State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL
LUCAS COUNTY

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

Application No: 04-01319

DATE: 4/22/2003

Sunoco, Inc.
Elaine Moore
P.O. Box 920
Toledo, OH 436970920

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$2350** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern

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

CC: USEPA TDES Toledo Metropolitan Area Council of Governments IN MI

LUCAS COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **04-01319** FOR AN AIR CONTAMINANT SOURCE FOR **SUNOCO, INC.**

On 4/22/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Sunoco, Inc.**, located at **1819 Woodville Rd., Oregon**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 04-01319:

Tier II Gasoline Project.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Karen Granata, Toledo Department of Environmental Services, 348 South Erie Street, Toledo, OH 43602 [(419)936-3015]

DRAFT PERMIT TO INSTALL 04-01319

Application Number:	04-01319
APS Premise Number:	0448010246
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Sunoco, Inc.
Person to Contact:	Elaine Moore
Address:	P.O. Box 920 Toledo, OH 436970920

Location of proposed air contaminant source(s) [emissions unit(s)]:
1819 Woodville Rd.
Oregon, Ohio

Description of proposed emissions unit(s):
Tier II Gasoline Project.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

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

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

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

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

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

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

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

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

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

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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

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

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

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

7. Fees

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

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit

shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

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

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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

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

11. Best Available Technology

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

12. Air Pollution Nuisance

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

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

3. Permit Transfers

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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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.

Emissions Unit ID: B053

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.

Pollutant	Tons Per Year
	(net increase)
CO	59.17 (54.50)
NOx	28.45 (1.84)
PE	13.15 (-16.20)
SO2	17.67 (-792.83)
VOC	18.57 (11.13)

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

1. The permittee will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two Parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.

2. If the final MACT standard is not promulgated by May 15, 2004, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted no later than May 15, 2004 [this date may be changed to May 15, 2003 as a result of a settlement between U.S. EPA and the Sierra Club], and must contain the following information:

   a. for a new affected source, the anticipated date of startup of operation;
   b. the hazardous air pollutants (HAPs)emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
   c. any existing federal, State, or local limitations or requirements applicable to the affected source;
   d. for each affected emission point or group of affected emission points, an identification of control technology in place;
   e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
   f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

3. The Part II application for a MACT determination may, but is not required to, contain the following information:

   a. recommended emission limitations for the affected source and support information. (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
   b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and

identification of the affected sources to which the control technologies must be applied; and

c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

4. If the NESHAP is promulgated before May 15, 2004, the facility shall be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

a. Within 120 days after promulgation of 40 CFR Part 63, Subpart DDDDD, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report, in accordance with 40 CFR Part 63.9(b)(2):

i. the name and mailing address of the permittee;
ii. the physical location of the source if it is different from the mailing address;
iii. identification of the relevant MACT standard and the source's compliance date;
iv. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each HAP; and
v. a statement confirming the facility is a major source for HAPs.

b. Within 60 days following completion of any required compliance demonstration activity specified in 40 CFR Part 63, Subpart DDDDD, the permittee shall submit a notification of compliance status that contains the following information:

i. the methods used to determine compliance;
ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR Part 63, Subpart DDDDD;
v. an analysis demonstrating whether the affected source is a major source or an area source;
vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
vii. a statement of whether or not the permittee has complied with the requirements of 40 CFR Part 63, Subpart DDDDD.

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements
B053 - 97 mmBtu/hr heater [H1] fired with refinery fuel gas, landfill gas and natural gas	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-21-07(B)
	OAC rule 3745-21-08(B)
	OAC rule 3745-23-06(B)
	40 CFR Part 60 Subpart J
	40 CFR Part 63 Subpart DDDDD
	OAC rule 3734-17-07(A)(1)
	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-54(O)(1)

Emissions Unit ID: B053

Applicable Emissions Limitations/Control Measures
8.58 pounds of carbon monoxide (CO) per hour, 37.57 tons of CO per year, 4.17 pounds of nitrogen oxides (NOx) per hour, 18.27 tons of NOx per year, 1.94 pounds of particulate emissions (PE) per hour, 8.50 tons of PE per year, 2.61 pounds of sulfur dioxide (SO2) per hour, 11.43 tons of SO2 per year, 0.56 pound of volatile organic compounds (VOC), 2.46 tons of VOC per year, and See section 2.a.
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.
0.020 pound of PE per mmBtu of actual heat input.
See section 2.b.
See section 2.c.
See section 2.c.
See section 2.c.
See section 2.d.
See section 2.e.

2. Additional Terms and Conditions

2.a The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1) and 40 CFR Part 60 Subpart J.

2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07, 3745-21-08 and 3745-23-06, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.d The permittee shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf or 159 ppmv). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph.

2.e The permittee shall ensure that this emissions unit complies with the requirements of 40 CFR Part 63 Subpart DDDDD, as summarized in Part II. Section A. of this permit, concerning boilers and process heaters. It is the permittee's responsibility to review these regulations to ensure compliance once they become effective and to incorporate any requirements of the regulations into the design of this emissions unit by the required date.

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, landfill gas and/or natural gas in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, landfill gas and/or natural gas, the permittee shall maintain a record of the type, quantity, sulfur content in pound(s) of sulfur per mmdscf, and heating value in Btu/dscf of the fuel burned.

   [60.105(a)(4) & (a)(4)(i)-(iii)]
2. A continuous monitoring systems shall be installed, calibrated, maintained, and operated by the permittee subject to the provisions of 40 CFR 60, Subpart J, as follows: an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   a. The span value for this instrument is 425 mg/dscm H_2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

c. The performance evaluations for this H_2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 from Appendix B. Method 11, 15, 15A, 16 shall be used for conducting the relative accuracy evaluations.

[60.13(d)]

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[40 CFR 60 Appendix F, Procedure 1, Section 4.2]

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

[40 CFR 60 Appendix F, Procedure 1, Section 4.3]

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

[60.13(e)]

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

[60.13(h)]

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs,

calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable Subparts to specify the emission limit.

[40 CFR 60 Appendix F Procedure 1, Section 3]

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.

   b. CD determination and adjustment of CEMS.

   c. Preventive maintenance of CEMS (including spare Parts inventory).

   d. Data recording, calculations, and reporting.

   e. Accuracy audit procedures including sampling and analysis methods.

   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

[60.7(f)]

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this Part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. A statement of certification of the existing H_2S CEMS shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Toledo local air agency upon request.

11. The permittee shall collect or require the landfill gas supplier to collect a representative sample of the landfill gas that is received for burning in this emissions unit. Sampling shall be performed initially on a quarterly basis. (The permittee may petition the Administrator to reduce testing frequency based on sampling records.) The permittee shall perform or require the supplier to perform analyses of each landfill gas sample for sulfur content, heat content and density in accordance with the appropriate ASTM methods. Alternative, equivalent test methods may be used upon written approval by the Toledo Division of Environmental Services.

12. The permittee shall maintain records of the total quantity of landfill gas combusted, the permittee's or landfill gas supplier's analyses for sulfur content, heat content, density and calculated SO2 emission rate (in pound/mmBtu).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, landfill gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

   [60.7(c)]

2. The permittee shall submit a quarterly written excess emissions and monitoring systems performance report and/or summary report form quarterly of all 3-hour periods during which the average concentration of H_2S exceeds 0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume weighted average. These reports shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

   [60.7(d)]

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of

the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60 Appendix F, Procedure 1, Section 7]

4. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable Subparts of this Part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from EPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR 60 Appendix F, Procedure 1.

5. The permittee shall submit, on a quarterly basis, copies of the permittee's or landfill gas supplier's analyses for the landfill gas which is received for burning in this emission unit. The permittee's or landfill gas supplier's analyses shall document the sulfur content (percent by volume), heat content (Btu/cu ft), density, and calculated sulfur dioxide emission rate (lb/mmBtu) for each sample.

6. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

V. Testing Requirements

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

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      8.58 pounds of CO per hour.

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

   c. Emission Limitation:

      37.57 tons of CO per year.

      Applicable Compliance Method:

      This emission limitation was developed by multiplying the hourly allowable CO emission limitation (8.58 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

   d. Emission Limitation:

4.17 pounds of NOx per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7 of 40 CFR Part 60 Appendix A.

e. Emission Limitation:
18.27 tons of NOx per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable NOx emission limitation (4.17 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

1.94 pounds of PE per hour.

Applicable Compliance Method:

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

g. Emission Limitation:

8.50 tons of PE per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable PE limitation (1.94 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

h. Emission Limitation:

2.61 pounds of SO2 per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-18-04.

i. Emission Limitation:

11.43 tons of SO2 per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable SO2 emission limitation (2.61 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

j. Emission Limitation:

0.56 pound of VOC per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10.

k. Emission Limitation:

2.46 tons of VOC per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable VOC emission limitation (0.56 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

l. Emission Limitation:

0.020 pound of PE per mmBtu.

Applicable Compliance Method:

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

m. Emission Limitation:

230 mg/dscm (0.10 gr/dscf or 159 ppm) hydrogen sulfide (H_2S)

Applicable Compliance Method:

[60.106(e)]
The permittee shall determine compliance with the H_2S standard as follows: Method 11, 15, 15A or 16 shall be used to determine the H_2S concentration. The gases entering the sampling train should be at about atmospheric pressure. If the pressure in the refinery fuel gas lines is relatively high, a flow control valve may be used to reduce the pressure. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line.

For Method 11, the sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times shall be taken at about 1-hour intervals. The arithmetic average of these two samples shall constitute a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H_2S may necessitate sampling for longer periods of time.

For Method 15 or 16, at least three injects over a 1-hour period shall constitute a run.

For Method 15A, a 1-hour sample shall constitute a run.

2. The permittee shall perform on-going quality assurance tests for the H_2S CEMS as required in section A.III. in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

VI. Miscellaneous Requirements

[40 CFR 60 Appendix F, Procedure 1, Section 5.2]

1. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following

corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

Emissions Unit ID: B053

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B053 - 97 mmBtu/hr heater [H1] fired with refinery fuel gas, landfill gas and natural gas		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: B054

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	40 CFR Part 60 Subpart J
B054 - 53 mmBtu/hr process heater [H2] fired with refinery fuel gas, landfill gas and natural gas	OAC rule 3745-31-05(A)(3)	40 CFR Part 63 Subpart DDDDD
	OAC rule 3734-17-07(A)(1)	
	OAC rule 3745-17-10(B)(1)	
	OAC rule 3745-18-54(O)(1)	
	OAC rule 3745-21-07(B)	
	OAC rule 3745-21-08(B)	
	OAC rule 3745-23-06(B)	

Applicable Emissions Limitations/Control Measures
4.69 pounds of carbon monoxide (CO) per hour, 20.53 tons of CO per year, 2.28 pounds of nitrogen oxides (NOx) per hour, 9.98 tons of NOx per year, 1.06 pounds of particulate emissions (PE) per hour, 4.64 tons of PE per year, 1.42 pounds of sulfur dioxide (SO2) per hour, 6.24 tons of SO2 per year, 0.31 pound of volatile organic compounds (VOC), 1.34 tons of VOC per year, and See section 2.a.
Visible particulate emissions from any stack shall not exceed 5% opacity as a 6-minute average.
0.020 pound of PE per mmBtu of actual heat input.
See section 2.b.
See section 2.c.
See section 2.c.
See section 2.c.
See section 2.d.
See section 2.e.

2. Additional Terms and Conditions

2.a The requirements of this rule also include compliance with the requirements of OAC rule 3734-17-07(A)(1), OAC rule 3745-17-10(B)(1) and 40 CFR Part 60 Subpart J.

2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07, 3745-21-08 and 3745-23-06, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.d The permittee shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf or 159 ppmv). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph.

2.e The permittee shall ensure that this emissions unit complies with the requirements of 40 CFR Part 63 Subpart DDDDD, as summarized in Part II. Section A. of this permit, concerning boilers and process heaters. It is the permittee's responsibility to review these regulations to ensure compliance once they become effective and to incorporate any requirements of the regulations into the design of this emissions unit by the required date.

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, landfill gas and/or natural gas in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, landfill gas and/or natural gas, the permittee shall maintain a record of the type, quantity, sulfur content in pound(s) of sulfur per mmdscf, and heating value in Btu/dscf of the fuel burned.

[60.105(a)(4) & (a)(4)(i)-(iii)]

2. A continuous monitoring systems shall be installed, calibrated, maintained, and operated by the permittee subject to the provisions of 40 CFR 60, Subpart J, as follows: an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   a. The span value for this instrument is 425 mg/dscm H_2S.

   b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

   c. The performance evaluations for this H_2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 from Appendix B. Method 11, 15, 15A, 16 shall be used for conducting the relative accuracy evaluations.

[60.13(d)]

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[40 CFR 60 Appendix F, Procedure 1, Section 4.2]

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

[40 CFR 60 Appendix F, Procedure 1, Section 4.3]

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

[60.13(e)]

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

[60.13(h)]

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable Subparts to specify the emission limit.

[40 CFR 60 Appendix F Procedure 1, Section 3]

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.

   b. CD determination and adjustment of CEMS.

   c. Preventive maintenance of CEMS (including spare Parts inventory).

   d. Data recording, calculations, and reporting.

   e. Accuracy audit procedures including sampling and analysis methods.

   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

[60.7(f)]

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this Part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. A statement of certification of the existing H_2S CEMS shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Toledo local air agency upon request.

11. The permittee shall collect or require the landfill gas supplier to collect a representative sample of the landfill gas that is received for burning in this emissions unit. Sampling shall be performed initially on a quarterly basis. (The permittee may petition the Administrator to reduce testing frequency based on sampling records.) The permittee shall perform or require the supplier to perform analyses of each landfill gas sample for sulfur content, heat content and density in accordance with the appropriate ASTM methods. Alternative, equivalent test methods may be used upon written approval by the Toledo Division of Environmental Services.

12. The permittee shall maintain records of the total quantity of landfill gas combusted, the permittee's or landfill gas supplier's analyses for sulfur content, heat content, density and calculated SO2 emission rate (in pound/mmBtu).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, landfill gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

   [60.7(c)]

2. The permittee shall submit a quarterly written excess emissions and monitoring systems performance report and/or summary report form quarterly of all 3-hour periods during which the average concentration of H_2S exceeds 0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume weighted average. These reports shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Emissions Unit ID: B054

[60.7(d)]

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

   b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60 Appendix F, Procedure 1, Section 7]

4. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable Subparts of this Part. As a minimum, the DAR must contain the following information:

   a. Permittee name and address.

   b. Identification and location of monitors in the CEMS.

   c. Manufacturer and model number of each monitor in the CEMS.

   d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

   e. Results from EPA performance audit samples described in Section 5 and the applicable RM's.

   f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

   An example of a DAR format is shown in Figure 1 of 40 CFR 60 Appendix F, Procedure 1.

5. The permittee shall submit, on a quarterly basis, copies of the permittee's or landfill gas supplier's analyses for the landfill gas which is received for burning in this emission unit. The permittee's or landfill gas supplier's analyses shall document the sulfur content (percent by volume), heat content (Btu/cu ft), density, and calculated sulfur dioxide emission rate (lb/mmBtu) for each sample.

6. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

V. Testing Requirements

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

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      4.69 pounds of CO per hour.

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

   c. Emission Limitation:

      20.53 tons of CO per year.

      Applicable Compliance Method:

      This emission limitation was developed by multiplying the hourly allowable CO emission

limitation (4.69 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

2.28 pounds of NOx per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7 of 40 CFR Part 60 Appendix A.

e. Emission Limitation:

9.98 tons of NOx per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable NOx emission limitation (2.28 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

1.06 pounds of PE per hour.

Applicable Compliance Method:

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

g. Emission Limitation:

4.64 tons of PE per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable PE limitation (1.06 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

h. Emission Limitation:

1.42 pounds of SO2 per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-18-04.

i. Emission Limitation:

6.24 tons of SO2 per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable SO2 emission limitation (1.42 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

j. Emission Limitation:

0.31 pound of VOC per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10.

k. Emission Limitation:

1.34 tons of VOC per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable VOC emission limitation (0.31 lbs/hr) by the maximum annual hours of operation (8760 hrs), and then dividing by 2000 lbs/ton and, therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

l. Emission Limitation:

0.020 pound of PE per mmBtu.

Applicable Compliance Method:

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

m. Emission Limitation:

230 mg/dscm (0.10 gr/dscf or 159 ppm) hydrogen sulfide (H_2S)

Applicable Compliance Method:

[60.106(e)]
The permittee shall determine compliance with the H_2S standard as follows: Method 11, 15, 15A or 16 shall be used to determine the H_2S concentration. The gases entering the sampling train should be at about atmospheric pressure. If the pressure in the refinery fuel gas lines is relatively high, a flow control valve may be used to reduce the pressure. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line.

For Method 11, the sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times shall be taken at about 1-hour intervals. The arithmetic average of these two samples shall constitute a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H_2S may necessitate sampling for longer periods of time.

For Method 15 or 16, at least three injects over a 1-hour period shall constitute a run.

For Method 15A, a 1-hour sample shall constitute a run.

2. The permittee shall perform on-going quality assurance tests for the H_2S CEMS as required in section A.III. in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

VI. Miscellaneous Requirements

[40 CFR 60 Appendix F, Procedure 1, Section 5.2]

1. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA,

CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must

always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B054 - 53 mmBtu/hr process heater [H2] fired with refinery fuel gas, landfill gas and natural gas		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment		Applicable Rules/Requirements
P039 - Desulfurized gasoline blending components with a flare as control during process upsets, and comprised of the following emissions sources:		
equipment leaks, controlled by equipment design and operating and maintenance programs	flare, 0.66 mmBtu per hour natural gas combustion with no control.	OAC rule 3745-31-05(A)(3) OAC rule 3745-21-09(T) 40 CFR Part 60, Subpart A 40 CFR Part 60, Subpart GGG 40 CFR Part 63, Subpart A 40 CFR Part 63, Subpart CC
wastewater, controlled by equipment design and operating and maintenance programs		OAC rule 3745-31-05(A)(3) 40 CFR Part 60, Subpart A

40 CFR Part 60, Subpart QQQ 40 CFR Part 61, Subpart A 40 CFR Part 61, Subpart FF 40 CFR Part 63, Subpart A 40 CFR Part 63, Subpart CC OAC rule 3745-31-05(A)(3)	Applicable Emissions Limitations/Control Measures 4.41 tons per year of volatile organic compounds (VOC), and 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 section A.I.2.e. See sections A.I.2.f through i. 1.55 tons per year of VOC, and see section A.I.2.j. See section A.I.2.c. See section A.I.2.k. See section A.I.2.l. See section A.I.2.m. See sections A.I.2.e and f. See sections A.I.2.f, h, i, n, o and p. Emissions from the combustion of	natural gas in the flare pilot light and safety sweep shall not exceed: 0.24 pound per hour of carbon monoxide (CO), 1.07 tons of CO per year, 0.046 pound per hour of nitrogen oxides (NOx), 0.20 ton of NOx per year, 0.002 pound per hour of PE, 0.006 ton of PE per year, 0.001 pound per hour of sulfur dioxide (SO2), 0.003 ton of SO2 per year, 0.09 pound per hour of volatile organic compounds (VOC), 0.40 ton of VOC per year, and section A.I.2.q.

Emissions Unit ID: P039

2. Additional Terms and Conditions

2.a i. The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

ii. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T), 40 CFR Part 60 Subparts A and GGG, and 40 CFR Part 63 Subparts A and CC.

2.b i. This regulation applies to petroleum refinery equipment leaks of volatile organic compounds (VOC) from pump seals, pipeline valves, process drains, compressor seals and pressure relief devices.

ii. Except as otherwise provided in paragraphs iii. and iv. below, and section III.1.b. of this permit, the permittee shall establish a VOC leak detection and repair program for the sources identified above, in compliance with the monitoring, record keeping and reporting requirements of sections II.1., III.1. and IV.1. of this permit.

iii. The monitoring, record keeping, and reporting requirements of 40 CFR Part 63 Subpart CC contain a degree of compliance and control greater than this applicable regulation. Compliance with this applicable regulation may be demonstrated by maintaining compliance with 40 CFR Part 63 Subpart CC for those sources affected by both regulations.

iv. Pressure relief devices which are connected to an operating flare header, vapor recovery devices, valves which are located in pipelines containing kerosene or heavier liquids, storage tank valves and valves which are not externally regulated are exempt from the requirements of OAC rule 3745-21-09(T).

v. The Administrator may accept an alternative monitoring, record keeping and reporting program for that required by paragraph ii. above, if the permittee can demonstrate to the satisfaction of the Administrator that the alternative program is at least as effective in identifying, documenting and reporting VOC leaks from petroleum refinery equipment as the program outlined in paragraph ii. For purposes of this paragraph, any proposed alternative program which the Administrator finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of OAC rule 3745-21-09 shall be acceptable to the Administrator.

2.c 40 CFR Part 60 Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

[60.590(a)]

2.d i. The provisions of 40 CFR part 60 subpart GGG applies to petroleum refinery

equipment leaks of VOC from a compressor, valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service.

[60.592(a)]

ii. The permittee shall demonstrate compliance with the VOC requirements of 40 CFR part 60 subpart GGG by complying with the VOC requirements of 40 CFR Part 60, Subpart VV, sections 60.482-1 to 60.482-10, as described in sections A.II.2.a. through j, of this permit, as soon as practicable, but no later than 180 days after initial startup. It is the permittee's responsibility to review these regulations to ensure compliance and to incorporate any requirements of these regulations into the design, monitoring, record keeping and reporting for this emissions unit.

[60.592(d)]

iii. The permittee shall also comply with the provisions of 40 CFR 60.485 through 60.487, as described in sections A.III.2., A.IV.2. and A.V.2. of this permit.

[63.1.(b)(1)]

2.e 40 CFR Part 63 Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units which emit, or have the potential to emit, any hazardous air pollutant (HAP) listed in, or pursuant to, section 112(b) of the Clean Air Act of 1990 and are subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to 40 CFR part 63.

[63.642(c)]

2.f i. Table 6 of 40 CFR Part 63 Subpart CC specifies the provisions of 40 CFR Part 63 Subpart A that apply and those that do not apply to sources subject to of 40 CFR Part 63 Subpart CC. These applicable provisions of 40 CFR Part 63 Subpart A have been summarized and included as section A.VI.1. of this permit. It is the permittee's responsibility to review these regulations to ensure compliance and to incorporate any requirements of these regulations into the design, monitoring, record keeping and reporting for this emissions unit.

[63.640(a)]

ii. 40 CFR Part 63 Subpart CC applies to petroleum refining process units that are located at a plant site that meet the criteria in paragraphs (a) and (b) below;

(a) Are located at a plant site that is a major source as defined in section 112(a) of the Clean Air Act; and

(b) Emit or have equipment containing or contacting one or more of the hazardous air pollutants (HAPs) listed in 40 CFR Part 63 Subpart CC, table 1.

[63.640(c)]

iii. For the purpose of 40 CFR Part 63 Subpart CC, the affected source shall comprise all HAP emission points, in combination, listed in paragraphs (a) through (d) below that are located at a single refinery plant site.

(a) All miscellaneous process vents from petroleum refining process units meeting the criteria in paragraph ii. above;

(b) All storage vessels associated with petroleum refining process units meeting the criteria in paragraph ii. above;

(c) All wastewater streams and treatment operations associated with petroleum refining process units meeting the criteria in paragraph ii. above;

(d) All equipment leaks from petroleum refining process units meeting the criteria in paragraph ii. above;

[63.640(i)]

iv. If an additional petroleum refining process unit is added to a plant site that is a major source as defined in section 112(a) of the Clean Air Act, the addition shall be subject to the requirements for a new source if it meets the criteria specified in paragraphs (a) through (c) below:

(a) It is an addition that meets the definition of construction in 40 CFR 63.2 of subpart A of this part;

(b) Such construction commenced after July 14, 1994; and

(c) The addition has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.

Note: The petroleum refining process unit addition which comprises this permit has a potential to emit of HAPs less than levels listed in paragraph (c) above. Therefore, the petroleum refining process unit addition which comprises this permit is subject to the requirements of 40 CFR Part 63 Subpart CC as an existing source, as described in paragraph v. below.

[63.640(l)]

v. If an additional petroleum refining process unit is added to a plant site or if a miscellaneous process vent or storage vessel, that meets the criteria in paragraph iii. above, is added to an existing petroleum refinery, and if the addition or process change is not subject to the new source requirements as determined according to

paragraph iv. above, the requirements in paragraphs (a) and (b) below shall apply.

(a) The added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit are subject to the requirements for an existing source.

(b) The added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit shall be in compliance with the requirements of 40 CFR Part 63 Subpart CC upon initial startup.

[63.648(a)]

2.g Except as provided in paragraphs (a) through (d) below, to demonstrate compliance with the HAP equipment leak requirements of 40 CFR Part 63 Subpart CC, the permittee shall comply with the VOC provisions of 40 CFR Part 60 Subpart VV. The applicable provisions of 40 CFR Part 60 Subpart VV have been summarized and included as sections A.II.2., A.III.2., A.IV.2. and A.V.2. of this permit. It is the permittee's responsibility to review this regulation to ensure compliance and to incorporate any requirements of this regulation into the design, monitoring, record keeping and reporting for this emissions unit.

i. For purposes of compliance with 40 CFR 63.648, the provisions of 40 CFR 60 Subpart VV apply only to equipment in organic HAP service, as defined in 40 CFR 63.641.

ii. Calculation of percentage leaking equipment components of 40 CFR Part 60 Subpart VV may be done on a process unit basis or a source wide basis.

[63.648(f)]

iii. Reciprocating pumps in light liquid service are exempt from 60.482-2, as described in section A.II.2.b. of this permit, if recasting the distance piece or reciprocating pump replacement is required.

[63.648(i)]

iv. Reciprocating compressors are exempt from seal requirements if recasting the distance piece or compressor replacement is required.

[63.640(p)]

2.h If there is an overlap of 40 CFR 63, Subpart CC with other regulations for equipment leaks that are also subject to the provisions of 40 CFR 60 and 61, the permittee is required to comply only with the provisions specified in 40 CFR 63, Subpart CC.

[63.640(q)]

2.i For overlap of 40 CFR 63, Subpart CC with local or State regulations, the permitting authority for the affected source may allow consolidation of the monitoring, record keeping, and reporting requirements under Subpart CC with the monitoring, record keeping, and reporting requirements under other applicable requirements in 40 CFR 60, 61, or 63, and in any 40 CFR Part 52 approved State implementation plan provided the implementation plan allows for approval of alternative monitoring, reporting, or record keeping requirements and provided that the permit contains an equivalent degree of compliance and control.

2.j i. The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

ii. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subparts A and QQQ, 40 CFR Part 61, Subparts A and FF, and 40 CFR Part 63, Subparts A and CC.

[60.690]

2.k i. The provisions of 40 CFR part 60 subpart QQQ apply to VOC emissions from all process drains and the first common box associated with this emissions unit.

[60.692-1(a)]

ii. The permittee shall comply with the requirements of 40 CFR 60.692-1 to 60.692-5, except during periods of startup, shutdown, or malfunction. The applicable provisions of 40 CFR Part 60 Subpart QQQ have been summarized and included as sections A.II.3., A.III.3., A.IV.3. and A.V.3. of this permit. It is the permittee's responsibility to review these regulations to ensure compliance and to incorporate any requirements of this regulation into the design, monitoring, record keeping and reporting for this emissions unit.

[60.692-1(d)]

(a) Stormwater sewer systems are not subject to the requirements of 40 CFR part 60 subpart QQQ.

(b) Ancillary equipment, which is physically separate from the wastewater system and does not come in contact with or store oily wastewater, is not subject to the requirements of 40 CFR part 60 subpart QQQ.

(c) Non-contact cooling water systems are not subject to the requirements of 40 CFR part 60 subpart QQQ.

(d) The permittee shall demonstrate compliance with the exclusions in paragraphs (a) through (c) above, as provided in sections A.III.3.b.xii. through xiv. of this permit.

[60.692-2(a)(1)]

iii. Each drain shall be equipped with water seal controls.

[60.692-2(b)(1)]

iv. (a) Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(b) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

[60.692-2(c)(1)]

v. Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

[60.692-2(d)]

vi. Except as provided in paragraph vii. below, each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987 shall be exempt from the provisions of this section.

[60.692-2(e)]

vii. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

2.l 40 CFR Part 61 Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 61.

[61.340]

2.m i. The provisions of 40 CFR Part 61 Subpart FF apply to petroleum refineries with benzene-containing hazardous waste treatment, storage, and disposal facilities. The following waste is exempt from the requirements of 40 CFR Part 61 Subpart FF:

(a) Waste in the form of gases or vapors that is emitted from process fluids:

(b) Waste that is contained in a segregated stormwater sewer system.

[61.342(c)]

ii. The permittee shall manage and treat the facility waste as follows:

(a) 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:

(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 40 CFR 61.348.

(ii) Comply with the standards specified in 40 CFR 61.343 through 61.347 for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with paragraph (i) above.

(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 40 CFR 61.343 through 61.347. 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 paragraph ii. above.

(b) A waste stream is exempt from paragraph (a) above, 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 61.355(c)(2) or 61.355(c)(3), as described in sections A.V.4.b.ii. and iii. of this permit.

(c) A waste stream is exempt from paragraph (a) above provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either paragraph (i) or (ii) below are met.

(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

(ii) All of the following conditions are met:

(A) The permittee does not choose to exempt process wastewater under paragraph (i) above,

(B) The total annual benzene quantity in all waste streams chosen for exemption does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 61.355(j), as described in section A.V.4.d. of this permit, and

(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.

[61.342(d)]

iii. As an alternative to the requirements specified in 61.342(c) and (e), as described in paragraphs ii. above and iv. below, the permittee may elect to manage and treat the facility waste as follows:

(a) The permittee shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph ii. above.

(b) The permittee shall manage and treat process wastewater in accordance with the following requirements:

(i) Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr (1.1 ton/yr). Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene quantity exiting the treatment process for each process wastewater stream treated in accordance with the requirements of 61.342(c)(1)(i), as described in paragraph ii.(a)(i) above.

(ii) Each treated process wastewater stream identified in paragraph (i) above shall be managed and treated in accordance with 61.342(c)(1), as described in paragraph ii.(a) above.

(iii) Each untreated process wastewater stream identified in paragraph (i) above is exempt from the requirements of 61.342(c)(1), as described in paragraph ii.(a) above.

[61.342(e)]

iv. As an alternative to the requirements specified in 61.342(c) and (d), as described in paragraphs ii. and iii. above, the permittee may elect to manage and treat the facility waste as follows:

(a) The permittee shall manage and treat facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of 61.342(c)(1), as described in paragraph ii.(a) above; and

(b) The permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10 percent or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10 percent, in accordance with the following:

(i) The benzene quantity for the wastes described in paragraph (b) above must be equal to or less than 6.0 Mg/yr (6.6 ton/yr), as determined in 61.355(k), as described in section A.V.4.f. of this permit. Wastes as described in paragraph (b) above that are

transferred offsite shall be included in the determination of benzene quantity as provided in 61.355(k). The provisions of 40 CFR 61.342(f) as described in paragraph v. below, shall not apply to any permittee who elects to comply with the provisions of paragraph iv. above.

(ii) The determination of benzene quantity for each waste stream defined in paragraph (a) above, shall be made in accordance with 61.355(k), as described in section A.V.4.f. of this permit.

[61.342(f)]

v. Rather than treating the waste onsite, the permittee may elect to comply with 61.342(c)(1)(i) as described in paragraph ii.(a)(i) above, by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of 61.342(c)(1)(i). The permittee transferring the waste shall:

(a) Comply with the standards specified in 40 CFR 61.343 through 61.347 for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(b) 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 40 CFR part 61 subpart FF.

[61.342(g)]

vi. Compliance with 40 CFR part 61 subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 61.355, as described in section A.V.4. of this permit.

[61.342(h)]

viii. Permission to use an alternative means of compliance to meet the requirements of 40 CFR 61.342 through 61.352 may be granted by the Administrator as provided in 40 CFR 61.353.

ix. The applicable benzene provisions of 40 CFR Part 61 Subpart FF have been summarized and included as sections A.II.4., A.III.4., A.IV.4. and A.V.4. of this permit. Provisions for compliance with this regulation are also incorporated into the terms and conditions of emissions unit P017. It is the permittee's responsibility to review this regulation to ensure compliance and to incorporate any requirements of this regulation into the design, monitoring, record keeping and reporting for this emissions unit.

[63.640(o)(1)]

2.n A Group 1 wastewater stream managed in a piece of equipment that is also subject to the VOC provisions of 40 CFR part 60, subpart QQQ is required to comply only with the HAP provisions of 40 CFR part 63 subpart CC.

[63.641]

Note: A Group 1 wastewater stream means a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 megagrams per year or greater as calculated according to the procedures in 40 CFR 61.342 of subpart FF of part 61 that has a flow rate of 0.02 liters per minute or greater, a benzene concentration of 10 parts per million by weight or greater, and is not exempt from control requirements under the provisions of 40 CFR part 61, subpart FF. A Group 2 wastewater stream means a wastewater stream that does not meet the definition of Group 1 wastewater stream.

[63.640(o)(2)]

2.o A Group 1 or Group 2 wastewater stream, as defined in paragraph 2.n. above, that is conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the HAP provisions of sections 63.133 through 63.147 of 40 CFR part 63 subpart G wastewater provisions shall comply as specified below. Compliance with the HAP provisions of this paragraph shall constitute compliance with the HAP requirements of 40 CFR part 63 subpart CC for that wastewater stream.

i. The permittee shall comply with paragraphs (a) through (c) below.

(a) The provisions in 63.133 through 63.140 of subpart G for all equipment used in the storage and conveyance of the Group 1 or Group 2 wastewater stream.

(b) The provisions in both 40 CFR part 61, subpart FF and in 63.138 and 63.139 of subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(c) The provisions in sections 63.143 through 63.148 of subpart G for monitoring and inspections of equipment and for record keeping and reporting requirements. The permittee is not required to comply with the monitoring, record keeping, and reporting requirements associated with the treatment and control requirements in 40 CFR part 61, subpart FF, 61.355 through 61.357.

ii. It is the permittee's responsibility to review this regulation to ensure compliance and to incorporate any requirements of this regulation into the design, monitoring, record keeping and reporting for this emissions unit.

[63.647(a)]

2.p i. Except as provided in 63.647(b), as described in paragraph ii. below, the permittee

shall comply with the benzene requirements of 40 CFR 61.340 through 61.355 of 40 CFR 61 subpart FF, as outlined in sections A.II.4., A.III.4, A.IV.4. and A.V.4. of this permit, for each process wastewater stream that meets the definition of a Group 1 wastewater stream in 63.641 and as defined in paragraph 2.n. above.

[63.647(b)]

ii. As used in the wastewater provisions section, all terms not defined in 40 CFR 63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR 61.341.

2.q i. The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

ii. Flares shall be designed for and operated with no visible emissions as determined by the methods described in section A.V.6. of this permit, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

iii. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from the requirements of OAC rule 3745-21-07(J), 40 CFR Part 60 Subparts A and J, and 40 CFR Part 63 Subparts A and CC.

II. Operational Restrictions

1. STANDARDS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES - OAC rule 3745-21-09(T)

[OAC rule 3745-21-09(T)(1)(d)]

a. All pipeline valves in gas service and pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring and to the Administrator.

b. If a leak is identified as a result of the monitoring program required by section A.III.2.a. of this permit, and the concentration of volatile organic compounds exceeds ten thousand parts per million by volume, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an identification number; and it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired.

[OAC rule 3745-21-09(T)(2)]

c. The permittee shall repair and retest any leaking component, which is tagged and identified in accordance with paragraph b. above, as soon as possible but no later than fifteen days after the leak is found unless the leaking component cannot be repaired until a process unit turnaround occurs.

[OAC rule 3745-21-09(T)(3)]

d. The Toledo Division of Environmental Services may require a process unit turnaround to occur earlier than the normally scheduled date if the number and severity of leaking components awaiting a turnaround warrant such action. Any such process unit turnaround shall be required by means of an order issued by the Administrator to the permittee pursuant to division (R) of section 3704.03 of the Ohio Revised Code.

[OAC rule 3745-21-09(T)(4)]

e. The Toledo Division of Environmental Services may accept an alternative monitoring, record keeping and reporting program for that required by section A.I.2.b.ii. of this permit, if the permittee can demonstrate to the satisfaction of the Administrator that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in this permit. For purposes of this paragraph, any proposed alternative program which the Administrator finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of OAC rule 3745-21-09 shall be acceptable to the Administrator

2. EQUIPMENT LEAK STANDARDS - 40 CFR 60, Subpart VV

[60.482-1]

a. STANDARDS: GENERAL - 40 CFR 60, Subpart VV

[60.482-1(a)]

i. The permittee shall demonstrate compliance with the requirements of 60.482-1 to 60.482-10, as described below, for all affected equipment within 180 days of initial startup.

[60.482-1(b)]

ii. Compliance with 60.482-1 to 60.482-10 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, as described in section A.V.2. of this permit.

[60.482-1(d)]

iii. Equipment that is in vacuum service is excluded from the requirements of 60.482-2 to 60.482-10 if it is identified as required in 60.486(e)(5), as described in section A.III.2.e.v. of this permit.

[60.482-2]

b. STANDARDS: PUMPS IN LIGHT LIQUID SERVICE - 40 CFR 60, Subpart VV

[60.482-2(a)]

i. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b), as described in section A.V.2.b. of this permit, except as provided in paragraphs iv., v. and vi. below. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

[60.482-2(b)]

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected.

[60.482-2(c)]

iii. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9, as described in section A.II.2.i. of this permit. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[60.482-2(d)]

iv. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph i. above, provided the following requirements are met:

(a) Each dual mechanical seal system is:

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

(ii) equipped with a barrier fluid degassing reservoir that is connected by a closed vent system to a control device that complies with the requirements of 60.482-10, as described in section A.II.2.j. of this

permit; or

(iii) equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(b) The barrier fluid system is in heavy liquid service or is not in VOC service.

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

(d) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(e) Each sensor as described in paragraph (c) above is checked daily or is equipped with an audible alarm, and the permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (e) above, a leak is detected. When a leak is detected, it shall be repaired as soon as practicable, but not 0later than 15 calendar days after it is detected, except as provided in 60.482-9, as described in section A.II.2.i. of this permit. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[60.482-2(e)]

v. Any pump that is designated, as described in 60.486(e)(1) and (2), as described in section A.III.2.e. of this permit, for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs i., iii., and iv. above if the pump:

(a) has no externally actuated shaft penetrating the pump housing;

(b) 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 40.485(c), as described in section A.V.2.c. of this permit; and

(c) is tested for compliance with paragraph (b) above, initially upon designation, annually, and at other times requested by the Administrator.

[60.482-2(f)]

vi. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 60.482-10, as described in section A.II.2.j. of this permit,

it is exempt from paragraphs i. through v. above.

[60.482-3]

c. STANDARDS: COMPRESSORS - 40 CFR 60, subpart VV

[60.482-3(a)]

i. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in paragraphs viii. and ix. below.

[60.482-3(b)]

ii. Each compressor seal system as required in paragraph a. of this section shall be:

(a) operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(b) equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 60.482-10, as described in section A.II.2.j. of this permit; or

(c) equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

[60.482-3(c)]

iii. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

[60.482-3(d)]

iv. Each barrier fluid system, as described in paragraph i. above, shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

[60.482-3(e)]

v. Each sensor, as required in paragraph iv. above, shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

[60.482-3(f)]

vi. If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph v. above, a leak is detected.

[60.482-3(g)]

vii. 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, as described in section A.II.2.i. of this permit. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[60.482-3(h)]

viii. A compressor is exempt from the requirements of paragraphs i. and ii. above, if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 60.482-10, as described in section A.II.2.j. of this permit, except as provided in paragraph ix. below.

[60.482-3(i)]

ix. Any compressor that is designated, as described in 60.486(e)(1) and (2), as described in section A.III.2.e. of this permit, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs i. through viii. above, if the compressor:

(a) 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), as described in section A.V.2.c. of this permit; and

(b) is tested for compliance with paragraph (a) above, initially upon designation, annually, and at other times requested by the Administrator.

[60.482-4]

d. STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE - 40 CFR 60, subpart VV

[60.482-4(a)]

i. 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), as described in section A.V.2.c. of this permit.

[60.482-4(b)]

ii. 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 , as described in section A.II.2.i. of this permit. 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), as

described in section A.V.2.c. of this permit.

[60.482-4(c)]

iii. Any pressure relief device that is 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, as described in section A.II.2.h. of this permit, is exempted from the requirements of paragraphs i. and ii. above.

[60.482-5]

e STANDARDS: SAMPLING CONNECTION SYSTEMS - 40 CFR 60, subpart VV

[60.482-5(a)]

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

[60.482-5(b)]

ii. Each closed-purge, closed-loop, or closed-vent system as required in paragraph i above, shall comply with the requirements specified in paragraphs (a) through (c) below:

(a) return the purged process fluid directly to the process line; or

(b) collect and recycle the purged process fluid to a process; or

(c) 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, as described in section A.V.2.b. of this permit.

[60.482-5(c)]

iii. In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs i. and ii. above.

[60.482-6]

f. STANDARDS: OPEN-ENDED VALVES OR LINES - 40 CFR 60, subpart VV

[60.482-6(a)]

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

[60.482-6(b)]

ii. 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.

[60.482-6(c)]

iii. 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 i. above, at all other times.

[60.482-7]

g. STANDARDS: VALVES IN GAS/VAPOR SERVICE AND IN LIGHT LIQUID SERVICE - 40 CFR 60, subpart VV

[60.482-7(a)]

i. Each valve shall be monitored monthly to detect leaks by the methods specified in 60.485(b), as described in section A.V.2.b. of this permit, and shall comply with paragraphs ii. through v. below, except as provided in paragraphs vi. through viii below, 60.483-1 and 60.483-2, as described in sections A.II.2.k. and A.II.2.l. of this permit.

[60.482-7(b)]

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

[60.482-7(c)]

iii. 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. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

[60.482-7(d)]

iv. 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, as described in section A.II.2.i. of this permit. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[60.482-7(e)]

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

(a) tightening of bonnet bolts;

(b) replacement of bonnet bolts;

(c) tightening of packing gland nuts; and

(d) injection of lubricant into lubricated packing.

[60.482-7(f)]

vi. Any valve that is designated, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph i. above, if the valve:

(a) has no external actuating mechanism in contact with the process fluid;

(b) is operated with emissions less than 500 ppm above background as determined by the method specified in 60.485(c), as described in section A.V.2.iii. of this permit; and

(c) is tested for compliance with paragraph (b) above, initially upon designation, annually, and at other times requested by the Administrator.

[60.482-7(g)]

vii. Any valve that is designated, as described in 60.486(f)(1) and in section A.III.2.f.i. of this permit, as an unsafe-to-monitor valve is exempt from the requirements of paragraph i. above, if:

(a) the permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with section A.III.2.a. of this permit; and

(b) 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.

[60.482-7(h)]

viii. Any valve that is designated, as described in 60.486(f)(2) and in section A.III.2.f.ii. of this permit, as a difficult-to-monitor valve is exempt from the requirements of paragraph i. above, if:

(a) the permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

(b) the process unit within which the valve is located either 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 valves as difficult-to-monitor;

and

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

[60.482-8]

h. STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND FLANGES AND OTHER CONNECTORS - 40 CFR 60, subpart VV

[60.482-8(a)]

i. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in 60.485(b), as described in section A.V.2.b. of this permit, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

[60.482-8(b)]

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

[60.482-8(c)]

iii. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9, as described in section A.II.2.i. of this permit. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[60.482-8(d)]

iv. First attempts at repair include, but are not limited to, the best practices described under 60.482-7(e), as described in section A.II.2.g.v. of this permit.

[60.482-9]

i. STANDARDS: DELAY OF REPAIR - 40 CFR 60, subpart VV

[60.482-9(a)]

i. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

[60.482-9(b)]

ii. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

[60.482-9(c)]

iii. Delay of repair for valves will be allowed if:

(a) 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

(b) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 60.482-10, as described in section A.II.2.j. of this permit.

[60.482-9(d)]

iv. Delay of repair for pumps will be allowed if:

(a) repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

(b) repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

[60.482-9(e)]

v. 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.

[60.482-10]

j. STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR 60, subpart VV

[60.482-10(a)]

i. The permittee of closed vent systems and control devices used to comply with provisions of 40 CFR 60, subpart VV shall comply with the provisions of this paragraphs ii. through xiii. below.

[60.482-10(b)]

ii. Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

[60.482-10(c)]

iii. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to provide

a minimum residence time of 0.75 seconds at a minimum temperature of 816°C.

[60.482-10(d)]

iv. Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

[60.482-10(e)]

v. 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.

[60.482-10(f)]

vi. Except as provided in paragraphs ix. through xi. of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (a) and (b) below.

[60.482-10(f)(1)]

(a) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the following requirements: conduct an initial inspection according to the procedures in 60.485(b), as described in section A.V.2.b. of this permit; and conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

[60.482-10(f)(2)]

(b) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall conduct an initial and annual inspections according to the procedures in 60.485(b), as described in section A.V.2.b. of this permit.

[60.482-10(g)]

vii. 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 paragraph viii. below. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected.

[60.482-10(h)]

viii. 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.

[60.482-10(i)]

ix. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraph vi. above.

[60.482-10(j)]

x. Any parts of the closed vent system that are designated, as described in 60.482-10(l)(1), as described in section A.V.2.b. of this permit, as unsafe to inspect are exempt from the inspection requirements of paragraph vi. above, if they comply with the requirements specified in paragraphs (a) and (b) below:

(a) 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 paragraphs f.i. or f.ii. of this section; and

(b) the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

[60.482-10(k)]

xi. Any parts of the closed vent system that are designated, as described in 60.482-10(l)(2), as described in paragraph xii. below, as difficult to inspect are exempt from the inspection requirements of paragraphs vi. above, if they comply with the requirements specified in paragraphs (a) through (c) below:

(a) the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(b) 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

(c) 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.

[60.482-10(l)]

xii. The permittee shall record the information specified in paragraphs (a) through (d) below.

(a) 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.

(b) 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.

(c) For each inspection during which a leak is detected, a record of the information specified in 60.486(c), as described in section A.III.2.c of this permit.

(d) For each inspection conducted in accordance with 60.485(b), as described in section A.V.2.b. of this permit, 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.

[60.482-10(m)]

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xiii. Closed vent systems and control devices used to comply with provisions of 40 CFR part 60 subpart VV shall be operated at all times when emissions may be vented to them.

[60.483-1]

k. ALTERNATIVE STANDARDS FOR VALVES - ALLOWABLE PERCENTAGE OF VALVES LEAKING - 40 CFR 60, subpart VV

[60.483-1(a)]

i. The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

[60.483-1(b)]

ii. The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:

(a) The permittee must notify the Director and Administrator that the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 60.487(b), as described in section A.IV.2.b. of this permit.

(b) A performance test as specified in paragraph iii. below, shall be conducted initially upon designation, annually, and at other times requested by the Director and Administrator.

(c) If a valve leak is detected, it shall be repaired in accordance with 60.482-7(d) and (e), as described in section A.II.2.g.iv. and v. of this permit..

[60.483-1(c)]

iii. Performance tests shall be conducted in the following manner:

(a) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 60.485(b), as described in section A.V.2.b. of this permit..

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

(c) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

[60.483-1(d)]

iv. The permittee who elects to comply with this alternative standard shall not have an

affected facility with a leak percentage greater than 2.0 percent.

[60.483-2]

l. ALTERNATIVE STANDARDS FOR VALVES - SKIP PERIOD LEAK DETECTION AND REPAIR - 40 CFR 60, subpart VV

[60.483-2(a)]

i. The permittee may elect to comply with one of the alternative work practices specified in paragraphs b.ii. and b.iii. of this section. The permittee must notify the Director and Administrator before implementing one of the alternative work practices, as specified in 40 CFR 60.487(b), as described in section A.IV.2.b. of this permit.

[60.483-2(b)]

ii. (a) The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in 60.482-7, as described in section A.II.2.g. of this permit.

(b) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(c) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(d) If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 60.482-7, as described in section A.II.2.g. of this permit, but can again elect to use section A.II.2.l. of this permit.

(e) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(f) The permittee must keep a record of the percent of valves found leaking during each leak detection period.

[60.484]

m. EQUIVALENCE OF MEANS OF EMISSION LIMITATION - 40 CFR part 60, subpart VV

[60.484(a)]

i. Each permittee subject to the provisions of this subpart may apply to the Director and Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

[60.484(b)]

ii. Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(a) Each permittee applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(b) The Director and Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(c) The Director and Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

[60.484(c)]

iii. Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(a) Each permittee applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(b) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(c) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(d) Each permittee applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(e) The TDOES will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (d) above.

(f) The Director and Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

[60.484(d)]

iv. The permittee may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

[60.484(e)]

v. After a request for determination of equivalence is received, the Administrator will publish a notice in the FEDERAL REGISTER and provide the opportunity for public hearing if the Administrator judges that the request may be approved. After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the FEDERAL REGISTER. Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

[60.484(f)]

vi. Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of 40 CFR part 60, subpart VV. The Administrator will make an equivalence determination according to the provisions of paragraphs ii. through v. above.

3. WASTEWATER PROVISIONS - 40 CFR part 60,subpart QQQ

STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR part 60,subpart QQQ

[60.692-2(a)(5)]

a. Whenever low water levels or missing or improperly installed caps or plugs are identified by the inspections required under sections III.3.a.i. through iii. of this permit, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except as provided in 60.692-6 and described in paragraph e. below.

[60.692-2(b)(4)]

b. If a broken seal or gap is identified by the inspections required under section III.3.a.iv., first effort at repair shall be made as soon as practicable, but not later than 15 calendar

days after the broken seal or gap is identified, except as provided in paragraph d. below.

[60.692-2(c)(3)]

c. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in paragraph d. below.

[60.692-5]

d. Standards: Closed vent systems and control devices.

[60.692-5(a)]

i. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C (1,500 °F).

[60.692-5(b)]

ii. Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

[60.692-5(c)]

iii. Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

[60.692-5(d)]

iv. 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.

[60.692-5(e)(1)]

v. (a) Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and semiannual inspections by the methods specified in 40 CFR 60.696, as described in section A.V.3.ii. of this permit.

[60.692-5(e)(2)]

(b) Closed vent systems shall be purged to direct vapor to the control device.

[60.692-5(e)(3)]

(c) A flow indicator shall be installed on a vent stream to a control device to ensure that the vapors are being routed to the device.

[60.692-5(e)(4)]

(d) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

[60.692-5(e)(5)]

(e) When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than 30 calendar days from the date the emissions are detected, except as provided in 60.692-6, as descibed in paragraph e. below.

[60.692-6]

e. Delay of repair of facilities that are subject to the provisions of 40 CFR part 60 subpart QQQ will be allowed if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown.

[60.692-7]

f. Delay of compliance of modified individual drain systems with ancillary downstream treatment components will be allowed if compliance with the provisions of 40 CFR part 60 subpart QQQ cannot be achieved without a refinery or process unit shutdown. Installation of equipment necessary to comply with the provisions of 40 CFR part 60 subpart QQQ shall occur no later than the next scheduled refinery or process unit shutdown.

[60.693-1]

g. Alternative standards for individual drain systems.

[60.693-1(a)]

i. The permittee may elect to construct and operate a completely closed drain system.

[60.693-1(b)]

ii. Each completely closed drain system shall be equipped and operated with a closed vent system and control device complying with the requirements of 60.692-5, as described in section d. above.

[60.693-1(c)]

iii. The permittee must notify the Administrator in the report required in 40 CFR 60.7 that the permittee has elected to construct and operate a completely closed drain system.

[60.693-1(d)]

iv. If the permittee elects to comply with the provisions of this section, then the permittee does not need to comply with the provisions of 60.692-2, summarized as paragraphs a through c. above, or 40 CFR 60.694.

[60.693-1(e)(1)]

v. (a) Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

[60.693-1(e)(2)]

(b) The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

[60.693-1(e)(3)]

(c) Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 60.692-6, as described in paragraph e. above.

4. WASTEWATER PROVISIONS - 40 CFR part 61, subpart FF

a. STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR 61, subpart FF

[61.346(a)]

i. Except as provided in section 61.346(b) as described in section A.II.4.b. below, 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) as described in section A.I.2.n i.(b) of this permit:

. [61.346(a)(1)]

(a) 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.

(i) The cover shall meet the following requirements:

(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) as described in section A.V.5.c of this permit.

(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.

(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 paragraph (B) above, does not apply to any opening that meets all of the following conditions:

(1) the purpose of the opening is to provide dilution air to reduce the explosion hazard;
(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) as described in section A.V.5.c.; and
(3) the pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(ii) The closed-vent system and control device shall be designed and operated in accordance with 61.349), as described in section A.II.4.b. of this permit.

[61.346(a)(2)]

(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 and that access hatches and other openings are closed and gasketed properly.

[61.346(a)(3)]

(c) Except as provided in 61.350, 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.

[61.346(b)]

ii. As an alternative to complying with paragraph i. above, the permittee may elect to comply with the following requirements:

[61.346(b)(1)]

(a) Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

[61.346(b)(2)]

(b) Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed

10.2 cm (4 in) in diameter.

(i) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(A) Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(B) Connect the junction box vent pipe to a closed-vent system and control device in accordance with 61.349, as described in section A.II.4.b. of this permit.

[61.346(b)(3)]

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

[61.346(b)(4)]

(d) Equipment installed in accordance with paragraphs (a), (b) or (c) above, shall be inspected as follows:

(i) Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(ii) Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(iii) Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(iv) The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

[61.346(b)(5)]

(e) Except as provided in 61.350, when a broken seal, gap, crack 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.

b. STANDARDS: CLOSED-VENT SYSTEMS AND CONTROL DEVICES - 40 CFR 61, subpart FF

i. [61.349(a)]
For each closed-vent system and control device used to comply with standards in accordance with 40 CFR 61.343 through 61.348, the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

[61.349(a)(1)]

(a) The closed-vent system shall:

(i) 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 40 CFR 61.355(h), as described in section A.V.4.d. of this permit.

(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 40 CFR Part 61 subpart FF 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 paragraph (B) below.

(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.

(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.

(iii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(iv) For each closed-vent system complying with 40 CFR 61.349(a), 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.

[61.349(a)(2)]

(b) The control device shall be designed and operated in accordance with the following conditions:

(i) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(A) Reduce the organic emissions vented to it by 95 weight percent or greater;

(B) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or

(C) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F). If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(ii) 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.

(iii) A flare shall comply with the requirements of 40 CFR 60.18.

(iv) A control device other than those described in paragraphs i. through iii. above may be used provided that the following conditions are met:

(A) The device 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) The permittee shall develop test data and design information that documents the control device will achieve an emission control efficiency of either 95 percent or greater for organic compounds or 98 percent or greater for benzene.

(C) The permittee shall identify:

(I) The critical operating parameters that affect the emission control performance of the device;

(II) The range of values of these operating parameters that ensure the emission control efficiency specified in paragraph (A) above, is maintained during operation of the device; and

(III) How these operating parameters will be monitored

to ensure the proper operation and maintenance of the device.

(D) The permittee shall submit the information and data specified in paragraphs (B) and (C) above, to the Administrator of U.S. EPA prior to operation of the alternative control device.

(E) The Administrator of USEPA will determine, based on the information submitted under paragraph (D) above, if the control device subject to paragraph (iv) above, meets the requirements of 40 CFR 61.349. The control device subject to paragraph (iv) above, may be operated prior to receiving approval from the Administrator of USEPA. However, if the Administrator of USEPA determines that the control device does not meet the requirements of 40 CFR 61.349, the facility may be subject to enforcement action beginning from the time the control device began operation.

[61.349(b)]

ii. Each closed-vent system and control device used to comply with 40 CFR 61 subpart FF, 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.

[61.349(c)]

iii. The permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in 40 CFR 61.349(a)(2) as described in section A.II.b.i.(b) above, by using one of the following methods:

[61.349(c)(1)]

(a) Engineering calculations in accordance with requirements specified in 40 CFR 61.356(f), as described in section A.III.4.a.v.; or

[61.349(c)(2)]

(b) Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355, as described in section A.V.4. of this permit.

[61.349(f)]

iv. 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.

[61.349(g)]

v. Except as provided in 61.350, as described in section c. below, 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.

[61.349(h)]

vi. The permittee of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with 61.354(c), as described in section A.III.4.a.iii. of this permit.

c. STANDARDS: DELAY OF REPAIR - 40 CFR 61, subpart FF

[61.350(a)]

i. Delay of repair of facilities or units that are subject to the provisions of 40 CFR 61, subpart FF will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

[61.350(b)]

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

5. WASTEWATER PROVISIONS - 40 CFR part 63, subpart CC

[63.637(c)]
The permittee required under 40 CFR 61, subpart FF to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in 40 CFR 61, subpart FF shall constitute a violation of the standard.

6. GENERAL CONTROL DEVICE REQUIREMENTS (FLARES) - OAC rule 3745-31-05(A)(3)

a. The flare shall be steam-assisted.

b. The flare shall be operated at all times when emissions may be vented to them.

c. The flare shall be operated with a flame present at all times, as determined by the methods specified in section V.6.b. of this permit.

d. The flare shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in section A.V.6.c. of this permit.

e. i. The flare shall be designed for and operated with an exit velocity, as determined by the methods specified in section A.V.6.d. of this permit, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (a) and (b) below.

ii. Steam-assisted flares designed for and operated with an exit velocity equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

iii. Steam-assisted flares designed for and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in section A.V.6.e. of this

permit, and less than 122 m/sec (400 ft/sec) are allowed.

III. Monitoring and/or Recordkeeping Requirements

1. MONITORING AND RECORDKEEPING REQUIREMENTS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES - OAC rule 3745-21-09(T)

[OAC 3745-21-09(T)(1)(a)]

a. Except as otherwise indicated in section A.I.2.b, a monitoring program shall be developed and implemented which incorporates the following provisions:

i. Yearly monitoring of all pump seals, pipeline valves in liquid service and process drains in accordance with the method specified in section A.V.1. of this permit;

ii. Quarterly monitoring of all compressor seals, pipeline valves in gas service and pressure relief valves in gas service in accordance with the method specified in section A.V.1. of this permit;

iii. Monthly monitoring of all pump seals by visual methods;

iv. Monitoring of any pump seal in accordance with the method specified in section A.V.1. of this permit within five working days after any liquids are observed dripping from the seal;

v. Monitoring of any relief valve in accordance with the method specified in section A.V.1. of this permit within five working days after the valve has vented to the atmosphere; and

vi. Monitoring of any component in accordance with the method specified in section A.V.1. of this permit within five working days after the repair of a leak.

[OAC 3745-21-09(T)(1)(c)]

b. For any pipeline or pressure relief valves in gas or liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in paragraph a. above, if the valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:

i. 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 monitoring on a quarterly or yearly basis as specified in paragraph a. of this section; and

ii. The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during process unit turnarounds and other safe to monitor times.

[OAC 3745-21-09(T)(1)(f)]

c. A monitoring log shall be maintained for all leaking components which are tagged in accordance with section A.II.1.b. of this permit. The monitoring log shall contain, at a minimum, the following data:

i. The name of the process unit where the leaking component is located;

ii. The type of leaking component (such as valve, seal, or other component);

iii. The tag number of the leaking component;

iv. The date on which the leaking component was detected;

v. The date on which the leaking component was repaired;

vi. The date and results of the monitoring performed within five working days after the leaking component was repaired;

vii. A record of the calibration of the monitoring instrument;

viii. A list of those leaking components which cannot be repaired until the next process unit turnaround; and

ix. The total number of components monitored and the total number of components found leaking during the calendar year.

d. [OAC 3745-21-09(T)(1)(g)]
A copy of any monitoring log shall be retained by the permittee for a minimum of five years after the date on which the record was made or the report was prepared.

e. [OAC 3745-21-09(T)(1)(h)]
A copy of any monitoring log shall immediately be made available to the Administrator or an authorized representative of the Administrator, upon verbal or written request, at any reasonable vvvtime.

[OAC rule 3745-21-09(M)(3)(b)] - PROCESS UNIT TURNAROUNDS

f. The permittee shall maintain records for a minimum of two years for each process unit turnaround. Such records shall include:

i. the date the unit was shut down;

ii. the approximate pressure of the vapors in the process vessel when the VOC emissions were first discharged to the ambient air; and

iii. the approximate total quantity of VOC emitted to the ambient air.

[60.486]

2. RECORD KEEPING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR 60, subpart VV

[60.486(a)]

a. The permittee shall comply with the record keeping requirements of this section. A permittee of more than one affected facility subject to the provisions of this subpart may comply with the record keeping requirements for these facilities in one record keeping system if the system identifies each record by each facility.

[60.486(b)]

b. When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7 and 60.482-8 as included in sections A.II.b., c., g. and h. of this permit, the following requirements apply:

[60.486(b)(1)]

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

[60.486(b)(2)]

ii. 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.II.] and no leak has been detected during those 2 months.

[60.486(b)(3)]

iii. The identification on equipment except on a valve, may be removed after it has been repaired.

[60.486(c)]

c. When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 40 CFR 60.483-2, as described in section A.II.2. of this permit, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

[60.486(c)(1)]

i. The instrument and operator identification numbers and the equipment identification number.

[60.486(c)(2)]

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

[60.486(c)(3)]

iii. Repair methods applied in each attempt to repair the leak.

[60.486(c)(4)]

iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a), as described in section A.V.2.a. of this permit, after each repair attempt is equal to or greater than 10,000 ppm.

[60.486(c)(5)]

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

[60.486(c)(6)]

vi. The signature of the person (or designate) whose decision it was that repair could not be effected without a process shutdown.

[60.486(c)(7)]

vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days.

[60.486(c)(8)]

viii. Dates of process unit shutdown that occur while the equipment is unrepaired.

[60.486(c)(9)]

ix. The date of successful repair of the leak.

[60.486(d)]

d. The following information pertaining to the design requirements for closed vent systems and control devices described in 60.482-10 and as section A.II.2.j. of this permit, shall be recorded and kept in a readily accessible location:

[60.486(d)(1)]

i. Detailed schematics, design specifications, and piping and instrumentation diagrams.

[60.486(d)(2)]

ii. The dates and descriptions of any changes in the design specifications.

[60.486(d)(3)]

iii. A description of the parameter or parameters monitored, as required in 60.482-10(e) and described in section A.II.2.j.v. of this permit, 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.

[60.486(d)(4)]

iv. Periods when the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5, as described in section A.II.2. of this permit, are not operated as designed, including periods when a flare pilot light does not have a flame.

[60.486(d)(5)]

v. Dates of startups and shutdowns of the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5, as described in section A.II.2. of this permit.

[60.486(e)]

e. The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10, as described in section A.II.2.a through j. of this permit, shall be recorded in a log that is kept in a readily accessible location:

[60.486(e)(1)]

i. A list of identification numbers for equipment subject to the requirements of 40 CFR 60, subpart VV.

[60.486(e)(2)]

ii. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 60.482-2(e), 60.482-3(i) and 60.482-7(f), as described in section A.II.2. of this permit. The designation of equipment as subject to the requirements of 60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

[60.486(e)(3)]

iii. A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4, as described in section A.II.2.d. of this permit.

[60.486(e)(4)]

iv. (a) The dates of each compliance test as required in 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f), as described in section A.II.2. of this permit.

(b) The background level measured during each compliance test.

(c) The maximum instrument reading measured at the equipment during each compliance test.

[60.486(e)(5)]

v. A list of identification numbers for equipment in vacuum service.

[60.486(f)]

f. The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h), as described in sections A.II.2.g.vii. and viii. of this permit, shall be recorded in a log that is kept in a readily accessible location:

[60.486(f)(1)]

i. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve.

[60.486(f)(2)]

ii. 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.

[60.486(g)]

g. The following information shall be recorded for valves complying with 40 CFR 60.483-2:

i. A schedule of monitoring.

ii. The percent of valves found leaking during each monitoring period.

[60.486(h)]

h. The following information shall be recorded in a log that is kept in a readily accessible location. The design criterion required in 60.482-2(d)(5) and 60.482-3(e)(2), as described in sections A.II.2.b.iii.(e) and A.II.2.c.v. of this permit, and an explanation of the design criterion; along with any changes to this criterion and the reasons for the changes.

[60.486(j)]

i. 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.

[60.486(k)]

j. The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60, subpart VV.

3. WASTEWATER PROVISIONS - 40 CFR part 60, subpart QQQ

a. Standards: Individual drain systems - 40 CFR 60.692-2

[60.692-2(a)(2)]

i. Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

[60.692-2(a)(3)]

ii. Except as provided in paragraph iii. below, each drain out of active service shall be checked by visual or physical inspection initially and weekly thereafter for indications of low water levels or other problems that could result in VOC emissions.

[60.692-2(a)(4)]

iii. As an alternative to the requirements in paragraph ii. above, if a pemittee elects to install a tightly sealed cap or plug over a drain that is out of service, inspections shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed.

[60.692-2(b)(3)]

iv. Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

[60.692-2(c)(2)]

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

[60.696(a)]

vi. Before using any equipment installed in compliance with the requirements of 40 CFR part 60, subpart QQQ, the permittee shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of 40 CFR part 60 subpart QQQ not to be met. Points of inspection shall include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

b. Record keeping requirements - 40 CFR 60.697

[60.697(a)]

i. The permittee shall comply with the recordkeeping requirements of 40 CFR 60.697 and paragraphs ii. through xiv. below. All records shall be retained for a period of 5 years after being recorded unless otherwise noted.

[60.697(b)(1)]

ii. For individual drain systems subject to section A.III.3.a. above, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

[60.697(b)(2)]

iii. For junction boxes subject to subject to section A.III.3.a. above, the location, date, and corrective action shall be recorded for inspections required by paragraph A.III.3.a.iv. above, when a broken seal, gap, or other problem is identified that could result in VOC emissions.

[60.697(b)(3)]

iv. For sewer lines subject to section A.III.3.a. above, the location, date, and corrective action shall be recorded for inspections required by A.III.3.a.v. above, when a problem is identified that could result in VOC emissions.

[60.697(d)]

v. For closed vent systems subject to 40 CFR 60.692-5, as described in section A.II.3.d. of this permit, and completely closed drain systems subject to 60.693-1, as described in section A.II.3.g. of this permit, the location, date, and corrective action shall be recorded for inspections required by 60.692-5(e), as described in section A.II.3.d.v. of this permit, during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

[60.697(e)(1)]

vi. If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

[60.697(e)(2)]

vii. The reason for the delay as specified in section A.II.3.d. of this permit, shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

[60.697(e)(3)]

viii. The signature of the permittee (or designee) whose decision it was that repair could not be effected without refinery or process shutdown shall be recorded.

[60.697(e)(4)]

ix. The date of successful repair or corrective action shall be recorded.

[60.697(f)(1)]

x. A copy of the design specifications for all equipment used to comply with the provisions of 40 CFR part 60 subpart QQQ shall be kept for the life of the source in a readily accessible location.

[60.697(f)(2)]

xi. The following information pertaining to the design specifications shall be kept.

(a) Detailed schematics, and piping and instrumentation diagrams.

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

[60.697(f)(3)]

xii. The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.

[60.697(f)(3)(i)]

(a) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter the control device, including flow and volatile organic compound content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C (1,500 °F) is used to meet the 95-percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph.

[60.697(f)(3)(ii)]

(b) For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound 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.

[60.697(f)(3)(iii)]

(c) Periods when the closed vent systems and control devices required in 60.692, as summarized in Sections A.I.2.k. and A.II.3. of this permit, are not operated as designed, including periods when a flare pilot does not have a flame shall be recorded and kept for 2 years after the information is recorded.

[60.697(f)(3)(iv)]

(d) Dates of startup and shutdown of the closed vent system and control devices required in 60.692, as summarized in Sections A.I.2.k. and A.II.3. of this permit, shall be recorded and kept for 2 years after the information is recorded.

[60.697(f)(3)(v)]

(e) The dates of each measurement of detectable emissions required in 60.692, 60.693, or 60.692-5, as summarized in Sections A.I.2.k. and A.II.3. of this permit, shall be recorded and kept for 2 years after the information is recorded.

[60.697(f)(3)(vi)]

(f) The background level measured during each detectable emissions measurement shall be recorded and kept for 2 years after the information is recorded.

[60.697(f)(3)(vii)]

(g) The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for 2 years after the information is recorded.

[60.697(f)(3)(viii)]

(h) The permittee of an affected facility that uses a thermal incinerator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28 °C (50 °F) below the design combustion zone temperature, and shall keep such records for 2 years after the information is recorded.

[60.697(f)(3)(ix)]

(i) The permittee of an affected facility that uses a catalytic incinerator shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28 °C (50 °F) below the design gas stream temperature, and records of all 3-hour periods during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference, and shall keep such records for 2 years after the information is recorded.

[60.697(f)(3)(x)]

(j) The permittee of an affected facility that uses a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

(i) The permittee of an affected facility that uses a carbon adsorber which is regenerated directly onsite shall maintain continuous records of the volatile organic compound concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average volatile organic compound concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

(ii) If a carbon adsorber that is not regenerated directly onsite 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 that the existing carbon in the control device is replaced with fresh carbon.

[60.697(g)]

xiii. If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.

[60.697(h)]

xiv. For stormwater sewer systems subject to the exclusion in section A.I.2.k.ii.(a) of this permit, the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the stormwater sewer system.

[60.697(i)]

xv. For ancillary equipment subject to the exclusion in section A.I.2.k.ii.(b) of this permit, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.

[60.697(j)]

xvi. For non-contact cooling water systems subject to the exclusion in section A.I.2.k.ii.(c) of this permit, the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.

4. WASTEWATER PROVISIONS - 40 CFR part 61, subpart FF

[61.354]

a. MONITORING OF OPERATIONS - 40 CFR 61, subpart FF

[61.354(a)]

i. 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:

(a) Measure the benzene concentration of the waste stream exiting the treatment process complying with 61.348(a)(1)(i) at least once per month by collecting and analyzing one or more samples using the procedures specified in 61.355(c)(3), as described in section A.V.4.b.iii. of this permit.

(b) 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.

[61.354(b)]

ii. If the permittee complies with the requirements of 61.348(b), then the permittee shall monitor each wastewater treatment system to ensure the unit is properly operated and maintained by the appropriate monitoring procedure as follows:

(a) For the first exempt waste management unit in each waste treatment train, other than an enhanced biodegradation unit, measure the flow rate, using the procedures of 61.355(b), as described in section A.V.4.a. of this permit, and the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 61.355(c)(3), as described in section A.V.4.b.iii. of this permit.

(b) For each enhanced biodegradation unit that is the first exempt waste management unit in a treatment train, measure the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 61.355(c)(3), as described in section A.V.4.b.iii. of this permit.

[61.354(c)]

iii. The permittee subject to the requirements in 61.349, as described in section A.II.4.b. of this permit, 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. 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 control device is operating properly.

(a) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is

greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(b) For a catalytic vapor incinerator, 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 °C or ±0.5 °C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(c) For a flare, a monitoring device in accordance with 40 CFR 60.18(f)(2) equipped with a continuous recorder.

(d) For a boiler or process heater having a design heat input capacity less than 44 MW (150 × 106 BTU/hr), a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(e) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 × 106 BTU/hr), a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(f) For a condenser, either:

(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) 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 °C or ±0.5 °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.

(g) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:
(i) A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the carbon bed; or
(ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(h) For a vapor recovery system other than a condenser or carbon adsorption system, a monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the control device.

(i) For a control device subject to the requirements of 61.349(a)(2)(iv), as described in section A.II.4.b.i. of this permit, devices to monitor the parameters as specified in 61.349(a)(2)(iv)(C).

[61.345(e)]

iv. 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.

[61.354(f)]

v. The permittee 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:

(a) 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), as described in section A.II.4.b.i. of this permit, to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(b) Visually inspect the readings from each flow monitoring device required by 61.349(a)(1)(ii), as described in section A.II.4.b.i. of this permit, at least once each operating day to check that vapors are being routed to the control device as required.

[61.354(g)]

vi. The 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.

b. RECORD KEEPING REQUIREMENTS - 40 CFR part 61, subpart FF

[61.356(a)]

i. Each record shall be maintained in a readily accessible location at the facility site for a period not less than five years from the date the information is recorded unless otherwise specified.

[61.356(b)]

ii. Each permittee shall maintain records that identify each group 1 waste stream in this emissions unit subject to 40 CFR 63, subpart CC, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR 61, subpart FF. In addition, the permittee shall maintain the following records:

[61.356(b)(1)]

(a) For each waste stream not controlled for benzene emissions in accordance with 40 CFR part 61, subpart FF, 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.

[61.356(b)(2)]

(b) For each waste stream exempt from 61.342(c)(1), as described in section A.I.2.m i.(a) of this permit, in accordance with 61.342(c)(3), as described in section A.I.2.m i.(c), the records shall include:

(i) all measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr in accordance with 61.342(c)(3)(i), as described in section A.I.2.m.iii.(a) of this permit or

(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 in accordance with 61.342(c)(3)(ii), as described in section A.I.2.m.iii.(b) of this permit.

[61.356(b)(3)]

(c) For each facility where process wastewater streams are controlled for

benzene emissions in accordance with 61.342(d), as described in section A.I.2.m ii. of this permit, the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

. [61.356(b)(4)]

(d) For each facility where waste streams are controlled for benzene emissions in accordance with 61.342(e), as described in section A.I.2.m iii. of this permit, the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr (6.6 ton/yr).

[61.356(b)(5)]

(e) For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 61.355(b)(5), as described in section A.V.4.a.i. of this permit, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 61.355(b)(5), the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with 61.355(a)(1)(iii)

[61.356(b)(6)]

(f) For each facility where wastewater streams are controlled for benzene emissions in accordance with 61.348(b)(2), the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.

[61.356(d)]

iii. A permittee using control equipment in accordance with 40 CFR 61.343 through 61.347 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 40 CFR 61.355(f).

[61.356(f)]

iv. The permittee using a closed-vent system and control device in accordance with 61.349, as described in section A.II.4.b. of this permit, shall maintain the following

records for the life of the control device:

[61.356(f)(1)]

(a) A statement signed and dated by the permittee 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.

[61.356(f)(2)]

(b) If engineering calculations are used to determine control device performance in accordance with 40 CFR 61.349(c), as described in section A.II.4.b.iii. of this permit, then a design analysis for the control device that includes for example:

(i) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the fol-lowing vent stream characteristics and control device operating parameters:

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the flame zone.

(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified

in 40 CFR 60.18.

(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.

(F) For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, 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, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(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.

(H) For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv), as described in section A.II.4.b.i. of this permit, the design analysis shall consider the vent stream composition, constituent concentration, and flow rate. The design analysis shall also include all of the information submitted under 40 CFR 61.349(a)(2)(iv).

[61.356(f)(3)]

(c) If performance tests are used to determine control device performance in accordance with 40 CFR 61.349(c), as described in section A.II.4.b.iii. of

this permit:

(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.

(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.

(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.

(iv) All test results.

[61.356(g)]

v. The permittee shall maintain a record for each visual inspection required by 61.343 through 61.347 of 40 CFR part 60 subpart FF 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.

[61.356(h)]

vi. The permittee shall maintain a record for each test of no detectable emissions required by 61.343 through 61.347 and 61.349 of 40 CFR part 60 subpart FF. 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.

[61.356(j)]

vii. For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:

[61.356(j)(1)]

(a) Dates of startup and shutdown of the closed-vent system and control device.

[61.356(j)(2)]

(b) 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.

[61.356(j)(3)]

(c) Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(i) Any valve car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii), as described in section A.II.4.b.i. of this permit, is broken or the by-pass line valve position has changed.

(ii) The flow monitoring devices required under 40 CFR 61.349(a)(1)(ii), as described in section A.II.4.b.i. of this permit, indicate that vapors are not routed to the control device as required.

[61.356(j)(4)]

(d) If a thermal vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C (82.4 °F) below the design combustion zone temperature.

[61.356(j)(5)]

(e) If a catalytic vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28°C (82.4 °F) below the design gas stream temperature, and records of all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference.

[61.356(j)(6)]

(f) If a boiler or process heater is used, then the permittee shall maintain records of each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone as required by 40 CFR 61.349(a)(2)(i)(C), as described in section A.II.4.b.i. of this permit,. For a boiler or process heater having a design heat input capacity less than 44 MW (150 x 106 Btu), the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the boiler or process heater and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C (82.4 °F) below the design combustion zone temperature. For a boiler or process heater having a design heat input capacity greater than or

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equal to 44 MW (150 x 106 Btu), the permittee shall maintain continuous records of the parameter(s) monitored in accordance with the requirements of 40 CFR 61.354(c)(5).

[61.356(j)(7)]

(g) If a flare is used, then the permittee shall maintain continuous records of the flare pilot flame monitoring and records of all periods during which the pilot flame is absent.

. [61.356(j)(8)]

(h) 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), as described in section A.III.4.a.iii.(f). If concentration of organics or concentration of benzene in the control device outlet gas stream is monitored, then the permittee 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. 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.

[61.356(j)(9)]

(j) 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 permittee 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. If the carbon bed regeneration interval is monitored, then the permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

[61.356(j)(10)]

(k) 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 then the existing carbon in the control device is replaced with fresh carbon.

[61.356(j)(11)]

(l) If an alternative operational or process parameter is monitored for a control device, as allowed in 40 CFR 61.354(e) as described in section A.III.4.iv. of this permit, then the permittee shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

[61.356(j)(12)]

(m) If a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv), as described in section A.II.4.b.i. of this permit, is used, then the permittee shall maintain records of the parameters that are monitored and each occurrence when the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C), or other records as specified by the Administrator of USEPA.

[61.356(k)]

viii. The permittee who elects to install and operate the control equipment in 40 CFR 61.351 shall comply with the recordkeeping requirements in 40 CFR 60.115b.

[61.356(l)]

ix. The permittee who elects to install and operate the control equipment in 40 CFR 61.352 shall maintain records of the following:

[61.356(l)(1)]

(a) The date, location, and corrective action for each visual inspection required by 40 CFR 60.693-2(a)(5), during which a broken seal, gap, or other problem is identified that could result in benzene emissions.

[61.356(l)(2)]

(b) Results of the seal gap measurements required by 40 CFR 60.693-2(a).

[61.356(m)]

x. 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.

5. GENERAL REQUIREMENTS - 40 CFR part 63, subpart CC

RECORD KEEPING REQUIREMENTS, EQUIPMENT LEAKS

[63.642(e)]

a. The permittee shall keep copies of all applicable records required by 40 CFR part 60 subpart CC for at least 5 years except as otherwise specified in this permit. 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.

[63.654(d)]

b. The permittee subject to the equipment leaks standards in 63.648 shall comply with the recordkeeping provisions in paragraphs (d)(1) through (d)(6) of this section.

[63.654(d)(1)]

i. Section 60.486 of subpart VV of except the signature of the permittee (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.

[63.654(d)(3)]

ii. The permittee who determines that a compressor qualifies for the hydrogen service exemption in 63.648 shall also keep a record of the demonstration required by 63.648.

[63.654(d)(4)]

iii. The permittee must keep a list of identification numbers for valves that are designated as leakless per 63.648(c)(10).

[63.654(d)(5)]

iv. 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.

[63.654(d)(6)]

v. The permittee must keep a list of reciprocating pumps and compressors determined to be exempt from seal requirements as per 63.648(f) and (i).

[63.654(i)]

c. Recordkeeping.

[63.654(i)(2)]

i. The permittee required to report the results of performance tests under paragraphs 63.654(f) and (g)(7) shall retain a record of all reported results as well as a complete test report, as described in paragraph 63.654(f)(2)(ii) for each emission point tested.

[63.654(i)(3)]

ii. The permittee required to continuously monitor operating parameters under 40 CFR 63.644 for miscellaneous process vents or under 40 CFR 63.652 and 63.653 for emission points in an emissions average shall keep the records specified in paragraphs (a) through (e) below, unless an alternative recordkeeping system has been requested and approved under 40 CFR 63.654(h).

(a) The monitoring system shall measure data values at least once every hour.

(b) The permittee shall record either:
  (i) Each measured data value; or
  (ii) Block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

(c) Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (d) below.
  (i) The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per day if operation is not continuous.
  (ii) The operating day shall be the period defined in the Notification of Compliance Status report. It may be from midnight to midnight or another daily period.

(d) If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status report, the permittee may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that day. For these days, the records required in paragraph (b) above, shall also be retained for 5 years.

(e) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation

when monitors are not operating.

[40 CFR 63.654(i)(4)]

iv. All other information required to be reported under 40 CFR 63.654(a) through (h) shall be retained for 5 years.

6. GENERAL CONTROL DEVICE REQUIREMENTS (FLARES) - OAC rule 3745-31-05(A)(3)

a. The permittee shall install a device (including but not limited to a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of a pilot flame. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

b. The following information pertaining to the design requirements for the flare shall be recorded and kept in a readily accessible location:

i. Detailed schematics, design specifications, and piping and instrumentation diagrams.

ii. The dates and descriptions of any changes in the design specifications.

iii. A description of the parameter or parameters monitored to ensure that flare is operated and maintained in conformance with its design and an explanation of why that parameter (or parameters) was (were) selected for the monitoring. These monitored parameters shall include, as a minimum, the net heating value of the gas being combusted in MJ/scm or Btu/scf, and the exit velocity in m/sec or ft/sec..

iv. Periods when the flare was not operated as designed while process gases are being vented to the flare, including periods when a flare pilot light does not have a flame.

v. Dates of startups and shutdowns of the flare.

c. For each day during which the permittee burns a fuel other than commercially available natural gas in the flare pilot light and safety sweep burn of this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

IV. Reporting Requirements

1. REPORTING REQUIREMENTS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES - OAC rule 3745-21-09(T)

[OAC 3745-21-09(T)(1)(i)]
A report shall be submitted to the TDOES by the fifteenth day of January, April, July and October that gives the total number of components monitored during the previous three calendar months,

gives the total number of components found leaking during the previous three calendar months, identifies all components which were found leaking during the previous three calendar months but which were not repaired within fifteen days and identifies all leaking components which cannot be repaired until the next process unit turnaround.

[60.487]

2. REPORTING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR 60, subpart VV

[60.487(a)]

a. The permittee shall submit semiannual reports to the Toledo Division of Environmental Services (TDOES) beginning six months after the initial start-up date.

[60.487(b)]

b. The initial semiannual report to the TDOES shall include the following information:

i. Process unit identification.

ii. Number of valves subject to the requirements of 60.482-7, as described in section A.II.2.g. of this permit, excluding those valves designated for no detectable emissions under the provisions of 60.482-7(f).

iii. Number of pumps subject to the requirements of 60.482-2, as described in section A.II.2.b. of this permit, excluding those pumps designated for no detectable emissions under the provisions of 60.482-2(e) and those pumps complying with 60.482-2(f).

iv. Number of compressors subject to the requirements of 60.482-3, as described in section A.II.2.c. of this permit, excluding those compressors designated for no detectable emissions under the provisions of 60.482-3(i) and those compressors complying with 60.482-3(h).

[60.487(c)]

c. All semiannual reports to the TDOES shall include the following information, summarized from the information in 60.486, as described in section A.III.2. of this permit:

[60.487(c)(1)]

i. Process unit identification.

[60.487(c)(2)]

ii. For each month during the semiannual reporting period:

(a) number of valves for which leaks were detected as described in 60.482(7)(b) and as section A.II.2.g.ii. of this permit;

(b) number of valves for which leaks were not repaired as required in paragraph 60.482-7(d)(1) and described in section A.II.2.g.iv. of this permit;

(c) number of pumps for which leaks were detected as described in 60.482-2(b) and (d)(6)(i) and as sections A.II.2.b.i. and A.II.2.b.iii.(f) of this permit;

(d) number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) and (d)(6)(ii) and described in sections A.II.2.b.ii. and A.II.2.b.iii.(f) of this permit;

(e) number of compressors for which leaks were detected as described in 60.482-3(f) and as section A.II.2.c.vi. of this permit;

(f) number of compressors for which leaks were not repaired as required in 60.482-3(g)(1) and described in section A.II.2.c.vii. of this permit; and

(g) the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

[60.487(c)(3)]

iii. Dates of process unit shutdowns which occurred within the semiannual reporting period.

[60.487(c)(4)]

iv. Revisions to items reported according to 40 CFR 60.487(b), as described in paragraph b. above, if changes have occurred since the initial report or subsequent revisions to the initial report.

[60.487(d)]

d. The permittee electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2, as described in sections A.II.2.k. and l. of this permit shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

[60.487(e)]

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 40 CFR 60 subpart VV 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.

3. WASTEWATER PROVISIONS - 40 CFR part 60, subpart QQQ

[60.698(b)(1)]

a. The permittee shall submit to the Administrator within 60 days after initial startup, a certification that the equipment necessary to comply with 40 CFR part 60, subpart QQQ has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the permittee shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards.

[60.698(c)]

b. A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted initially and semiannually thereafter to the Administrator.
[60.698(e)]

c. If compliance with the provisions of 40 CFR part 60, subpart QQQ is delayed pursuant to 60.692-7 as described in section A.II.3.f. of this permit, the notification required under 40 CFR 60.7(a)(4), as described in paragraph d. below, shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

[60.7(a)(4)]

d. The permittee shall submit a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

4. WASTEWATER PROVISIONS - 40 CFR 61, subpart FF

[61.357(a)]

a. The permittee shall submit to the Administrator by the initial startup for this emissions unit, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 61.355(c), as described in section A.V.4.b. of this permit, to contain benzene. The report shall include the following

information:

[61.357(a)(1)]

i. Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a).

[61.357(a)(2)]

ii. A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.

[61.357(a)(3)]

iii. For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, subpart FF the following information shall be added to the table:

(a) whether or not the water content of the waste stream is greater than 10 percent;

(b) whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(c) annual waste quantity for the waste stream;

(d) range of benzene concentrations for the waste stream;

(e) annual average flow-weighted benzene concentration for the waste stream; and

(f) annual benzene quantity for the waste stream.

[61.357(a)(4)]

iv. The information required in paragraphs i. ii and iii above, should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a).

[61.357(d)]

b. If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr, then the permittee shall submit to the Administrator the following reports:

[61.357(d)(1)]

i. By the date of initial startup, 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 40 CFR part 61, subpart FF.

[61.357(d)(2)]

ii. Beginning on the date of initial startup, the permittee shall submit annually to the Administrator a report that updates the information listed in paragraphs (a) through (c) below. If the information in the annual report required by paragraphs (a) through (c) below is not changed in the following year, the permittee may submit a statement to that effect.

(a) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a).

(b) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR part 61, subpart FF.

(c) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR part 61, subpart FF the following information shall be added to the table:
- (i) whether or not the water content of the waste stream is greater than 10 percent;
- (ii) whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
- (iii) annual waste quantity for the waste stream;
- (iv) range of benzene concentrations for the waste stream;
- (v) annual average flow-weighted benzene concentration for the waste stream; and
- (vi) annual benzene quantity for the waste stream.

[61.357(d)(3)]

iii. If the permittee elects to comply with the requirements of 61.342(c)(3)(ii)of 40 CFR part 61, subpart FF, then the report required by paragraph ii above, shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

[61.357(d)(4)]

iv. If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the permittee shall include in the report required paragraph ii.b. above, a table presenting the following information for each process wastewater stream:

[61.357(d)(4)(i)]

(a) Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61 Subpart FF;

[61.357(d)(4)(ii)]

(b) For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61 Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

[61.357(d)(4)(iii)]

(c) For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61 Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

[61.357(d)(5)]

v. If the permittee elects to comply with the alternative requirements of 61.342(e), as described in section A.I.2.m.iv. of this permit, then the report required by paragraph ii. above, shall include a table presenting the following information for each waste stream:

[61.357(d)(5)(i)]

(a) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61 Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

40 CFR 61.357(d)(5)(ii)

(b) For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61 Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 61.355(k)(2), as described in section A.V.4.f.ii. of this permit: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

[61.357(d)(6)]

vi. Beginning 3 months after the date of initial startup, 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 40 CFR part 61, subpart FF.

[61.357(d)(7)]

vii. Beginning 3 months after the date of initial startup, the permittee shall submit a report quarterly to the Administrator that includes:

(a) If a treatment process or wastewater treatment system unit is monitored in accordance with 61.354(a)(1), as described in section A.III.4.a.i.(a) of this permit, 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) If a treatment process or wastewater treatment system unit is monitored in accordance with 61.354(a)(2), as described in section A.III.4.a.i.(b) of this permit, 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) If a treatment process or wastewater treatment system unit is monitored in accordance with 61.354(b), as described in section A.III.4.a.ii. of this permit, then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr.

(d) For a control device monitored in accordance with 61.354(c), as described in section A.III.4.a.iii. of this permit, 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)(H)]
Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not

regenerated at the predetermined carbon bed regeneration time. [61.357(d)(7)(iv)(I)]

(iii) 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), as described in section A.III.4.a.iii. of this permit.

viii. [61.357(d)(8)]
Beginning one year after the date of initial startup, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 61.342 through 61.354 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.

5. 40 CFR part 63, subpart CC

a. [63.654(a)]
Except as provided in section A.I.2.n i.(c) of this permit, the permittee shall comply with the reporting provisions in 40 CFR 61.357 of subpart FF, as summarized and included as section A.IV.4.b. of this permit.

[63.642(e)]
b. The permittee shall keep copies of all applicable reports required by 40 CFR part 63, subpart CC for at least 5 years except as otherwise specified in this permit.

[63.642(f)]
c. All reports required under this subpart shall be sent to the Administrator at the addresses listed in 40 CFR 63.13 as described in section VI.1.c. of this permit. If acceptable to the Administrator, the reports may be submitted on electronic media.

[63.640(l)(3)]
d. The permittee of a petroleum refining process unit or of a storage vessel, miscellaneous process vent, wastewater stream that is added to a plant site and is subject to the requirements for existing sources shall comply with the reporting and recordkeeping requirements that are applicable to existing sources including, but not limited to, the reports listed in paragraphs i. through v. below. A process change to an existing petroleum refining process unit shall be subject to the reporting requirements for existing sources including, but not limited to, the reports listed in paragraphs i. through v. below. The applicable reports include, but are not limited to:

i. The Notification of Compliance Status report as required by 40 CFR 63.654(f) for the emission points that were added or changed;

ii. Periodic Reports and other reports as required by 40 CFR 63.654 (g) and (h);

iii. Reports and notifications required by sections of subpart A of 40 CFR part 63 that are applicable to subpart CC, as identified in 40 CFR part 63 subpart CC table 6.

iv. Reports and notifications required by 40 CFR 63.182, or 40 CFR 60.487. The requirements of subpart H of 40 CFR part 63 are summarized in 40 CFR part 63 subpart CC table 3;

v. Reports required by 40 CFR 61.357 of subpart FF;

[63.640(l)(4)]

e. If pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, or instrumentation systems are added to an existing source, they are subject to the equipment leak standards for existing sources in 40 CFR 63.648. A notification of compliance status report shall not be required for such added equipment.

[63.654(e)]

f. The permittee subject to 40 CFR part 63, subpart CC shall submit the reports listed in paragraphs i. through iii. below, and shall keep records as described in 63.654(i) as described in section i. below.

i. A Notification of Compliance Status report as described in 63.654(f) as described in section g. below.

ii. Periodic Reports as described in 63.654(g) as described in section. h. below.

iii. Other reports as described in 63.654(h) as described in section. i. below.

[63.654(f)]

g The permittee subject to 40 CFR part 63 subpart CC shall submit a Notification of Compliance Status report within 150 days after initial startup. 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 initial startup, a separate Notification of Compliance Status report is not required. If the permittee submits the information specified in paragraphs (i) through (v) 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.

[63.654(f)(1)]

i. The Notification of Compliance Status report shall include the information specified in paragraphs (a) through (d) below:

Emissions Unit ID: P039

(a) For storage vessels, this report shall include the information specified in paragraphs (i) and (ii) below:

(i) Identification of each storage vessel subject to this subpart, and for each Group 1 storage vessel subject to this subpart, the information specified in paragraphs (A) through (C) below. This information is to be revised each time a Notification of Compliance Status report is submitted for a storage vessel subject to the compliance schedule specified in 63.640(h)(4) or to comply with 63.640(l)(3).

(A) For each Group 1 storage vessel complying with 40 CFR 63.646 that is not included in an emissions average, the method of compliance (i.e., internal floating roof, external floating roof, or closed vent system and control device).

(B) For storage vessels subject to the compliance schedule specified in 63.640(h)(4) that are not complying with 63.646, the anticipated compliance date.

(C) For storage vessels subject to the compliance schedule specified in 63.640(h)(4) that are complying with 63.646 and the Group 1 storage vessels described in 63.640(l), the actual compliance date.

(ii) If a closed vent system and a flare is used, the permittee shall submit:

(A) Flare design (e.g., steam-assisted, air-assisted, or nonassisted);

(B) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.120(e); and

(C) All periods during the compliance determination when the pilot flame is absent.

[63.654(f)(1)(iv)]

(b) For miscellaneous process vents controlled by flares, performance test results including the information in paragraphs (i) and (ii) below;

(i) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.645 and 63.116(a) of subpart G, and

(ii) A statement of whether a flame was present at the pilot light over the full period of the compliance determination.

[63.654(f)(2)]

ii. If initial performance tests are required by 40 CFR 63.643 through 63.653, the Notification of Compliance Status report shall include one complete test report for each test method used for a particular source.

[63.654(f)(2)(i)]

(a) For additional tests performed using the same method, the results specified in section (i) above, shall be submitted, but a complete test report is not required.

[63.654(f)(2)(ii)]

(b) A complete test report shall include a sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.

[63.654(f)(2)(iii)]

(c) Performance tests are required only if specified by 63.643 through 63.653. Initial performance tests are required for some kinds of emission points and controls. Periodic testing of the same emission point is not required.

[63.654(f)(3)]

iii. For each monitored parameter for which a range is required to be established under 63.120(d) of 40 CFR part 63 subpart G for storage vessels or 63.644 for miscellaneous process vents, the Notification of Compliance Status report shall include the information in paragraphs (a) through (c) below.

[63.654(f)(3)(i)]

(a) The specific range of the monitored parameter(s) for each emission point;

[63.654(f)(3)(ii)]

(b) The rationale for the specific range for each parameter for each emission point, including any data and calculations used to develop the range and a description of why the range ensures compliance with the emission standard.

(i) If a performance test is required by 40 CFR part 63 subpart CC for a control device, the range shall be based on the parameter values measured during the performance test supplemented by engineering assessments and manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of permitted parameter values.

(ii) If a performance test is not required by 40 CFR part 63 subpart CC for a control device, the range may be based solely on engineering assessments and manufacturers' recommendations.

[63.654(f)(3)(iii)]

(c) A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends.

[63.654(f)(4)]

iv. Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status report.

[63.654(f)(5)]

v. For emission points included in an emissions average, the Notification of Compliance Status report shall include the values of the parameters needed for input to the emission credit and debit equations in 63.652(g) and (h), calculated or measured according to the procedures in 63.652(g) and (h), and the resulting credits and debits for the first quarter of the year. The first quarter begins on the compliance date specified in 63.640.

[63.654(f)(6)]

vi. Notification of Compliance Status reports required by 63.640(l)(3) and for storage vessels subject to the compliance dates specified in 63.640(h)(4) shall be submitted no later than 60 days after the end of the 6-month period during which the change or addition was made that resulted in the Group 1 emission point or the existing Group 1 storage vessel was brought into compliance, and may be combined with the periodic report. Six-month periods shall be the same 6-month periods specified in 63.654(g) as summarized in section h. below. The Notification of Compliance Status report shall include the information specified in paragraphs (i) through (v)

above. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, as part of the periodic report, or in any combination of these four. If the required information has been submitted before the date 60 days after the end of the 6-month period in which the addition of the Group 1 emission point took place, a separate Notification of Compliance Status report is not required within 60 days after the end of the 6-month period. If the permittee submits the information specified in paragraphs (i) through (v) above, at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

[63.654(g)]

h. The permittee of a source subject to 40 CFR part 63 subpart CC shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs 40 CFR 63.654(g)(1) through (g)(6). The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. A Periodic Report is not required if none of the compliance exceptions specified in paragraphs 63.654(g)(1) through (g)(6), occurred during the 6-month period unless emissions averaging is utilized. Quarterly reports must be submitted for emission points included in emissions averages, as provided in 40 CFR 63.654(g)(8).

[63.654(h)]

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

[63.654(h)(1)]

i. Reports of startup, shutdown, and malfunction required by 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 63.641, that are not included in an emissions average. For purposes of this paragraph, startup and shutdown shall have the meaning defined in 63.641, and malfunction shall have the meaning defined in 63.2; and

[63.654(h)(5)]

ii. The permittee may request approval to use alternatives to the continuous operating parameter monitoring and record keeping provisions listed in paragraph 63.654(i) as described in section A.III.5.c. of this permit.

(a) Requests shall be submitted with the Application for Approval of Construction or Reconstruction for new sources. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal. Requests shall

contain the information specified in paragraphs (c) and (d) below, as applicable.

(b) The provisions in 63.8(f)(5)(i) of subpart A of this part shall govern the review and approval of requests.

(c) The permittee may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once every hour) but records all values that meet set criteria for variation from previously recorded values.

(i) The requested system shall be designed to:

(A) Measure the operating parameter value at least once every hour.

(B) Record at least 24 values each day during periods of operation.

(C) Record the date and time when monitors are turned off or on.

(D) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident.

(E) Compute daily average values of the monitored operating parameter based on recorded data.

(ii) The request shall contain a description of the monitoring system and data compression recording system including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all criteria of paragraph (i) above.

(d) The permittee may request approval to use other alternative monitoring systems according to the procedures specified in 63.8(f) of subpart A of this part.

[63.654(h)(6)]

iv. The permittee shall submit the information specified in paragraphs (b) through (c) below, as applicable. For existing sources, this information shall be submitted in the initial Notification of Compliance Status report. For a new source, the information shall be submitted with the application for approval of construction or reconstruction required by 63.5(d). The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(a) The determination of applicability of 40 CFR part 63 subpart CC to petroleum refining process units that are designed and operated as flexible operation units.

(b) The determination of applicability of this subpart to any storage vessel for

which use varies from year to year.

(c) The determination of applicability of this subpart to any distillation unit for which use varies from year to year.

[63.654(d)]

j. The permittee subject to the equipment leaks standards in 63.648 shall comply with the reporting provisions in paragraphs (i) and (ii) below.

[63.654(d)(1)]

i. Section 60.487 of subpart VV except the signature of the permittee (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.

[63.654(d)(2)]

ii. The initial semiannual report required by 60.487(b) of 40 CFR part 60, subpart VV shall be submitted within 150 days of the compliance date specified in 63.640(h).

6. GENERAL CONTROL DEVICE REQUIREMENTS (FLARES) - OAC rule 3745-31-05(A)(3)

a. The permittee shall submit deviation (excursion) reports that identify each period when the flare was not operated as designed while process gases are being vented to the flare. These deviations reports shall include, but are not limited to, periods when a flare pilot light does not have a flame, the net heating value of the gas being combusted was below the design minimum, or the exit velocity exceeded the design parameter, as well as any corrective actions taken to avoid future exceedences.

b. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than commercially available natural gas was burned in the flare pilot light and safety sweep burn of this emissions unit.

V. Testing Requirements

1. METHOD FOR THE DETECTION OF LEAKS OF VOC COMPOUNDS FROM PETROLEUM REFINERY EQUIPMENT - OAC rule 3745-21-09(T)

[OAC 3745-21-10(F)(1)]

a. This method is applicable to the detection of leaks of volatile organic compounds into the ambient air from petroleum refinery equipment and any chemical manufacturing equipment

subject to paragraph (T) or (DD) of rule 3745-21-09 of the Ohio Administrative Code.

[OAC 3745-21-10(F)(2)]

b. The detection of leaks shall be determined in accordance with the test procedure set forth in "Method 21, 40 CFR, Part 60, Appendix A."

[OAC 3745-21-10(F)(3)]

c. The calibration gases shall be:

i. Zero air, which consists of less than ten ppmv of hydrocarbon in air; and

ii. A mixture of air and methane or n-hexane at a concentration of approximately, but less than, ten thousand ppmv of methane or n-hexane.

[OAC 3745-21-10(F)(4)]

d. The leak detection instrument shall be calibrated before use on each day of its use.

2. TEST METHODS AND PROCEDURES, LEAK DETECTION - 40 CFR 60, Subpart VV

[60.485(a)]

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 40 CFR part 60 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

[60.485(b)]

b. The permittee shall determine compliance with the standards in 60.482, 60.483, and 60.484, as described in sections A.II.2. of this permit as follows. 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:

[60.485(b)(1)(i)]

i. zero air (less than 10 ppm of hydrocarbon in air); and

[60.485(b)(1)(ii)]

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.

[60.485(c)]

c. The permittee shall determine compliance with the no detectable emission standards in 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f) and 60.482-10(e), as described in section A.II.2. of this permit, as follows:

i. The requirements of paragraph b. above, shall apply.

ii. 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 indicates by the instrument and the background level is compared with 500 ppm for determining compliance.

[60.485(d)]

d. The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC series, 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:

[60.485(d)(1)]

i. Procedures that conform to the general methods in ASTM E-260, E-168, E-169 (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.

[60.485(d)(2)]

ii. 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.

[60.485(d)(3)]

iii. 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 TDOES disagrees with the judgment, paragraphs i. and ii. above, shall be used to resolve the disagreement.

[60.485(e)]

e. The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

[60.485(e)(1)]

i. The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C. Standard reference texts or ASTM D-2879 (incorporated by reference, see 40 CFR 60.17) shall be used to determine the vapor pressures.

[60.485(e)(2)]

ii. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at20°C is equal to or greater than 20 percent by weight.

[60.485(e)(3)]

iii. The fluid is a liquid at operating conditions.

[60.485(f)]

f. Samples used in conjunction with paragraphs d., e., and g. of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

[60.485(g)]

g. The permittee shall determine compliance with the standards of flares as follows:

[60.485(g)(1)]

i. Method 22 shall be used to determine visible emissions.

[60.485(g)(2)]

ii. A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

[60.485(g)(3)]

iii. The maximum permitted velocity (V_{max}) for air-assisted flares shall be computed using the following equation:

$$V_{max} = 8.706+0.7084\ H_T$$

where:

V_{max} = maximum permitted velocity, m/sec.

H_T = net heating value of the gas being combusted, MJ/scm.

[60.485(g)(4)]

iv. The net heating value (H_T) of the gas being combusted in a flare shall be computed using the equation found in section A.V.6.c. of this permit.

[60.485(g)(5)]

v. Method 18 and ASTM D 2504-67 (incorporated by reference, see 40 CFR 60.17) shall be used to determine the concentration of sample component "i.".

[60.485(g)(6)]

vi. ASTM D 2382-76 (incorporated by reference, see 40 CFR 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

[60.485(g)(7)]

vii. Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

3. WASTEWATER PROVISIONS - 40 CFR part 60 subpart QQQ

[60.692-1(b)]
Compliance with the requirements of 40 CFR part 60 subpart QQQ, as described in section A.I.2.k, will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.696.

4. WASTEWATER PROVISIONS - 40 CFR part 61, subpart FF

[61.355(a)]

a. The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

[61.355(a)(1)]

i. For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a), the permittee shall:

(a) Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355(b), as described in paragraph b. below.

(b) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355(c), as described in paragraph c. below.

(c) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

[61.355(a)(2)]

ii. Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355(b)(4), as described in paragraph b.i. below.

[61.355(a)(3)]

iii. The permittee shall comply with the requirements of 40 CFR 61.342(c), as described in section A.I.2.m. of this permit, 40 CFR 61.342(d) , or (e).

[61.355(a)(4)]

iv. If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

[61.355(a)(4)(i)]

(a) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357; and

[61.355(a)(4)(ii)]

(b) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

[61.355(a)(5)]

v. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

[61.355(a)(5)(i)]

(a) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 as summarized in sections A.III.4.b. and A.IV.4. of this permit; and

[61.355(a)(5)(ii)]

(b) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

. [61.355(a)(6)]

vi. The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in paragraph (b)(4) of 40 CFR 61.355, as described in paragraph b.i. below, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of 40 CFR 61.355. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

[61.355(b)]

b. The permittee shall determine the annual waste quantity at the point of waste generation, by one of the methods given in paragraphs i. through iv. below.

. [61.355(b)(4)]

i. The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) and included as section A.V.4.i.(c) above, for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1), as described in section A.IV.4.a.i. of this permit, the permittee shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with

good engineering practices. If the permittee chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

[61.355(b)(5)]

ii. Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

iii. [61.355(b)(6)]
use the maximum design capacity of the waste management unit; or

iv. [61.355(b)(7)]
use measurements that are representative of maximum waste generation rates.

[61.355(c)]

c. For the purposes of the calculation required by 61.355(a), as described in section A.V.4.a. above, the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph i. below, using either of the methods given in paragraphs ii. and iii. below.

[61.355(c)(1)]

i. The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(a) The determination shall be made at the point of waste generation except for the specific cases given in paragraphs i. through iv. below.
(i) The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
(ii) The determination for wastes that are received from off site shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
(iii) The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraph ii. or iii. above. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in 61.355(a)(1)(iii) for the year in which the turnaround

occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(b) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(c) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination to reduce the benzene concentration.

(d) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (a)(i) through (iv) above.

(e) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

[61.355(c)(2)]

ii. Knowledge of the waste.
The permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When the permittee and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under paragraph iii. below, shall be used to resolve the disagreement.

[61.355(c)(3)]

iii. Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

[61.355(c)(3)(i)]

(a) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

[61.355(c)(3)(ii)& (c)(3)(ii)(A) through (H)]

(b) For waste in enclosed pipes, the following procedures shall be used:
(i) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to

sampling.

(ii) A static mixer shall be installed in the process line or in a by-pass line unless the permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(iii) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(iv) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(v) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(vi) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C.

(vii) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(viii) The sample containers shall immediately be cooled and maintained at a temperature below 10°C for transfer to the laboratory.

[61.355(c)(3)(iii)]

(c) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

[61.355(c)(3)(iv) & (c)(3)(iv)(A) through (F)]

(d) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(i) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846

(incorporation by reference as specified in 40 CFR 61.18);

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(v) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(vi) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

[61.355(c)(3)(v)]

(e) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses using the equation in 40 CFR 61.355(c)(3)(v), as described in section A.V.4.b.iii.(e) of this permit.

[61.355(h)]

d. The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347 and 61.349 in accordance with the following requirements:

[61.355(h)(1)]

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

[61.355(h)(2)]

ii. The detection instrument shall meet the performance criteria of Method 21.

[61.355(h)(3)]

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

[61.355(h)(4)]

iv. Calibration gases shall be zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

[61.355(h)(5)]

v. The background level shall be determined as set forth in Method 21.

[61.355(h)(6)]

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

[61.355(h)(7)]

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

[61.355(i)]

e. A 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 40 CFR 61.349(a)(2), as described in section A.II.4.b. of this permit, 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 40 CFR Part 60, appendix A, 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) 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) A run shall consist of a 1-hour period during the test. For each run:
(i) The reading from each measurement shall be recorded;
(ii) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from 40 CFR Part 60, appendix A, as appropriate;
(iii) 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 40 CFR Part 60, appendix A.

(c) The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} = (K_1 V_{aj}) / 10^6) \times (\sum_{i=1}^{n} C_{ai} MW_i)$$

$$M_{bj} = (K_1 V_{bj}) / 10^6) \times (\sum_{i=1}^{n} C_{bi} MW_i)$$

Where:

M_{aj} = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

M_{bj} = Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb).

V_{aj} = Volume of vent stream entering the control device during run j at standards conditions, m^3 (ft^3).

V_{bj} = Volume of vent stream exiting the control device during run j at standards conditions, m^3 (ft^3).

C_{ai} = Organic concentration of compound i or benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis.

C_{bi} = Organic concentration of compound i measured in the vent stream exiting the control device as determined by method 18, ppm by volume on a dry basis.

MW_i = Molecular weight of organic compound i in the vent stream or molecular weight of benzene, kg/kg-mol (lb/lb-mole).

n = Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1.

K_1 = Conversion factor for molar volume = 0.0416 kg-mol/m^3 (at 293°K and 760 mm Hg (527°R and 14.7 psia)). = 0.0416 kg-mol/m^3 (0.00118lb-mol/ft^3)

10^{-6} = Conversion factor for ppmv.

[61.355(i)(3)(iv)]

(d) The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using as follows:

$$E_a = (\sum_{j=1}^{n} M_{aj}) / T$$

$$E_b = (\sum_{j=1}^{n} M_{bj}) / T$$

where:

E_a = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).

E_b = Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr).

M_{aj} = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

M_{bj} = Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb).
T = Total time of all runs, hour.
n = Number of runs.

iv. [61.355(i)(4)]

The organic reduction efficiency for the control device shall be calculated as follows:

$R = 100 (E_a - E_b)/E_a$

Where:

R = Total organic reduction efficiency or benzene reduction efficiency for the control device, percent.
E_b = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).
E_a = Mass flow rate of organics or benzene emitted from the control device, kg/hr (lb/hr).

[61.355(j)]

f. The permittee shall determine the benzene quantity for the purposes of the calculation required by 61.342(c)(3)(ii)(B) as described in section A.I.2.m iii.(b)(ii) of this permit, according to the provisions of 61.355(a), as described in paragraph a. above, except that the procedures in 61.355(a) shall also apply to wastes with a water content of 10 percent or less.

[61.355(k)]

g. The permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) by the following procedure:

[61.355(k)(1)]

i. For each waste stream that is not controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the benzene quantity shall be determined as specified in 61.355(a), as described in paragraph a. above, except that 40 CFR 61.355(b)(4), as described in paragraph b.i. above, shall not apply, i.e., the waste quantity for process unit turnaround waste is not annualized but shall be included in the determination of benzene quantity for the year in which the waste is generated for the purposes of the calculation required by 40 CFR

61.342(e)(2).

[61.355(k)(2)]

ii. For each waste stream that is controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (a) through (c) below, and prior to any reduction of benzene concentration through volatilization of the benzene, using the methods given in paragraphs (d) and (e) below.

(a) Where the waste stream enters the first waste management unit not complying with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit,

(b) For each waste stream that is managed or treated only in compliance with 40 CFR 61.343 through 61.348(a) up to the point of final direct discharge from the facility, the determination of benzene quantity shall be prior to any reduction of benzene concentration through volatilization of the benzene, or

(c) For wastes managed in units controlled for air emissions in accordance with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a), and then transferred offsite, facilities shall use the first applicable offsite location as described in paragraphs (a) and (b) above, if they have documentation from the offsite facility of the benzene quantity at this location. Facilities without this documentation for offsite wastes shall use the benzene quantity determined at the point where the transferred waste leaves the facility.

(d) Annual waste quantity shall be determined using the procedures in 40 CFR 61.355 (b)(5), (6), or (7), as described in sections A.V.4.b.ii. through iv. of this permit.

(e) The flow-weighted annual average benzene concentration shall be determined using the procedures in 40 CFR 61.355(c)(2) or (3), as described in sections A.V.4.c.ii. and iii. of this permit

[61.355(k)(3)]

iii. The benzene quantity in a waste stream that is generated less than one time per year, including process unit turnaround waste, shall be included in the determination of benzene quantity as determined in 40 CFR 61.355(k)(6), as described in paragraph vi. below, for the year in which the waste is generated. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste for purposes of determining benzene quantity as determined in 40 CFR 61.355(k)(6),

as described in paragraph vi. below.

[61.355(k)(4)]

iv. The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B), shall not be included in the determination of benzene quantity, determined in 40 CFR 61.355(k)(6), as described in paragraph vi. below, if the following conditions are met:

(a) The benzene concentration for each waste stream entering the enhanced biodegradation unit is less than 10 ppmw on a flow-weighted annual average basis, and

(b) All prior waste management units managing the waste comply with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a).

[61.355(k)(5)]

v. The benzene quantity for each waste stream in 40 CFR 61.355(k)(2), as described in paragraph ii. above, shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

[61.355(k)(6)]

vi. The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) shall be determined by adding together the benzene quantities determined in 40 CFR 61.355(k)(1) and (k)(5), as described in paragraphs i. and v. above, of for each applicable waste stream.

[40 CFR 61.355(k)(7)]

vii. If the benzene quantity determined in 40 CFR 61.355(k)(6), as described in paragraph vi. above, exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the permittee may use the following procedures for the purposes of the calculation required by 40 CFR 61.342(e)(2), as described in section A.I.2.m of this permit:

[61.355(k)(7)(i)]

(a) Determine which waste management units are involved in the multiple counting of benzene;

[61.355(k)(7)(ii)]

(b) Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of 40 CFR 61.355,

or destroyed in the units if applicable, using either direct measurements or the best available estimation techniques developed or approved by the Administrator of USEPA.

[61.355(k)(7)(iii)]

(c) Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from 40 CFR 61.355(k)(7)(ii), as described in paragraph (b) above, and determine the total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2), as described in section A.I.2.m of this permit.

[61.355(k)(7)(iv)]

(d) Submit in the annual report required under 40 CFR 61.357(a), as described in section A.IV.4.a. of his permit, a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of 40 CFR 61.355, the benzene quantity determination from paragraph (k)(6) of 40 CFR 61.355, and the adjusted benzene quantity determination from paragraph (k)(7)(iii) of 40 CFR 61.355.

5. GENERAL REQUIREMENTS - 40 CFR part 63, subpart CC

[63.642(d)]
Initial performance tests and initial compliance determinations shall be required only as specified in 40 CFR part 63, subpart CC.

[63.642(d)(1)]

a. Performance tests and compliance determinations shall be conducted according to the schedule and procedures specified in 40 CFR part 63, subpart CC.

[63.642(d)(2)]

b. The permittee shall notify the Administrator of the intention to conduct a performance test at least 30 days before the performance test is scheduled.

[63.642(d)(3)]

c. Performance tests shall be conducted according to the provisions of 63.7(e) except that performance tests shall be conducted at maximum representative operating capacity for the process. During the performance test, the permittee shall operate the control device at either maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction.

[63.642(d)(4)]

d. 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 40 CFR part 63, appendix A.

6. GENERAL CONTROL DEVICE REQUIREMENTS (FLARES) - OAC rule 3745-31-05(A)(3)

a. Reference Method 22 of 40 CFR part 60, appendix A shall be used to determine the compliance of flares with the visible emission provisions. The observation period is 2 hours and shall be used according to Method 22.

b. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

c. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$Ht = K \sum_{i=1}^{n} Ci\, Hi$$

where:

Ht = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees C;

K = Constant, 1.740 x 10-7 (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20 degrees C;

Ci = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 of 40 CFR part 60, appendix A and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90; and

Hi = Net heat of combustion of sample component i, kcal/g mole at 25 degrees C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.

d. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

e. The maximum permitted velocity, Vmax, shall be determined by the following equation.

$$\text{Log10 (Vmax)} = (Ht + 28.8) / 31.7$$

where

Vmax = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
Ht = The net heating value determined in paragraph c. above.

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

i. Emission Limitation;

20% opacity, as a six-minute average.

Applicable Compliance Method;

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

ii. Emission Limitation:

0.24 pound of CO per hour.

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 84 pounds of CO emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot and multiply the result by the maximum heat input capacity of 0.66 mmBtu per hour.

iii. Emission Limitation:

1.07 tons of CO per year.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.24 pound of CO per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

iv. Emission Limitation:

0.046 pound of NOx per hour.

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 50 pounds of NOx emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.66 mmBtu per hour.

v.. Emission Limitation:

0.20 ton of NOx per year.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.046 pound of NOx per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

vi. Emission Limitation:

0.002 pound of PE per hour.

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 1.9 pounds of PE per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.66 mmBtu per hour.

vii. Emission Limitation:

0.006 ton of PE per year.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit.

viii. Emission Limitation:

0.001 pound of SO2 per hour.

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 0.6 pound of SO2 emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.66 mmBtu per hour.

ix.. Emission Limitation:

0.003 ton of SO2 per year.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit.

x. Emission Limitation:

0.09 pound of VOC per hour.

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 5.5 pounds of VOC emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.66 mmBtu per hour.

xi. Emission Limitation:

0.40 ton of VOC per year.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.09 pound of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

VI. Miscellaneous Requirements

1. GENERAL PROVISIONS OF 40 CFR 63, subpart A:

[63.1]

a. Applicability

[63.1(a)(11)]

i. For the purposes of 40 CFR part 63, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the permittee shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

[63.1(a)(12)]

ii. Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by the permittee, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the permittee and the Administrator. Procedures governing the implementation of this provision are specified in 63.9(i) and included as section A.VI.1.g.iii. of this permit.

[63.6(e)]

b. Operation and maintenance requirements. (Does not apply to Group 2 emission points.)

[63.6(e)(1)]

i. (a) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph iii. below.

(b) Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act as amended in 1990 are enforceable independent

of emissions limitations or other requirements in relevant standards.

[63.6(e)(2)]

ii. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph A.III. of this section, review of operation and maintenance records, and inspection of the source.

. [63.6(e)(3)(i)]

iii. (a) The permittee of an affected source shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. As required under 40 CFR 63.8(c)(1)(i), the plan shall identify all routine or otherwise predictable CMS malfunctions. This plan shall be developed by the permittee by the source's compliance date for that relevant standard. The plan shall be incorporated by reference into the source's title V permit. The purpose of the startup, shutdown, and malfunction plan is to:

(i) Ensure that permittees are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

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

[63.6(e)(3)(ii)]

(b) During periods of startup, shutdown, and malfunction, the permittee of an affected source shall operate and maintain such source (including associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (a) above.

[63.6(e)(3)(vi)]

(c) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the permittee may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

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

(d) Based on the results of a determination made under paragraph a.ii. of this section, the Administrator may require that the permittee of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

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

(ii) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards; or

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

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

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

[63.6(f)]

c. Compliance with non-opacity emission standards

[63.6(f)(1)]

i. Applicability.

The non-opacity emission standards set forth in 40 CFR part 63 shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

ii. Methods for determining compliance.

[63.6(f)(2)]

(a) The Administrator will determine compliance with non-opacity emission standards in 40 CFR part 63 based on the results of performance tests conducted according to the procedures in 63.7, as summarized in section A.VI.1.e. of this permit, unless otherwise specified in an applicable subpart of 40 CFR part 63.

[63.6(f)(2)(ii)]

(b) The Administrator will determine compliance with non-opacity emission standards in this part by evaluation of the permittees conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in 63.6(e), as summarized in section A.VI.1.b. of this permit, and applicable subparts of 40 CFR part 63.

[63.6(f)(2)(iii)]

(c) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if:

(i) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(ii) The performance test was conducted under representative operating conditions for the source; and

(iii) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in 63.7(e), as described in section A.VI.1.e.iii. of this permit.

[63.6(f)(2)(iv)]

(d) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of 40 CFR part 63.

[63.6(f)(2)(v)]

(e) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of the permittee's conformance with operation and maintenance requirements, as specified in paragraph 63.7(e), as described in section A.VI.1.e. below, and applicable subparts of 40 CFR part 63.

[63.6(f)(3)]

iii. Finding of compliance.

The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs 63.6(f)(1) and (2) and described in sections i. and ii. above, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph 63.6(e)(1)(i) as described in section A.VI.b.i.(a) above.

[63.6(h)]

d. Compliance with opacity and visible emission standards

[63.6(h)(1)]

i. Applicability.

The opacity and visible emission standards set forth in 40 CFR part 63 must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in 40 CFR part 63, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

[63.6(h)(2)]

ii. Methods for determining compliance.

(a) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in 40 CFR part 63., compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of 40 CFR part 60 or the method specified in 40 CFR 63.6(h)(7)(ii). Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of 40 CFR part 60.

(b) If an affected source undergoes opacity or visible emission testing at

startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if:

(i) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(ii) The opacity or visible emission test was conducted under representative operating conditions for the source;

(iii) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in 40 CFR part 63.7(e) and included as section A.VI.1.e.iii. of this permit, and

(iv) The opacity or visible emission test was appropriately quality-assured, as specified in 40 CFR part 63.7(c).

[63.6(h)(6)]

iii. Availability of records.
The permittee shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

[63.7]

e. Performance testing requirements.

[63.7(a)(3)]

i Applicability and performance test dates.
The Administrator may require the permittee to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Clean Air Act of 1990.

[63.7(d)]

ii. Performance testing facilities.
If required to do performance testing, the permittee, at the request of the Administrator, shall provide performance testing facilities as follows:

(a) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(b) Safe sampling platform(s);

(c) Safe access to sampling platform(s);

(d) Utilities for sampling and testing equipment; and

(e) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

[63.7(e)]

iii. Conduct of performance tests.

(a) Performance tests shall be conducted under such conditions as the Administrator specifies to the permittee based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under 63.6(e) as described in section A.VI.1.b. above. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(b) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of 40 CFR parts 51, 60, 61, and 63 unless the Administrator:

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology; or

(ii) Approves the use of an intermediate or major change or alternative to a test method, the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the permittee has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(c) Nothing in paragraphs (a) and (b) above shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[63.7(h)]

iv. Waiver of performance tests.

(a) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the permittee remains subject to the requirements of this section.

(b) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the permittee has requested an extension of compliance and the Administrator is still considering that request.

(c) Request to waive a performance test.

(i) If a request is made for an extension of compliance under 40 CFR 63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the permittee has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under 40 CFR 63.7(c) is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under 40 CFR 63.6(i), 63.9(h), and 63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under 40 CFR 63.7(c) is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the permittee's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

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

[63.8]

f. Monitoring requirements.

[63.8(b)]

i. Conduct of monitoring.

(a) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator:
(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures; or
(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures.
(iii) The permittee with a flare subject to 40 CFR 63.11(b) is not subject to the requirements of this section unless otherwise specified in the relevant standard.

(b) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the permittee shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the permittee shall report the results from the CMS used to meet the monitoring requirements of this 40 CFR part 63. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the permittee shall report the results from each CMS for the relevant compliance period.

[63.8(c)]

ii. Operation and maintenance of continuous monitoring systems.

(a) The permittee shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.
(i) The permittee must maintain and operate each CMS as specified in 63.6(e)(1)and included as section A.VI.1.b.i. of this permit.
(ii) The permittee must develop and implement a written startup, shutdown, and malfunction plan for CMS as specified in 63.6(e)(3) and included as section A.VI.1.b.iii. of this permit.

(b) (i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).
(ii) Unless the individual subpart states otherwise, the permittee must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS

required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(c) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under 63.7 as described in section A.VI.1.e. of this permit. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

g. [63.9]
Notification requirements.

[63.9(a)]
i. Applicability and general information.

(a) The applicability of this section is set out in 40 CFR 63.1(a)(4).

(b) For affected sources that have been granted an extension of compliance under 40 CFR part 63 subpart D, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

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

(d) (i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the permittee in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Administrator of the Division indicated in the list of the EPA Regional Offices in 40 CFR 63.13 and included as section A.VI.1.i. of this permit.

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

[63.9(b)]

ii. Initial notifications.
The permittee of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under 40 CFR 63.5(d) must provide a notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date, in writing to the Administrator.

[63.9(i)]

iii. Adjustment to time periods or postmark deadlines for submittal and review of required communications.

(a) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (b) and (c) below, the permittee remains strictly subject to the requirements of 40 CFR part 63.

(ii) The permittee shall request the adjustment provided for in paragraphs (b) and (c) below each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

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

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

(d) If the Administrator is unable to meet a specified deadline, he or she will

notify the permittee of any significant delay and inform the permittee of the amended schedule.

[63.10]

h. Recordkeeping and reporting requirements.

[63.10(a)]

i. Applicability and general information.

(a) The applicability of this section is set out in 40 CFR 63.1(a)(4).

(b) For affected sources that have been granted an extension of compliance under subpart D of this 40 CFR part 63, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

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

(d) (i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under 40 CFR part 63, the permittee such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Administrator of the Division indicated in the list of the EPA Regional Offices in 63.13 and included as section A.VI.1.i. of this permit).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under 40 CFR part 63, the permittee in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the permittee shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (i) above. The Regional Office may waive this requirement for any reports at its discretion.

(e) If the permittee in a State with delegated authority is required to submit periodic reports under 40 CFR part 63 to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the permittee may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the

permittee and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in 63.9(i), as described in section 3.g. above.

(f) If the permittee supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the permittee and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in 63.9(i), as described in section A.VI.1.g.iii. above.

(g) If the permittee supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this 40 CFR, the permittee may arrange by mutual agreement between the permittee and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in 63.9(i), as described in section A.VI.1.g.iii. above.

[63.10(b)]

ii. General recordkeeping requirements.
The permittee subject to the provisions of 40 CFR part 63 shall maintain relevant records for such source of:

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

(b) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;

(c) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see 63.6(e)(3), as described in section A.VI.1.b.iii. above);

(d) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 63.6(e)(3), as described in section A.VI.1.b.iii. above, when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of record keeping, in order to minimize the record keeping burden for conforming events);

(e) All CMS calibration checks;

(f) All adjustments and maintenance performed on CMS;

[63.10(d)(5)]

iii. (a) Periodic startup, shutdown, and malfunction reports.
If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see 63.6(e)(3) as described in section A.VI.1.b.iii. above], the permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the permittee is required to submit excess emissions and continuous monitoring system

performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the permittee receives approval to reduce the frequency of reporting for the latter under paragraph 40 CFR 63.10(e), the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph 40 CFR 63.10(e)(3).

(b) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (a) above, any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the permittee may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in 40 CFR 63.9(i), as described in section A.VI.1.g.iii. above.

[63.11(a)]

i. 40 CFR 63.11 contains requirements for control devices used to comply with provisions in relevant standards. These requirements apply only to affected sources covered by relevant standards referring directly or indirectly to this section.

[63.13]

j. Addresses of State air pollution control agencies and EPA Regional Offices.

[63.13(a)]

i. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

[63.13(b)]

ii. All information required to be submitted to the Administrator in compliance with the requirements of this permit also shall be submitted to the Toledo Division of Environmental Services, 348 S. Erie St., Toledo, Ohio 43602, to which authority has been delegated under section 112(l) of the Clean Air Act as amended in 1990.

[63.13(c)]

iii. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[63.14(a)]

k. Incorporations by reference. The materials listed in 40 CFR 63.14 are incorporated by reference in the corresponding sections.

[63.15]

l. Availability of information and confidentiality.

[63.15(a)]

i. (a) With the exception of information protected through 40 CFR part 2, all reports, records, and other information collected by the Administrator under 40 CFR part 63 are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Clean Air Act as amended in 1990.

(b) The availability to the public of information provided to or otherwise

obtained by the Administrator under this part shall be governed by 40 CFR part 2.

[63.15(b)]

ii. (a) If a permittee is required to submit information entitled to protection from disclosure under section 114(c) of the Clean Air Act as amended in 1990, the permittee may submit such information separately. The requirements of section 114(c) shall apply to such information.

(b) The contents of a Title V permit shall not be entitled to protection under section 114(c) of the Clean Air Act as amended in 1990; however, information submitted as part of an application for a Title V permit may be entitled to protection from disclosure.

Emissions Unit ID: P039

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P039 - Desulfurized gasoline blending components with a flare as control during process upsets		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T163 - 100,000 bbl internal floating roof tank [Tank 1]; Group 1 storage vessel, dual seals.	OAC rule 3745-31-05(A)(3)	8.41 tons of volatile organic compounds (VOC) per year, and see section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	40 CFR Part 60, Subpart Kb	See section A.I.2.c.
	40 CFR Part 63, Subpart CC	See section A.I.2.d.

2. Additional Terms and Conditions

2.a The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart Kb and 40 CFR Part 63 Subpart CC.

2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.c Implementation of operational restrictions in accordance with the terms and conditions of Section A.II. of this permit is appropriate and sufficient to satisfy the requirements of 40 CFR Part 60 Subpart Kb.

[63.640(n)(1)]

2.d A Group 1 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60 Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60 Subpart Kb.

II. Operational Restrictions

[60.112b(a)(1)]
The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:

1.. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2. The internal floating roof shall be equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

3. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

4. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

5. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

6. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

7. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

8. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

III. Monitoring and/or Recordkeeping Requirements

[60.116b(a)]

1. The permittee shall keep copies of all records required by this section for at least 5 years. The record required by 60.116b(b) below, will be kept for the life of the source.

[60.116b(b)]

2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

[60.116b(c)]

3. The permittee shall maintain of the volatile organic liquid (VOL) stored, the period of storage (or throughput), the maximum true vapor pressure of that VOL during the respective storage period. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined in 40 CFR 60.116b(e).

[60.113b(a)(1)]

4. Prior to filling the storage vessel with VOL, the permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

[60.113b(a)(3)(ii)]

5. The permittee shall either:

[60.113b(a)(2)]

a. visually inspect the internal floating roof, the primary seal and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Toledo Division of Environmental Services (TDOES) in the inspection report required by 60.115b(a)(3) as described in section A.IV.2. of this permit. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible; and

[60.113b(a)(4)]

b. visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces

from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 60.113b(a)(2), as described in section A.III.5.a. above; or

[60113b(a)(3)(i)]

c. visually inspect the vessel at intervals of no greater than 5 years as specified in 60.113b(a)(4), and described in section A.III.5.b. above.

[60.115b(a)(2)]

6. The permittee shall keep a record of each inspection performed as required by 60.113b(a) and described in sections A.III.4. and 5. above. Each record shall identify the storage vessel, shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

IV. Reporting Requirements

[60.113b(5)]

1. The permittee shall notify the TDOES in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by sections 60.113b(a)(1) and (a)(4) as described in sections A.III.4. and 5.b. above, to afford the Administrator the opportunity to have an observer present. If the inspection required by 60.113b(a)(4) is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the TDOES at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the TDOES at least 7 days prior to the refilling.

[60.115b(a)(3)]

2. If any of the conditions described in 60.113b(a)(2), as described in section A.III.5.a. of this permit, are detected during the annual visual inspection, a report shall be furnished to the TDOES within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

[60.115b(a)(4)]

3. After each inspection required by 60.113b(a)(3), as described in section A.III.5. of this permit, that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or

other control equipment defects listed in 60.113b(a)(3)(ii), as described in section A.III.5.a. of this permit, a report shall be furnished to the TDOES within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 60.112b(a)(1), as described in section A.II. of this permit, or 60.113b(a)(3) and list each repair made.

4. All reports and submittals shall be sent to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo , Ohio 43602-1633.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.c of these terms and conditions shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

2. Compliance with the annual VOC emission limitation shall be determined using the latest version of TANKS software, using the actual annual throughput and annual average vapor pressure.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T163 - 100000 bbl internal floating roof tank [Tank 1]		

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