the waste offsite to

another facility where the waste is treated in accordance with the requirements of 61.342(c)(1)(i) [paragraph a.i.(a) of this section]. The permittee transferring the waste shall:

- i. [61.342(f)(1)]
Comply with the standards specified in 61.343 through 61.347 [see sections A.I.2. and A.III.] for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.
 - ii. [61.342(f)(2)]
Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of this subpart.
 - c. [61.342(g)]
Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 61.355 [see section A.V.].
3. [60.482-1] STANDARDS: GENERAL - 40 CFR 60, subpart VV
- a. [60.482-1(a)]
The permittee shall demonstrate compliance with the requirements of 60.482-1 through 60.482-10 [see sections A.II. and A.III.] for all equipment within 180 days of initial startup.
 - b. [60.482-1(b)]
Compliance with 60.482-2 through 60.482-10 [see section A.III.] will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 60.485 [see section A.V.].
 - c. [60.482-1(d)]
Equipment that is in vacuum service is excluded from the requirements of 60.482-2 to 60.482-10 [see section A.III.] if it is identified as required in 60.486(e)(5) [see section A.III.].

III. Monitoring and/or Recordkeeping Requirements

1. [63.642(e)] GENERAL STANDARDS - 40 CFR 63, subpart CC
The permittee shall keep copies of all applicable reports and records required by this subpart for at least 5 years except as otherwise specified in this subpart. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. 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.
2. [63.648] EQUIPMENT LEAK STANDARDS - 40 CFR 63, subpart CC

- a. [63.648(b)]

The use of monitoring data generated before August 18, 1995 to qualify for less frequent monitoring of valves and pumps as provided under 40 CFR 60, subpart VV and 63.648(c) [paragraph b. of this section] (i.e., quarterly or semiannually) is governed by the requirements of 63.648(b)(1) and (b)(2) [paragraphs a.i. and a.ii. of this section].

 - i. [63.648(b)(1)]

Monitoring data must meet the test methods and procedures specified in 60.485(b) of 40 CFR 62, subpart VV except for minor departures.
 - ii. [63.648(b)(2)]

Departures from the criteria specified in 60.485(b) of 40 CFR 60, subpart VV or from the monitoring frequency specified in subpart VV or in 63.648(c) [see paragraph b. of this section] (such as every 6 weeks instead of monthly or quarterly) are minor and do not significantly affect the quality of the data. An example of a minor departure is monitoring at a slightly different frequency (such as every 6 weeks instead of monthly or quarterly). Failure to use a calibrated instrument is not considered a minor departure.
 - b. [63.648(f)]

Reciprocating pumps in light liquid service are exempt from 60.482 [see section A.III.] if recasting the distance piece or reciprocating pump replacement is required.
3. [63.654] RECORDKEEPING REQUIREMENTS - 40 CFR 63, subpart CC
- a. [63.654(a)] Wastewater
The permittee shall comply with the recordkeeping and reporting provisions in 61.356 [see section A.III.] and 61.357 [see section A.IV.] of 40 CFR 61, subpart FF. There are no additional reporting and recordkeeping requirements for wastewater under this subpart.
 - b. [63.654(d)] Equipment Leaks
The permittee shall comply with the recordkeeping and reporting provisions in 63.654(d)(1), (d)(2), (d)(5) and (d)(6) [paragraphs b.i. through b.iv. of this section].
 - i. [63.654(d)(1) and (d)(1)(i)]

Sections 60.486 and 60.487 of 40 CFR 60, subpart VV [see sections A.III. and A.IV.], except as specified in 63.654(d)(1)(i) [paragraph b.i.(a) of this section].

 - (a) The signature of the owner or operator (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be effected without a process shutdown shall be recorded and retained for 2 years.
 - ii. [63.654(d)(2)]

The initial semiannual report required by 60.478(b) of 40 CFR 60, subpart VV shall be submitted within 150 days of initial startup as specified in 40 CFR 63.640(h).

- iii. [63.654(d)(5)]
The permittee must identify, either by list or location (area or refining process unit), equipment in organic HAP service less than 300 hours per year within refining process units subject to this subpart.
- iv. [63.654(d)(6)]
The permittee must keep a list of reciprocating pumps and compressors determined to be exempt from seal requirements as per 63.648(f) [see section A.III.].

4. [61.343] STANDARDS: TANKS - 40 CFR 61, subpart FF

- a. [61.343(a)]
Except as provided in 40 CFR 61.343(b), the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 61.342(c)(1)(ii) [see section A.II.]. The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.
 - i. [61.343(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.
 - (a) [61.343(a)(1)(i)]
The fixed-roof shall meet the following requirements:
 - (i) [61.343(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.].
 - (ii) [61.343(a)(1)(i)(B)]
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 waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
 - (iii) [61.343(a)(1)(i)(C) and (a)(1)(i)(C)(1) through (C)(3)]
If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then 61.343(a)(1)(i)(B) [paragraph a.i.(a)(ii) of this section] does not apply to any opening that meets all of the following conditions:

- (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
 - (B) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.]; and
 - (C) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.
 - (b) [61.343(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirement of 61.349 [see section A.III.] of this subpart
 - b. [63.343(c)]
Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.
 - c. [63.343(d)]
Except as provided in 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.
5. [61.345] STANDARDS: CONTAINERS - 40 CFR 61, subpart FF
- a. [61.345(a)]
The permittee shall meet the following standards for each container in which waste is placed in accordance with 61.342(c)(1)(ii) [see section A.II.] of this subpart:
 - i. [61.345(a)(1)]
The permittee shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:
 - (a) [61.345(a)(1)(i)]
The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.].
 - (b) [61.345(a)(1)(ii)]
Except as provided in 61.345(a)(4) [paragraph a.iv. of this section], 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 waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

- ii. [61.345(a)(2)]

When a waste is transferred into a container by pumping, the permittee shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with 61.345(a)(4) [paragraph a.iv. of this section].
 - iii. [61.345(a)(3)]

Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that whenever it is necessary for the container to be open while the waste is being treated, the container is located under a cover (e.g. enclosure) with a closed-vent system that routes all organic vapors vented from the container to a control device, except for cover and closed-vent systems that meet the requirements in 61.345(a)(4) [paragraph a.iv. of this section].

 - (a) [61.345(a)(3)(i)]

The cover and all openings (e.g., doors, hatches) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.].
 - (b) [61.345(a)(3)(ii)]

The closed-vent system and control device shall be designed and operated in accordance with 61.349 [see section A.III.].
 - iv. [61.345(a)(4)]

If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

 - (a) [61.345(a)(4)(i)]

The purpose of the opening is to provide dilution air to reduce the explosion hazard;
 - (b) [61.345(a)(4)(ii)]

The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in 61.355(h) [see section A.V.]; and
 - (c) [61.345(a)(4)(iii)]

The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.
- b. [61.345(b)]

Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

- c. [61.345(c)]
Except as provided in 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
6. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR 61, subpart FF
- a. [61.346(a)]
The permittee shall meet the following standards for each individual drain system in which waste is placed in accordance with 61.342(c)(1)(ii) [see section A.II.]:
 - i. [61.346(a)(1)]
The permittee shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.
 - (a) [61.346(a)(1)(i)]
The cover shall meet the following requirements:
 - (i) [61.346(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.].
 - (ii) [61.346(a)(1)(i)(B)]
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 waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
 - (iii) [61.346(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then 61.346(a)(1)(i)(B) [paragraph a.i.(a)(ii) of this section] does not apply to any opening that meets all of the following conditions:
 - (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
 - (B) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.]; and

(C) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(b) [61.346(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 61.349 [see section A.III.].

ii. [61.346(a)(2)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

iii. [61.346(a)(3)]
Except as provided in 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

7. [61.347] STANDARDS: OIL-WATER SEPARATORS - 40 CFR 61, subpart FF

a. [61.347(a)]
Except as provided in 40 CFR 61.352, the permittee shall meet the following standards for each oil-water separator in which waste is placed in accordance with 61.342(c)(1)(ii) [see section A.II.]:

i. [61.347(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.

(a) [61.347(a)(1)(i)]

The fixed-roof shall meet the following requirements:

(i) [61.347(a)(1)(i)(A)]

The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.].

- (ii) [61.347(a)(1)(i)(B)]
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 waste is in the oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
 - (iii) [61.347(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the oil-water separator is maintained at a pressure less than atmospheric pressure, then 61.347(a)(1)(i)(B) [paragraph a.i.(a)(ii) of this section] does not apply to any opening that meets all of the following conditions:
 - (A) [61.347(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;
 - (B) [61.347(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.]; and
 - (C) [61.347(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.
 - (b) [61.347(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirements of 61.349 [see section A.III.].
 - b. [61.347(b)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.
 - c. [61.347(c)]
Except as provided in 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
8. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR 61, subpart FF
- a. [61.348(a)]
 - i. [61.348(a)(2)]

Each treatment process complying with 61.348(a)(1)(i) [see section A.I.2.] shall be designed and operated in accordance with the appropriate waste management unit standards specified in 61.343 through 61.347 [see section A.III.]. For example, if a treatment process is a tank, then the permittee shall comply with 61.343 [see section A.III.].

- ii. [61.348(a)(3)]
For the purpose of complying with the requirements specified in 61.348(a)(1)(i) [see section A.I.2.], the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.
 - iii. [61.348(a)(4)]
The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of 61.348(a)(1) [see section A.I.2.] except as provided in 61.348(a)(5) [paragraph a.iv. of this section].
 - iv. [61.348(a)(5)]
If the permittee aggregates or mixes any combination of process wastewater, product tank draw down, or landfill leachate subject to 61.342(c)(1) [see section A.II.] together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 CFR 61.348(b) of this subpart. These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.
- b. [61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, achieves the appropriate conditions specified in 61.348(a) [see section A.I.2. and A.III.] in accordance with the following requirements:
- i. [61.348(c)(1)]
Engineering calculations in accordance with requirements specified in 61.356(e) [see section A.III.]; or
 - ii. [61.348(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 61.355 [see section A.V.].
- c. [61.348(e)]
Except as specified in 61.348(e)(3) [paragraph c.iii. of this section], if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept

closed at all times when waste is being treated, except during inspection and maintenance.

- i. [61.348(e)(1)]
Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.
- ii. [61.348(e)(2)]
Except as provided in 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
- iii. [61.348(e)(3)]
If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:
 - (a) [61.348(e)(3)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;
 - (b) [61.348(e)(3)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.]; and
 - (c) [61.348(e)(3)(iii)]
The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.
- d. [61.348(f)]
Except for treatment processes complying with 40 CFR 61.348(d), the Administrator may request at any time the permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 61.348(a) [see sections A.I.2. and A.III.] by conducting a performance test using the test methods and procedures as required in 61.355 [see section A.V.]
- e. [61.348(g)]
The permittee shall monitor the unit in accordance with the applicable requirements in 61.354 [see section A.III.].

9. [61.349] STANDARDS: CLOSED-VENT SYSTEMS AND CONTROL DEVICES

- a. [61.349(a)]
For each closed-vent system and control device used to comply with standards in accordance with 61.343 through 61.348 [see section A.III.], the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:
- i. [61.349(a)(1)]
The closed-vent system shall:
- (a) [61.349(a)(1)(ii)]
Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of this subpart shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every 15 minutes, except as provided in 61.349(a)(1)(ii)(B)] [paragraph a.i.(a)(ii) of this section].
- (i) [61.349(a)(1)(ii)(A)]
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.
- (ii) [61.349(a)(1)(ii)(B)]
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.
- (b) [61.349(a)(1)(iii)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (c) [61.349(a)(1)(iv)]
For each closed-vent system complying with 61.649(a) [see sections A.I.2. and A.III., paragraph a. of this section], one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.
- ii. [61.349(a)(2) and (2)(ii)]
The control device shall be designed and operated in accordance with the following conditions: a vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

- b. [61.349(b)]
Each closed-vent system and control device used to comply with this subpart shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

- c. [61.349(c)]
The permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in 61.349(a)(2) [paragraph a.ii. of this section] by using one of the following methods:
 - i. [61.349(c)(1)]
Engineering calculations in accordance with requirements specified in 61.356(f) [see section A.III.]; or
 - ii. [61.349(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 61.355 [see section A.V.].

- d. [61.349(e)]
The Administrator may request at any time the permittee demonstrate that a control device meets the applicable conditions specified in 61.349(a)(2) [paragraph a.ii. of this section] by conducting a performance test using the test methods and procedures as required in 61.355 [see section A.V.], the Administrator may specify alternative test methods and procedures, as appropriate.

- e. [61.349(f)]
Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

- f. [61.349(g)]
Except as provided in 61.350 [see section A.III.], if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

10. [61.350] STANDARDS: DELAY OF REPAIR - 40 CFR 61, subpart FF
 - a. [61.350(a)]

Delay of repair of facilities or units that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.
 - b. [61.350(b)]

Repair of such equipment shall occur before the end of the next facility or unit shutdown.

11. [61.354] MONITORING OF OPERATIONS - 40 CFR 61, subpart FF
 - a. [61.354(a)]

The permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:

 - i. [61.354(a)(1)]

Measure the benzene concentration of the waste stream exiting the treatment process complying with 61.348(a)(1)(i) [see section A.I.2.] at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3).
 - ii. [61.354(a)(2)]

Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.
 - b. [61.354(c)]

The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator. permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.

 - i. [61.354(c)(6)(i)]

A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the condenser; or

- ii. [61.354(c)(6)(ii)]
For a condenser, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ± 1 percent of the temperature being monitored in $^{\circ}\text{C}$ or $\pm 0.5^{\circ}\text{C}$, whichever is greater. One temperature sensor shall be installed at a location in the exhaust stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

- c. [61.354(d)]
For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

- d. [61.354(e)]
An alternative operation or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications

- e. [61.354(f)]
Permittees using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do the following:
 - i. [61.354(f)(1)]
Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or closure mechanism required under 61.349(a)(1)(ii) [see section A.III.] to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

 - ii. [61.354(f)(2)]
Visually inspect the readings from each flow monitoring device required by 61.349(a)(1)(ii) [see section A.III.] at least once each operating day to check that vapors are being routed to the control device as required.

- f. [61.354(g)]
Each permittee who uses a system for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.

12. [61.356] RECORDKEEPING REQUIREMENTS - 40 CFR 61, subpart FF

- a. [61.356(a)]
The permittee shall comply with the recordkeeping requirements of this section. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.
- b. [61.356(b)]
The permittee shall maintain records that identify each waste stream at the facility subject to this subpart, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the permittee shall maintain the following records:
 - i. [61.356(b)(1)]
For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
 - ii. [61.356(b)(2)]
For each waste stream exempt from 61.342(c)(1) [see section A.II.] in accordance with 61.342(c)(3) [see section A.II.], the records shall include:
 - (a) [61.356(b)(2)(i)]
All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 61.342(c)(3)(i) [see section A.II.], or
 - (b) [61.356(b)(2)(ii)]
All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 61.342(c)(3)(ii) [see section A.II.].
- c. [61.356(c)]

The permittee transferring waste off-site to another facility for treatment in accordance with 61.342(f) [see section A.II.] shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

- d. [61.356(d)]
The permittee using control equipment in accordance with 61.343 through 61.347 [see section A.III.] shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a control device is used, then the permittee shall maintain the control device records required by 61.356(f) [paragraph f. of this section].

- e. [61.356(e)]
The permittee using a treatment process or wastewater treatment system unit in accordance with 61.348 of this subpart shall maintain the following records. The documentation shall be retained for the life of the unit.
 - i. [61.356(e)(1)]
A statement signed and dated by the permittee certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

 - ii. [61.356(e)(2)]
If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams, and other documentation necessary to demonstrate the unit performance.

 - iii. [61.356(e)(3)]
If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain all test information necessary to demonstrate the unit performance.
 - (a) [61.356(e)(3)(i)]
A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.

- (b) [61.356(e)(3)(ii)]
Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.
 - (c) [61.356(e)(3)(iii)]
Records of unit operating conditions during each test run including all key process parameters.
 - (d) [61.356(e)(3)(iv)]
All test results.

- iv. [61.356(e)(4)]
If a control device is used, then the permittee shall maintain the control device records required by 61.356(f) [paragraph f. of this section].

- f. [61.356(f)]
The permittee using a closed-vent system and control device in accordance with 61.349 [see section A.III.] of this subpart shall maintain the following records. The documentation shall be retained for the life of the control device.
 - i. [61.356(f)(1)]
A statement signed and dated by the owner or operator certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

 - ii. [61.356(f)(2)]
If engineering calculations are used to determine control device performance in accordance with 61.349(c) [see section A.III.], then a design analysis for the control device that includes for example:
 - (a) [61.356(f)(2)(i)]
Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:
 - (i) [61.356(f)(2)(i)(E)]
For a condenser, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level or the design outlet benzene concentration level, design average temperature of the condenser exhaust vent stream, and the design

average temperatures of the coolant fluid at the condenser inlet and outlet.

(ii) [61.356(f)(2)(i)(G)]

For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

iii. [61.356(f)(3)]

If performance tests are used to determine control device performance in accordance with 61.349(c) [see section A.III.] of this subpart:

(a) [61.356(f)(3)(i)]

A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.

(b) [61.356(f)(3)(ii)]

A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.

(c) [61.356(f)(3)(iii)]

A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(d) [61.356(f)(3)(iv)]

All test results.

g. [61.356(g)]

The permittee shall maintain a record for each visual inspection required by 61.343 through 61.347 [see section A.III.] that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

h. [61.356(h)]

The permittee shall maintain a record for each test of no detectable emissions required by 61.343 through 61.347 and 61.349 [see section A.III.]. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

- i. [61.356(i)]
For each treatment process and wastewater treatment system unit operated to comply with 61.348 [see section A.III.], the permittee shall maintain documentation that includes the following information regarding the unit operation:
 - i. [61.356(i)(1)]
Dates of startup and shutdown of the unit.
 - ii. [61.356(i)(2)]
If measurements of waste stream benzene concentration are performed in accordance with 61.3654(a)(1) [see section A.III.], the permittee shall maintain records that include the date each test is performed and all test results.
 - iii. [61.356(i)(3)]
If a process parameter is continuously monitored in accordance with 61.354(a)(2) [see section A.III.], the permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the unit.
 - iv. [61.356(i)(5)]
Periods when the unit is not operated as designed.
- j. [61.356(j)]
For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:
 - i. [61.356(j)(1)]
Dates of startup and shutdown of the closed-vent system and control device.

- ii. [61.356(j)(2)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.
- iii. [61.356(j)(3)]
Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:
 - (a) [61.356(j)(3)(i)]
Any valve car-seal or closure mechanism required under 61.349(a)(1)(ii) [see section A.III.] is broken or the by-pass line valve position has changed.
 - (b) [61.356(j)(3)(ii)]
The flow monitoring devices required under 61.349(a)(1)(ii) [see section A.III.] indicate that vapors are not routed to the control device as required.
- iv. [61.356(j)(8)]
If a condenser is used, then the permittee shall maintain records from the monitoring device of the parameters selected to be monitored in accordance with 61.354(c)(6) [see section A.III.]. If the temperature of the condenser exhaust stream and coolant fluid is monitored, then the permittee shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6°C (11 °F) above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C (11 °F) above the design average coolant fluid temperature at the condenser outlet.
- v. [61.356(j)(9)]
If a carbon adsorber is used, then the permittee shall maintain records from the monitoring device of the concentration of organics or the concentration of benzene in the control device outlet gas stream. If the concentration of organics or the concentration of benzene in the control device outlet gas stream is monitored, then the owner or operator shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value.
- vi. [61.356(j)(10)]
If a carbon adsorber that is not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time when the existing carbon in the control device is replaced with fresh carbon.
- k. [61.356(m)]

If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, then the permittee shall maintain records of the monitoring device and records of all periods during which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.

13. [60.482-2] STANDARDS: PUMPS IN LIGHT LIQUID SERVICE - 40 CFR 60, subpart VV
- a. i. [60.482-2(a)(1)]
Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.685(b) [see section A.V.], except as provided 60.482-2(d), 2(e) and 2(f) [paragraphs d., e., and f. of this section].
 - ii. [60.482-2(a)(2)]
Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - b. i. [60.482-2(b)(1)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - ii. [60.482-2(b)(2)]
If there are indications of liquids dripping from the pump seal, a leak is detected.
 - c. i. [60.482-2(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 60.482-9 [see section A.III.].
 - ii. [60.482-2(c)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - d. [60.482-2(d)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 60.482-2(a) [paragraph a. of this section], provided the requirements of 40 CFR 60.482(d)(1) through (d)(6) are met.
 - e. [60.482-2(e)]
Any pump that is designated, as described in paragraphs e.i. and e.ii. of this section, for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 60.482-2(a), (c) and (d) [paragraphs a., c., and d. of the section] if the pump:

- i. [60.482-2(e)(1)]
Has no externally actuated shaft penetrating the pump housing;
 - ii. [60.482-2(e)(2)]
Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 60.485(c) [see section A.V.]; and
 - iii. [60.482-2(e)(3)]
Is tested for compliance with paragraph e.ii. of this section initially upon designation, annually, and at other times requested by the Administrator.
- f. [60.482-2(f)]
If any pump is 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 60.482-10 [see section A.III.], it is exempt from 60.482-2(a) through (e) [paragraphs a. through e. of this section].
- g. [60.482-2(g)]
Any pump that is designated, as described in 60.486(f)(1) [see section A.III.], as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 60.482-2(a) and (d)(4) through (d)(6) [see paragraph a. and d. of this section] if:
- i. [60.482-2(g)(1)]
The permittee of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph a. of this section; and
 - ii. [60.482-2(g)(2)]
The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph c. of this section if a leak is detected.
14. [60.482-4] STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE
- a. [60.482-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 60.485(c) [see section A.V.].

- b.
 - i. [60.482-4(b)(1)]
After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 60.482-9 [see section A.III.].
 - ii. [60.482-4(b)(2)]
No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 60.485(c) [see section A.V.].
 - c. [60.482-4(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 through the pressure relief device to a control device as described in 60.482-10 [see section A.III.] is exempted from the requirements of paragraphs a. and b. of this section.
 - d.
 - i. [60.482-4(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 paragraph a. and b. of this section, provided the permittee complies with the requirements in paragraph d.ii. of this section.
 - ii. [60.482-4(d)(2)]
After each pressure release, a new 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 60.482-9 [see section A.III.].
15. [60.482-5] STANDARDS: SAMPLING CONNECTION SYSTEMS
- a. [60.482-5(a)]
Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured.
 - b. [60.482-5(b)]
Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs b.i. through b.iv. of this section:
 - i. [60.482-5(b)(1)]
Return the purged process fluid directly to the process line; or
 - ii. [60.482-5(b)(2)]

Collect and recycle the purged process fluid to a process; or

- iii. [60.482-5(b)(3)]
Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 60.482-10 [see section A.III.], or
- iv. [60.482-5(b)(4)]
Collect, store, and transport the purged process fluid to any of the following systems or facilities:
 - (a) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR 63, subpart G, applicable to Group 1 wastewater streams;
 - (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.
- c. [60.482-5(c)]
In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs a. and b. of this section.

16. [60.482-6] STANDARDS: OPEN-ENDED VALVES OR LINES

- a. i. [60.482-6(a)(1)]
Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.
- ii. [60.482-6(a)(ii)]
The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- b. [60.482-6(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. [60.482-6(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. [60.482-6(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. [60.482-6(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 paragraphs a. through c. of this section.

17. [60.482-7] STANDARDS: VALVES IN GAS/VAPOR SERVICE IN LIGHT LIQUID SERVICE

- a. [60.482-7(a)]
Each valve shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [see section A.V.] and shall comply with 60.482-7(b) through (e) [paragraphs b. through e. of this section], except as provided in 60.482-7(f), (g) and (h) [paragraphs f., g., and h. of this section].
- b. [60.482-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- c.
 - i. [60.482-7(c)(1)]
Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
 - ii. [60.482-7(c)(2)]
If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- d.
 - i. [60.482-7(d)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 60.482-9 [see section A.III.].
 - ii. [60.482-7(d)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- e. [60.482-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:
 - i. [60.482-7(e)(1)]

- Tightening of bonnet bolts;
 - ii. [60.482-7(e)(2)]
Replacement of bonnet bolts;
 - iii. [60.482-7(e)(3)]
Tightening of packing gland nuts;
 - iv. [60.482-7(e)(4)]
Injection of lubricant into lubricated packing.
- f. [60.482-7(f)]
Any valve that is designated, as described in 60.486(e)(2) [see section A.III.], for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
- i. [60.482-7(f)(1)]
Has no external actuating mechanism in contact with the process fluid,
 - ii. [60.482-7(f)(2)]
Is operated with emissions less than 500 ppm above background as determined by the method specified in 60.485(c) [see section A.V.], and
 - iii. [60.482-7(f)(3)]
Is tested for compliance with 60.482-7(f)(2) [paragraph f.ii. of this section] initially upon designation, annually, and at other times requested by the Administrator.
- g. [60.482-7(g)]
Any valve that is designated, as described in 60.482-7(f)(1) [paragraph f.i. of this section], as an unsafe-to-monitor valve is exempt from the requirements of 60.482-7(a) [paragraph a. of this section] if:
- i. [60.482-7(g)(1)]
The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 60.482-7(a) [paragraph a. of this section], and
 - ii. [60.482-7(g)(2)]
The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

- h. [60.482-7(h)]
Any valve that is designated, as described in 60.486(f)(2) [see section A.III.], as a difficult-to-monitor valve is exempt from the requirements of paragraph a. if:
 - i. [60.482-7(h)(1)]
The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
 - ii. [60.482-7(h)(2)]
The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 of subpart A or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
 - iii. [60.482-7(h)(3)]
The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

- 18. [60.482-8] STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE AND CONNECTORS
 - a. [60.482-8(a)]
If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:
 - i. [60.482-8(a)(1)]
The owner or operator shall monitor the equipment within 5 days by the method specified in 60.485(b) [see section A.V.] and shall comply with the requirements of paragraphs b. and d. of this section.
 - ii. [60.482-8(a)(ii)]
The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

 - b. [60.482-8(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

 - c.
 - i. [60.482-8(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 60.482-9 [see section A.III.].
 - ii. [60.482-8(c)(2)]

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

- d. [60.482-8(d)]
First attempts at repair include, but are not limited to, the best practices described under 60.482-7(e) [see section A.III.].

19. [60.482-9] STANDARDS: DELAY OF REPAIR

- a. [60.482-9(a)]
Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- b. [60.482-9(b)]
Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- c. [60.482-9(c)]
Delay of repair for valves will be allowed if:
 - i. [60.482-9(c)(1)]
The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - ii. [60.482-9(c)(2)]
When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 60.482-10 [see section A.III.].
- d. [60.482-9(d)]
Delay of repair for pumps will be allowed if:
 - i. [60.482-9(d)(1)]
Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - ii. [60.482-9(d)(2)]
Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

- e. [60.482-9(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 next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

20. [60.482-10] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES

- a. [60.482-10(b)]
Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC 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.
- b. [60.482-10(e)]
The permittees of control devices 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 designs.
- c. [60.482-10(f)]
Except as provided in 60.482-10(i) through (k) [paragraphs f. through h. of this section], each closed vent system shall be inspected according to the procedures and schedule specified in 60.482-10(f)(1) and (f)(2) [paragraphs c.i. and c.ii. of this section].
 - i. [60.482-10(f)(1)]
If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in the following paragraphs:
 - (a) [60.482-10(f)(1)(i)]
Conduct an initial inspection according to the procedures in 60.485(b) [see section A.V.]; and
 - (b) [60.482-10(f)(1)(ii)]
Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - ii. [60.482-10(f)(2)]
If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:
 - (a) [60.482-10(f)(2)(i)]
Conduct an initial inspection according to the procedures in 60.485(b) [see section A.V.]; and

- (b) [60.482-10(f)(2)(ii)]
Conduct annual inspections according to the procedures in 60.485(b) [see section A.V.].
- d. [60.482-10(g)]
Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 60.482-10(h) [paragraph e. of this section].
 - i. [60.482-10(g)(1)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - ii. [60.482-10(g)(2)]
Repair shall be completed no later than 15 calendar days after the leak is detected.
- e. [60.482-10(h)]
Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- f. [60.482-10(i)]
If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 60.482-10(f)(1)(i) and (f)(2) [paragraphs c.i.(a) and c.ii. of this section].
- g. [60.482-10(j)]
Any parts of the closed vent system that are designated, as described in 60.482-10(l)(1) [paragraph i.i. of this section], as unsafe to inspect are exempt from the inspection requirements of 60.482-10(f)(1)(i) and (f)(2) [paragraphs c.i. and c.ii. of this section] if they comply with the requirements specified in 60.482-10(j)(1) and (j)(2) [paragraphs g.i. and g.ii. of this section].
 - i. [60.482-10(j)(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 60.482-10(f)(1)(i) and (f)(2) [paragraphs c.i. and c.ii. of this section]; and
 - ii. [60.482-10(j)(2)]
The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- h. [60.482-10(k)]

Any parts of the closed vent system that are designated, as described in 60.482-10(l)(2) [paragraph i.ii. of this section], as difficult to inspect are exempt from the inspection requirements of 60.482-10(f)(1)(i) and (f)(2) [paragraphs c.i. and c.ii. of this section] if they comply with the requirements specified in 60.482-10(k)(1) through (k)(3) [paragraphs h.i. through h.iii. of this section]:

- i. [60.482-10(k)(1)]
The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
- ii. [60.482-10(k)(2)]
The process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
- iii. [60.482-10(k)(3)]
The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

i. [60.482-10(l)]
The permittee shall record the information specified below [paragraphs i.i. through i.v. in this section]:

- i. [60.482-10(l)(1)]
Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
- ii. [60.482-10(l)(2)]
Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
- iii. [60.482-10(l)(3)]
For each inspection during which a leak is detected, a record of the information specified in 60.486(c) [see section A.III.].
- iv. [60.482-10(l)(4)]
For each inspection conducted in accordance with 60.485(b) [see section A.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.
- v. [60.482-10(l)(5)]

For each visual inspection conducted in accordance with 60.482-10(f)(1)(ii) [paragraph c.i.(b) of this section] 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.

- j. [60.482-10(m)]
Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
21. [60.486] RECORDKEEPING REQUIREMENTS - 40 CFR 60, subpart VV
- a. [60.486(b)]
When each leak is detected as specified in 60.482-2, 60.482-7, and 60.482-8, [see section A.III.] the following requirements apply:
 - i. [60.486(b)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - ii. [60.486(b)(2)]
The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 60.482-7(c) [see section A.III.] and no leak has been detected during those 2 months.
 - iii. [60.486(b)(3)]
The identification on equipment except on a valve, may be removed after it has been repaired.
 - b. [60.486(c)]
When each leak is detected as specified in 60.482-2, 60.482-7, and 60.482-8, [see section A.III.], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
 - i. [60.486(c)(1)]
The instrument and operator identification numbers and the equipment identification number.
 - ii. [60.486(c)(2)]
The date the leak was detected and the dates of each attempt to repair the leak.
 - iii. [60.486(c)(3)]
Repair methods applied in each attempt to repair the leak.

- iv. [60.486(c)(4)]
"Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) [see section A.V.] after each repair attempt is equal to or greater than 10,000 ppm.
- v. [60.486(c)(5)]
"Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- vi. [60.486(c)(6)]
The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
- vii. [60.486(c)(7)]
The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- viii. [60.486(c)(8)]
Dates of process unit shutdowns that occur while the equipment is unrepaired.
- ix. [60.486(c)(9)]
The date of successful repair of the leak.
- c. [60.486(d)]
The following information pertaining to the design requirements for closed vent systems and control devices described in 60.482-10 [see section A.III.] shall be recorded and kept in a readily accessible location:
 - i. [60.486(d)(1)]
Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - ii. [60.486(d)(2)]
The dates and descriptions of any changes in the design specifications.
 - iii. [60.486(d)(3)]
A description of the parameter or parameters monitored, as required in 60.482-10(e) [see section A.III.], 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.
 - iv. [60.486(d)(4)]
Periods when the closed vent systems and control devices required in 60.482-2, 60.482-4, and 60.482-5 [see section A.III.] are not operated as designed, including periods when a flare pilot light does not have a flame.

- v. [60.486(d)(5)]
Dates of startups and shutdowns of the closed vent systems and control devices required in 60.482-2, 60.482-4, and 60.482-5 [see section A.III.].

- d. [60.486(e)]
The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10 [see sections A.II. and A.III.] shall be recorded in a log that is kept in a readily accessible location:
 - i. [60.486(e)(1)]
A list of identification numbers for equipment subject to the requirements of this subpart.

 - ii. (a) [60.486(e)(2)(i)]
A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 60.482-2(e) and 60.482-7(f) [see section A.III.].
(b) [60.486(e)(2)(ii)]
The designation of equipment as subject to the requirements of 60.482-2(e) and 60.482-7(f) [see section A.III.] shall be signed by the permittee.

 - iii. [60.486(e)(3)]
A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4 [see section A.III.].

 - iv. (a) [60.486(e)(4)(i)]
The dates of each compliance test as required in 60.482-2(e), 60.482-4 and 60.482-7(f) [see section A.III.].
(b) [60.486(e)(4)(ii)]
The background level measured during each compliance test.
(c) [60.486(e)(4)(iii)]
The maximum instrument reading measured at the equipment during each compliance test.

 - v. [60.486(e)(5)]
A list of identification numbers for equipment in vacuum service.

- e. [60.486(f)]
The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h) [see section A.III.] and to all pumps subject to the requirements of 60.482-2(g) [see section A.III.] shall be recorded in a log that is kept in a readily accessible location:

- i. [60.486(f)(1)]
A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - ii. [60.486(f)(2)]
A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each value.
- f. [60.486(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:
- i. [60.486(h)(1)]
Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) [see section A.III.] and explanation of the design criterion; and
 - ii. [60.486(h)(2)]
Any changes to this criterion and the reasons for the changes.
- g. [60.486(j)]
Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- h. [60.486(k)]
The provisions of 40 CFR 60.7(b) and (d), of subpart A, do not apply to affected facilities subject to this subpart.
22. [60.116b] RECORDKEEPING FOR (3) 11,000 GALLON TANKS - 40 CFR 60, subpart Kb
- a. [60.116b(a) and (b)]
The record required by 60.116b(b) of this section will be kept for the life of the source. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m³ is subject to no provision of 40 CFR 60, subpart Kb, other than those required by this paragraph.

IV. Reporting Requirements

- 1. [63.642(f)] GENERAL STANDARDS - 40 CFR 63, subpart CC
All reports required under this subpart shall be sent to the Administrator at the addresses listed in below. The permittee shall also submit a copy to the Toledo Division of Environmental Services (TDOES). If acceptable to both the Administrator and the permittee of a source, reports may be submitted on electronic media.

Ohio EPA, DAPC
Mike Hopkins
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie St.
Toledo, OH 43602

2. [63.654] REPORTING REQUIREMENTS - 40 CFR 63, subpart CC
 - a. [63.654(e)]

The permittee shall submit the reports listed below:

 - i. [63.654(e)(1)]

A Notification of Compliance Status report as described in 63.654(f) [paragraph b. of this section]; and
 - ii. [63.654(e)(3)]

Other reports as described in 63.654(h) [paragraph c. of this section].
 - b. [63.654(f)] - Notice of Compliance Status Report

The permittee shall submit a Notification of Compliance Status report within 150 days after the compliance dates specified in 40 CFR 63.640(h). This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If the required information has been submitted before the date 150 days after the compliance date specified in 40 CFR 63.640(h), a separate Notification of Compliance Status report is not required within 150 days after the compliance dates specified in 40 CFR 63.640(h). If the permittee submits the information specified below at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

 - i. [63.654(f)(4)] Wastewater

The Notification of Compliance Status report shall include the results of any continuous monitoring system performance evaluations.
 - c. [63.654(h)]

Other reports shall be submitted as specified in 40 CFR 63, subpart A and as follows:

 - i. [63.654(h)(1)]

Reports of startup, shutdown, and malfunction required by 40 CFR 63.10(d)(5). Records and reports of startup, shutdown, and malfunction are not required if they pertain solely to Group 2 emission points, as defined in 40 CFR 63.641, that are not included in an emissions average. For purposes of this paragraph, startup and shutdown shall have the meaning defined in 40 CFR 63.641, and malfunction shall have the meaning defined in 40 CFR 63.2.
3. [61.357] REPORTING REQUIREMENTS - 40 CFR 61, subpart FF

NOTE: Sunoco, Inc. Refinery submits the Total Annual Benzene (TAB) report for all wastewater streams in the refinery.

- a. [61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the permittee shall submit to the Administrator the following reports:
 - i. [61.357(d)(1)]
By the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart. If a waiver of compliance is granted under 40 CFR 61.11, the certification of equipment necessary to comply with these standards shall be submitted by the date the waiver of compliance expires.
 - ii. [61.357(d)(6)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with 61.357(d)(1) [paragraph a.ii. of this section], the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.
 - iii. [61.357(d)(7)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance 61.357(d)(1) [paragraph a.ii. *a.i.* of this section], the permittee shall submit a report quarterly to the Administrator that includes:
 - (a) [61.357(d)(7)(i)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 61.354(a)(1) [see section A.III.], then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.
 - (b) [61.357(d)(7)(ii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 61.354(a)(2) [see section A.III.] of this subpart, then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.
 - (c) [61.357(d)(7)(iv)]
For a control device monitored in accordance with 61.354(c) [see section A.III.], each period of operation monitored during which any of the following conditions occur, as applicable to the control device:
 - (i) [61.357(d)(7)(iv)(D)]

Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

(ii) [61.357(d)(7)(iv)(E)]

Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C (11 °F) above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C (11 °F) above the design average coolant fluid temperature at the condenser outlet.

(iii) [61.357(d)(7)(iv)(I)]

Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in 61.354(c) [see section A.III.].

(d) [61.357(d)(7)(v)]

For a cover and closed-vent system monitored in accordance with 61.354(g) [see section A.III.], the permittee shall submit a report quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

iv. [61.357(d)(8)]

Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with 61.357(d)(1) [paragraph a.i. of this section], the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 61.342 through 61.354 [see section A.III.] during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

4. [60.487] REPORTING REQUIREMENTS - 40 CFR 60, subpart VV

a. [60.487(a)]

The permittee shall submit semiannual reports to the Administrator beginning six months after the initial start up date.

b. [60.487(b)]

The initial semiannual report to the Administrator shall include the following information:

- i. [60.487(b)(1)]
Process unit identification.
 - ii. [60.487(b)(2)]
Number of valves subject to the requirements of 60.482-7 [see section A.III.], excluding those valves designated for no detectable emissions under the provisions of 60.482-7(f) [see section A.III.].
 - iii. [60.487(b)(3)]
Number of pumps subject to the requirements of 60.482-2 [see section A.III.], excluding those pumps designated for no detectable emissions under the provisions of 60.482-2(e) [see section A.III.] and those pumps complying with 60.482-2(f) [see section A.III.].
- c. [60.487(c)]
All semiannual reports to the Administrator shall include the following information, summarized from the information in 60.486 [see section A.III.]:
- i. [60.487(c)(1)]
Process unit identification.
 - ii. [60.487(c)(2)]
For each month during the semiannual reporting period,
 - (a) [60.487(c)(2)(i)]
Number of valves for which leaks were detected as described in 60.482-7(b) [see section A.III.],
 - (b) [60.487(c)(2)(ii)]
Number of valves for which leaks were not repaired as required in 60.482-7(d)(1) [see section A.III.],
 - (c) [60.487(c)(2)(iii)]
Number of pumps for which leaks were detected as described in 60.482-2(b) [see section A.III.] and 40 CFR 60.482-2(d)(6)(i),
 - (d) [60.487(c)(2)(iv)]
Number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) [see section A.III.] and 40 CFR 60.482-2(d)(6)(ii),
 - (e) [60.487(c)(2)(vii)]
The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
 - iii. [60.487(c)(3)]
Dates of process unit shutdowns which occurred within the semiannual reporting period.
 - iv. [60.487(c)(4)]

Revisions to items reported according to paragraph b. if changes have occurred since the initial report or subsequent revisions to the initial report.

- d. [60.487(e)]
The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

V. Testing Requirements

- 1. [63.642(d)] GENERAL STANDARDS - 40 CFR 63, subpart CC
Initial compliance determinations shall be required only as specified in this subpart. Compliance determinations shall be conducted according to the schedule and procedures specified in this subpart.
 - a. [63.642(d)(1)]
Performance tests and compliance determinations shall be conducted according to the schedule and procedures specified in this subpart.
 - b. [63.642(d)(2)]
The permittee shall notify the Administrator of the intention to conduct a performance test at least 30 days before the performance test is scheduled.
 - c. [63.642(d)(3)]
Performance tests shall be conducted according to the provisions of 40 CFR 63.7(e) except that performance tests shall be conducted at maximum representative operating capacity for the process. During the performance test, an owner or operator shall operate the control device at either maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction.
 - d. [63.642(d)(4)]
Data shall be reduced in accordance with the EPA-approved methods specified in the applicable section 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 63.
- 2. [61.355] TEST METHODS, PROCEDURES AND COMPLIANCE PROVISIONS - 40 CFR 61, subpart FF
 - a. [61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 61.343 through 61.347, and 61.349 [see section A.III.] in accordance with the following requirements:
 - i. [61.355(h)(1)]

Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

- ii. [61.355(h)(2)]
The detection instrument shall meet the performance criteria of Method 21.
 - iii. [61.355(h)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
 - iv. [61.355(h)(4)]
Calibration gases shall be:
 - (a) [61.355(h)(4)(i)]
Zero air (less than 10 ppm of hydrocarbon in air); and
 - (b) [61.355(h)(4)(ii)]
A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
 - v. [61.355(h)(5)]
The background level shall be determined as set forth in Method 21.
 - vi. [61.355(h)(6)]
The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.
 - vii. [61.355(h)(7)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.
- b. [61.355(i)]
The permittee using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under 61.349(a)(2) [see section A.III.] shall use the following procedures:
- i. [61.355(i)(1)]
The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

- ii. [61.355(i)(2)]
Sampling sites shall be selected using Method 1 or 1A from appendix A of 40 CFR 60, as appropriate.
 - iii. [61.355(i)(3)]
The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:
 - (a) [61.355(i)(3)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.
 - (b) [61.355(i)(3)(ii)]
A run shall consist of a 1-hour period during the test. For each run:
 - (i) [61.355(i)(3)(ii)(A)]
The reading from each measurement shall be recorded;
 - (ii) [61.355(i)(3)(ii)(B)]
The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from appendix A of 40 CFR 60, as appropriate;
 - (iii) [61.355(i)(3)(ii)(C)]
The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from Appendix A of 40 CFR part 60
 - (c) [61.355(i)(3)(iii)]
The mass of organics or benzene entering and exiting the control device during each run shall be calculated using the equation found at 40 CFR 61.355(i)(3)(iii).
 - (d) [61.355(i)(3)(iv)]
The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using the equation found at 40 CFR 61.355(i)(3)(iv).
 - iv. [61.355(i)(4)]
The organic reduction efficiency for the control device shall be calculated using the equation found at 40 CFR 61.355(i)(4)].
3. [60.485] TEST METHODS AND PROCEDURES - 40 CFR 60, subpart VV (Equip. Leaks)

- a. [60.485(a)]
In conducting the performance tests required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

- b. [60.485(b)]
The permittee shall determine compliance with the standards in 60.482 [see section A.III.] as follows:
 - i. [60.485(b)(1)]
Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:
 - (a) [60.485(b)(1)(i)]
Zero air (less than 10 ppm of hydrocarbon in air); and
 - (b) [60.485(b)(1)(ii)]
A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

- c. [60.485(c)]
The permittee shall determine compliance with the no detectable emission standards in 60.482-2(e), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:
 - i. [60.485(c)(1)]
The requirements of paragraph b. of this section shall apply.

 - ii. [60.485(c)(2)]
Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

- d. [60.485(d)]
The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
 - i. [60.485(d)(1)]
Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

- ii. [60.485(d)(2)]
Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
 - iii. [60.485(d)(3)]
Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs d.i. and d.ii. of this section shall be used to resolve the disagreement.
- e. [60.485(e)]
The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:
- i. [60.485(e)(1)]
The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C (1.2 in. H₂O at 68°F. Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the vapor pressures.
 - ii. [60.485(e)(2)]
The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C (1.2 in. H₂O at 68°F is equal to or greater than 20 percent by weight.
 - iii. [60.485(e)(3)]
The fluid is a liquid at operating conditions.

4. **OAC REQUIREMENTS**

Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation:
0.73 tons of VOC per year.

Applicable Compliance Method:

Compliance shall be demonstrated through engineering calculations using the latest version of TANKS and U.S. EPA's WATER software for the tanks and water clarifier, with 98% control on the carbon adsorber.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Wastewater sludge dewatering process comprised of the following components: centrifuge, cake auger, slurry dryer, oil/water separator, condenser, (7) pumps, 430 gallon oil tank, 430 gallon water tank, 1,500 gallon HEMT tank, 11,000 gallon stabilization tank, 8,600 water clarification tank, 11,000 gallon oily sludge tank and 11,000 oil buffer tank controlled by a closed vent system, condenser and a carbon adsorber	none	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