OhioEPA

State of Ohio Environmental Protection Agency

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

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

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

09/26/01

RE: Proposed Title V Chapter 3745-77 Permit
07-73-01-0004
New Boston Coke Corporation

Attn: Genevieve Damico AR-18J
United States Enviromental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for New Boston Coke Corporation, has been created in Ohio EPA's State Air Resources System (STARS) on 09/26/01, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Portsmouth Air Pollution Group
File, DAPC PMU

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 09/26/01	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 07-73-01-0004 to:
New Boston Coke Corporation
600 River Avenue
New Boston, OH 45662-3128

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

B008 (Boiler # 1)
Emissions from 464 MMBTU/h natural gas and coke oven gas fired boiler

B009 (Boiler # 2)
Emissions from 464 MMBTU/h natural gas and coke oven gas fired boiler

B901 (No.2 Coke Oven Battery)
Emissions from coke-oven firing, emergency bypass bleeder flare, charging, offtakes, charging hole lids, oven doors, and pushing.

F001 (Roadways)
Emissions from plant roadways and parking areas

F002 (Coal Storage and Handling)
Emissions from coal storage and handling activities

F003 (Coke Storage and Handling)
Emissions from coke storage and handling activities

J001 (Tar Load-out)
Emissions from tar load-out activities

P001 (Wastewater Treatment Facility)
Emissions from treatment of weak ammonia liquor (wastewater).

P002 (Quenching)
Emissions from coke quenching activities

P801 (By Products Tar Recovery Plant)
Emissions from tar decanter, tar receiver, tar condensate sump, weak liquor storage tank and loading facilities.

P802 (Light Oil Recovery Plant)
Emissions from wash oil still and separators, primary and secondary condensers, light oil storage and loading facilities.

T016 (Tar Storage Tank # 703)
Emissions from tar storage tank # 703

T017 (Tar Storage Tank # 704)
Emissions from tar storage tank #704

T018 (Light Oil Storage Tank # 713)
Emissions from light oil storage tank #T713

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Portsmouth Air Pollution Group
740 Second Street
Portsmouth, OH 45662
(614) 353-5156

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

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 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 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

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

12. Compliance Requirements

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

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

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

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

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

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;

b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and 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. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with

this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

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

T019 - 5,000-gallon horizontal cylindrical #2 diesel fuel storage tank;
T020 - 1,000-gallon horizontal cylindrical #2 diesel fuel storage tank;
T021 - 1,000-gallon horizontal cylindrical #2 diesel fuel storage tank;
T022 - 500-gallon horizontal cylindrical gasoline storage tank; and
Z004 - maintenance shop diesel fuel tank.

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 1 (B008)

Activity Description: Emissions from 464 MMBTU/h natural gas and coke oven gas fired boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas and coke oven gas fired boiler	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu of actual heat input See A.I.2.b below.
	OAC rule 3745-18-79(C)(1)	4.1 pounds of sulfur dioxide per mmBtu of actual heat input

2. Additional Terms and Conditions

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

2.b Pursuant to OAC rule 3745-17-10, the total heat input for B008 is derated from 464 mmBtu/hr to 245 mmBtu/hr. (The derated total heat input of 245 mmBtu/hr corresponds to a steam load of 180,000 pounds per hour.)

II. Operational Restrictions

1. At no time shall the steam flow rate from B008 exceed 180,000 pounds per hour (as an average over any one-hour period).

III. Monitoring and/or Record Keeping Requirements

1. On a daily basis, the permittee shall collect 3 samples of the coke oven gas burned by this emissions unit. The samples shall be obtained at various times of day, such that the samples are representative of the quality of the coke oven gas burned during each calendar day. The samples shall be analyzed according to the following test methods:

a. The hydrogen sulfide content of each of the 3 samples shall be determined using the "Tutwiler Method," and the resulting hydrogen sulfide content shall be expressed in terms of grains of hydrogen sulfide per 100 dry standard cubic feet of coke oven gas. The hydrogen sulfide content of each of the 3 samples shall be averaged together to determine the hydrogen sulfide content of the coke oven gas burned each day. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of COG shall be converted to the decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and then dividing by the density of COG (0.036 pound per cubic feet).

b. The heat content of each of the 3 samples shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot. The results from the 3 samples shall be averaged to determine the heat content of the coke oven gas burned each day.

The resulting decimal fraction of sulfur content and the heat content determined in (a) and (b) above shall be used as input into the equation defined in OAC rule 3745-18-04(F)(3) to calculate and record daily the sulfur dioxide emission rate expressed in terms of pounds per mmBtu of actual heat input.

2. The permittee shall maintain daily records of the quantity of coke oven gas (million cubic feet) burned in this emissions unit.

3. The permittee shall maintain a record of any changes in the maximum capacity of this emissions unit.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall continuously monitor and record the steam flow rate from B008. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the calculated sulfur dioxide emission rate for the coke oven gas exceeded 4.1 lbs/mmBtu, and the actual sulfur dioxide emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

IV. Reporting Requirements (continued)

3. If for any reason the steam flow rate from B008 exceeds 180,000 pounds per hour, the following information shall be reported within 5 business days after the exceedance:

a. the date of the exceedance;

b. the time interval over which the exceedance occurred;

c. the value of the exceedance;

d. the cause(s) of the exceedance;

e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and

f. a copy of the steam chart which shows the exceedance.

4. 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 emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor in lbs of particulates/mmscf of fuel fired, by the maximum quantity of fuel fired per hour, in mmscf. The particulate emission factor shall be calculated from the results of the testing for Boiler #2 (B009).

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

4.1 pounds of sulfur dioxide per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping and analysis requirements in section A.III.1 and the equation contained in OAC rule 3745-18-04(F)(3).

If required, compliance shall also be demonstrated based upon the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 2 (B009)

Activity Description: Emissions from 464 MMBTU/h natural gas and coke oven gas fired boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas and coke oven gas fired boiler	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu of actual heat input See A.I.2.b below.
	OAC rule 3745-18-79(C)(1)	4.1 pounds of sulfur dioxide per mmBtu of actual heat input

2. Additional Terms and Conditions

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

2.b Pursuant to OAC rule 3745-17-10, the total heat input for B009 is derated from 464 mmBtu/hr to 245 mmBtu/hr. (The derated total heat input of 245 mmBtu/hr corresponds to a steam load of 180,000 pounds per hour.)

II. Operational Restrictions

1. At no time shall the steam flow rate from B009 exceed 180,000 pounds per hour (as an average over any one-hour period).

III. Monitoring and/or Record Keeping Requirements

1. On a daily basis, the permittee shall collect 3 samples of the coke oven gas burned by this emissions unit. The samples shall be obtained at various times of day, such that the samples are representative of the quality of the coke oven gas burned during each calendar day. The samples shall be analyzed according to the following test methods:

a. The hydrogen sulfide content of each of the 3 samples shall be determined using the "Tutwiler Method," and the resulting hydrogen sulfide content shall be expressed in terms of grains of hydrogen sulfide per 100 dry standard cubic feet of coke oven gas. The hydrogen sulfide content of each of the 3 samples shall be averaged together to determine the hydrogen sulfide content of the coke oven gas burned each day. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of COG shall be converted to the decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pound of sulfur per 1 pound of H2S, and then dividing by the density of COG (0.036 pound per cubic feet).

b. The heat content of each of the 3 samples shall be determined by use of a continuous calorimeter and shall be expressed in Btu per cubic foot. The results from the 3 samples shall be averaged to determine the heat content of the coke oven gas burned each day.

The resulting decimal fraction of sulfur content and the heat content determined in (a) and (b) above shall be used as input into the equation defined in OAC rule 3745-18-04(F)(3) to calculate and record daily the sulfur dioxide emission rate expressed in terms of pounds per mmBtu of actual heat input.

2. The permittee shall maintain daily records of the quantity of coke oven gas (million cubic feet) burned in this emissions unit.

3. The permittee shall maintain a record of any changes in the maximum capacity of this emissions unit.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall continuously monitor and record the steam flow rate from B009. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the calculated sulfur dioxide emission rate for the coke oven gas exceeded 4.1 lbs/mmBtu, and the actual sulfur dioxide emissions for each such day.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

IV. Reporting Requirements (continued)

3. If for any reason the steam flow rate from B009 exceeds 180,000 pounds per hour, the following information shall be reported within 5 business days after the exceedance:

a. the date of the exceedance;

b. the time interval over which the exceedance occurred;

c. the value of the exceedance;

d. the cause(s) of the exceedance;

e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and

f. a copy of the steam chart which shows the exceedance.

4. 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 emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

4.1 pounds of sulfur dioxide per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping and analysis requirements in section A.III.1 and the equation contained in OAC rule 3745-18-04(F)(3).

If required, compliance shall also be demonstrated based upon the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 9 months after issuance of the permit and within 9 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitation for particulates and sulfur dioxide.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No.2 Coke Oven Battery (B901)

Activity Description: Emissions from coke-oven firing, emergency bypass bleeder flare, charging, offtakes, charging hole lids, oven doors, and pushing.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
coke oven firing (combustion stack)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(C)(1)	Particulate emissions from coke oven firing (combustion stack) shall not exceed 0.184 pound per mmBtu of actual heat input.
	OAC rule 3745-18-79(C)(4)	See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
emergency bypass bleeder flare	40 CFR Part 63.307	See A.I.2.c below.
	OAC rule 3745-31-05(A)(3) (PTI 07-350)	Particulate emissions from the emergency bypass bleeder flare shall not exceed 56.0 pounds per hour. Sulfur dioxide emissions from the emergency bypass bleeder flare shall not exceed 910.0 pounds per hour. Nitrogen oxides emissions from the emergency bypass bleeder flare shall not exceed 32.6 pounds per hour. Hydrocarbon emissions from the emergency bypass bleeder flare shall not exceed 246.5 pounds per hour. Emissions from the emergency bypass bleeder flare shall not exceed: 1.01 tpy of particulates 16.38 tpy of sulfur dioxide 0.59 tpy of nitrogen oxides 4.44 tpy of hydrocarbons See A.I.2.k below.
charging operations	40 CFR Part 63.302(a)(1)(iv)	See A.I.2.d below.
	OAC rule 3745-17-07(B)(2)(a)	See A.I.2.h below.
offtake systems	40 CFR Part 63.302(a)(1)(iii)	See A.I.2.e below.
	OAC rule 3745-17-07(B)(2)(b)	See A.I.2.h below.
topside port lids	40 CFR Part 63.302(a)(1)(ii)	See A.I.2.f below.
	OAC rule 3745-17-07(B)(2)(c)	See A.I.2.h below.
oven doors	40 CFR Part 63.302(a)(1)(i)(B)	See A.I.2.g below.
	OAC rule 3745-17-07(B)(2)(d)	See A.I.2.h below.
collecting main	40 CFR Part 63.308	See A.III.3 below.
pushing operations	OAC rule 3745-17-07(B)(2)(e)	See A.I.2.h below.

2. Additional Terms and Conditions

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

2.b The hydrogen sulfide content of the coke oven gas combusted in this emissions unit shall not exceed 800 grains per 100 dry standard cubic feet of coke oven gas.

2.c The emergency bypass bleeder flare shall be operated with no visible emissions, as determined by the methods specified in 40 CFR Part 60, Appendix A, Method 22 with an observation period of two hours, except for periods not to exceed 5 minutes during any 2 consecutive hours.

2.d During charging operations, visible particulate emissions shall not exceed 12 seconds per charge, as determined by the procedures in section A.V.1.e of these terms and conditions.

2.e There shall be no visible particulate emissions from more than 3.0 percent of the offtake systems, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.f There shall be no visible particulate emissions from more than 0.6 percent of the topside port lids, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.g There shall be no visible particulate emissions from more than 5.5 percent of the oven doors, as determined by the procedures in section A.V.1.f of these terms and conditions. On and after January 1, 2003, there shall be no visible particulate emissions from more than 5.0 percent of the oven doors, as determined by the procedures in section A.V.1.f of these terms and conditions.

2.h This facility is located in Scioto County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

2.i An oven door and the associated chuck door on the pusher side of the battery shall be considered as one door. [OAC rule 3745-17-07(B)(2)(d)(iii)]

2.j At all times including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery, and its pollution control equipment, in a manner consistent with good air pollution practices for minimizing emissions to the level required in sections A.I.1 and A.I.2 of these terms and conditions.

2.k Annual allowable emissions from the emergency bypass bleeder flare are calculated based on an estimated usage of 36 hours per year.

2.l Upon promulgation, the permittee shall comply with the requirements in 40 CFR Part 63, Subpart CCCCC, National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks.

II. Operational Restrictions

1. In accordance with the requirements of 40 CFR Part 63, Subpart L, the emergency bypass bleeder flare shall comply with the following requirements:

a. the flare shall be able to control 120% of the normal gas flow generated by the battery;

b. the flare shall be steam-assisted and shall have a net heating value of 240 Btu/scf;

c. the flare shall be operated with a continuously operable pilot flame monitored by a thermocouple (or equivalent device); and

d. coke oven emissions shall not be vented to the atmosphere through the bypass bleeder stack, except through the flare system.

2. The permittee shall operate according to the work practice plan, required by section A.III.5 for each emission point, following the second independent exceedance of the visible emission limitation for that emission point in any consecutive 6-month period, by no later than 3 days after the receipt of written notification of the second such exceedance from the certified observer. The permittee shall continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days.

III. Monitoring and/or Record Keeping Requirements

1. On a daily basis, the permittee shall collect three samples of the coke oven gas burned by this emissions unit. The samples shall be obtained at various times of day, such that the samples are representative of the quality of the coke oven gas burned during each calendar day. The samples shall be analyzed according to the following test methods:

a. The hydrogen sulfide content of each of the three samples shall be determined using the "Tutwiler Method," and the resulting hydrogen sulfide content shall be expressed in terms of grains of hydrogen sulfide per 100 dry standard cubic feet of coke oven gas. The hydrogen sulfide content of each of the three samples shall be averaged together to determine the hydrogen sulfide content of the coke oven gas burned each day. The grains of hydrogen sulfide (H2S) per 100 dry standard cubic feet of COG shall be converted to the decimal fraction of sulfur by multiplying the grains of H2S per 100 cubic feet times 1 pound H2S per 7000 grains of H2S and times 0.94 pounds of sulfur per 1 pound of H2S, and then dividing by the density of COG (0.036 pounds per cubic feet).

b. The heat content of each of the 3 samples shall be determined by use of a continuous calorimeter and shall be expressed in BTU per cubic foot. The results from the 3 samples shall be averaged to determine the heat content of the coke oven gas burned each day.

The resulting decimal fraction of sulfur content and the heat content determined in (a) and (b) above shall be used as input into the equation defined in OAC rule 3745-18-04(F)(3) to calculate and record daily the sulfur dioxide emission rate expressed in terms of pounds per mmBtu of actual heat input.

2. The permittee shall maintain daily records of the quantity of coke oven gas (million cubic feet) burned in this emissions unit.

3. The collecting main shall be inspected at least once daily in accordance with 40 CFR Part 63, Appendix A, Method 303.

The charging operations shall be inspected at least once daily, for 5 consecutive charges, in accordance with 40 CFR Part 63, Appendix A, Method 303.

The offtake piping, charging hole lids and oven doors shall be inspected at least once daily in accordance with 40 CFR Part 63, Appendix A, Method 303.

3.a 40 CFR Part 63, Appendix A, Method 303 visible emission readings shall be performed by a certified observer, and shall be conducted each day, 7 days per week, at various times during the day.

The certified observer shall complete any reasonable safety training program offered by the permittee prior to conducting any performance test at a coke oven battery.

3.b The permittee shall record the time and date each collecting main leak is first observed, the time and date the collecting main leak is temporarily sealed, and the time and date of repair. Any leak in the collecting main shall be temporarily sealed as soon as possible after detection, but no later than 4 hours after detection of the leak. The permittee shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak.

3.c The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under 40 CFR Part 63, Appendix A, Method 303. Observations from fewer than five consecutive charges shall constitute a valid set of charging operations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of 40 CFR Part 63, Appendix A, Method 303.

3.d If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.

3.e After each test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of 40 CFR Part 63, Appendix A, Method 303. The permittee shall demonstrate, pursuant to Method 303, the accuracy of the pressure measurement device upon request of the certified observer. The permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection.

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

3.f The permittee shall not knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

3.g Compliance shall be demonstrated using the observations obtained from each performance test in accordance with section A.V.1.f of these terms and conditions.

3.h The certified observer shall make available to the Portsmouth local air agency, as well as to the permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average of each emission point to the permittee as soon as practicable following each performance test. For the purpose of notifying the permittee of the results obtained by a certified observer, the person does not have to be certified.

3.i Compliance shall not be determined more often than the schedule provided for performance tests in these terms and conditions. If additional valid emissions observations are obtained (or in the case of charging , valid sets of emission observations), the arithmetic average of all values (or valid sets of values) obtained during the day shall be used in any computation performed to determine compliance under sections A.V.1.f or A.III.5 of these terms and conditions.

4. No observations obtained during any program for training or for certifying observers for 40 CFR Part 63, Appendix A, Method 303 shall be used to determine compliance with the requirements of these terms and conditions.

5. The permittee shall maintain a written emission control work practice plan for the coke battery. In accordance with the requirements of section 63.306 of 40 CFR Part 63, Subpart L, the plan shall be designed, implemented, and maintained to achieve compliance with the visible emission limitations for coke oven doors, charging hole lids, offtake systems and charging operations. The permittee shall organize the work practice plan so that the subjects required in accordance with sections A.III.5.a through A.III.5.e are clearly addressed.

5.a The work practice plan shall include procedures for initial and refresher training for all plant personnel and contractors with responsibilities that impact emissions. The training program shall include:

i. a list, by job title, of personnel that are required to be trained and the emission points associated with each job title;

ii. an outline of the subjects to be covered in the initial and refresher training for each group of personnel;

iii. a description of the training methods that will be used;

iv. a statement of the duration of initial training and the duration and frequency of refresher training;

v. a description of the methods used to demonstrate and document successful completion of the training program; and

vi. a description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form(s) to be completed by the certified Method 303 observer.

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

5.b The work practice plan shall include procedures for controlling emissions from oven doors including the following:

i. a program for the inspection, adjustment, repair, and replacement of coke oven door jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;

iii. procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

iv. for batteries equipped with self sealing doors, procedures for the use of supplemental gasketing and luting materials, if the permittee elects to use such procedures as part of the program to prevent exceedances;

v. for batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary, to prevent exceedances;

vi. procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located on site; and

vii. procedures for monitoring and controlling collecting main back pressure, including corrective actions if pressure control problems occur.

5.c The work practice plan shall include procedures for controlling emissions from charging operations including the following:

i. procedures for equipment inspection, including the frequency of inspections, and the replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for ensuring that the larry car hoppers are filled properly with coal;

iii. procedures for the alignment of the larry car over the oven to be charged;

iv. procedures for filling the oven;

v. procedures for ensuring that the coal is leveled properly in the oven; and

vi. procedures and schedules for inspection and cleaning of offtake systems, oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.

5.d The work practice plan shall include procedures for controlling emissions from topside port lids including the following:

i. procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and

ii. procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.

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

5.e The work practice plan shall include procedures for controlling emissions from oven offtake systems including the following:

i. procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

ii. procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and

iii. procedures for dampering off ovens prior to a push.

5.f The work practice plan shall include procedures for maintaining, for each emission point subject to visible emission limitations by this permit, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:

i. procedures for recording the performance of such plan requirements; and

ii. procedures for certifying the accuracy of such records by the permittee.

5.g The permittee shall implement the work practice plan procedures after 2 independent exceedances of the visible emission limitations for an emission point within a 6-month period and within 3 days after the receipt of written notification.

The permittee shall continue the procedures of the work practice plan until the visible emission limitation for the point is achieved for 90 consecutive days.

5.h The permittee shall review and revise the work practice plan in accordance with the following:

i. The permittee may be required to review and revise the work practice plan for an emission point if there are 2 independent exceedances of a visible emission limitation within the 6-month period which begins 30 days after the permittee is required to implement the work practice plan.

ii. The permittee shall not be required to review and revise the work practice plan more than twice in any 12-month period for a particular emission point.

iii. If the certified observer calculates a second independent exceedance of the visible emission limitation has occurred for an emission point, the observer shall notify the permittee. Within 10 days of notification, the permittee shall notify the Administrator and the Director whether the work practices are related to the cause or solution of the problem.

iv. The permittee shall submit revised work practice plans within 60 days of notification from the Administrator or Director.

v. If a work practice plan revision is required, the permittee may be required to address subjects not listed in these terms and conditions or 40 CFR Part 63.306(b) if there is reason to expect further exceedances of the visible emission limitations.

vi. A work practice plan revision may be disapproved if the revised plan is not adequate to prevent future exceedances of the visible emission limitations.

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

5.i If the permittee is required to implement the provisions of the work practice plan for a particular emission point, the permittee shall maintain the following records regarding the implementation of plan requirements for that emission point during the implementation period:

i. copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under section A.III.5.a of these terms and conditions;

ii. the records required to be maintained by the plan provisions implementing section A.III.5.f. of these terms and conditions;

iii. records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under sections A.III.5.b.i, A.III.5.c.i, A.III.5.d.i, and A.III.5.e.i of these terms and conditions; and

iv. if the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under section A.III.5.b.vi of these terms and conditions.

6. The permittee shall develop and implement, in accordance with the procedures in section 63.310 of 40 CFR Part 63, Subpart L, a written startup, shutdown, and malfunction plan for the coke oven battery. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the coke oven battery, and its pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by 40 CFR Part 63, Subpart L.

a. The permittee shall operate the coke oven battery in accordance with the startup, shutdown, and malfunction plan during a startup, shutdown, or malfunction event.

b. Malfunctions shall be corrected as soon as practical in accordance with this plan.

c. The permittee shall notify the certified Method 303 observer if practical and if the observer is at the facility during a malfunction event.

d. The permittee shall maintain plant records which form the basis of each malfunction notification.

e. The permittee may use the standard operating procedures manual for the coke oven battery to satisfy the requirements of a startup, shutdown, and malfunction plan if the standard operating procedure manual meets the requirements of these terms and conditions and 40 CFR Part 63.310 and is available for review at reasonable times.

f. The permittee may be required to make revisions to a startup, shutdown, and malfunction plan if the plan does not address (i) a startup, shutdown, malfunction event that has occurred; (ii) fails to provide adequate procedures for startup, shutdown, malfunctions which are consistent with good air pollution control practices; or (iii) does not provide adequate procedures to correct malfunctioning process equipment as soon as practical.

g. If the permittee demonstrates a startup, shutdown, or malfunction event has occurred, then an observation occurring during such event (i) shall not be a violation of relevant requirements, (ii) shall not be used in any visible emission compliance determination per Method 303, and (iii) shall not be considered as an exceedance for purposes of the work practice plan.

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

7. The permittee shall maintain records of the design drawings and engineering specifications for the emergency bypass bleeder flare.

For the emergency bypass bleeder flare, the permittee shall properly operate and maintain a device to continuously monitor the flare pilot flame. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which there was no pilot flame; and

b. the downtime for the flare, monitoring equipment, and the associated emissions unit.

The permittee shall observe and record emergency bleeder flare visible emissions each time the bleeder flare is employed and when the emissions unit is operating and when weather conditions allow in accordance with the methods and procedures of 40 CFR Part 60, Appendix A, Method 22 with an observation period of 2 hours.

8. The permittee shall, on a weekly basis, observe and record combustion stack visible emissions in accordance with the methods and procedures of 40 CFR Part 60, Appendix A, Method 9.

10. The permittee shall maintain files of all required information in a permanent form suitable for inspection at an on site location for at least 1 year and must thereafter be assessable within 3 working days to the Administrator and/or Director for a period of at least 5 years from the date of the monitoring, sample, measurement, report, or application.

11. The permittee shall verify the presence of a pilot flame on the emergency bypass bleeder flare at a minimum of once per shift. The permittee shall maintain records of the presence of a pilot flame on the emergency bypass bleeder flare at a minimum of once per shift.

12. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-350, modified on 6/9/99: A.III.1 through A.III.11. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports identifying all periods of time during which the coke oven battery exceeded the visible emission limitations for charging, offtake piping, oven lids, and oven doors.

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of all COG samples, and the corresponding periods of time, for which the hydrogen sulfide content exceeded 800 grains per 100 dry standard cubic feet of coke oven gas, and the actual hydrogen sulfide content for each such period.

3. The permittee shall submit quarterly deviation (excursion) reports identifying any instance when the results of the Method 9 readings documented an exceedance of the combustion stack visible emission limitation.

4. For the emergency bypass bleeder flare, the permittee shall submit quarterly deviation (excursion) reports identifying any instance when the results of the Method 22 readings documented an exceedance of the emergency flare visible emission limitation.

For the emergency bypass bleeder flare, the permittee shall submit quarterly deviation (excursion) reports identifying any instance when the thermocouple reading indicated the absence of a pilot flame.

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

6. Any malfunction which necessitates the use of the emergency bypass bleeder flare shall be reported to the Portsmouth local air agency in accordance with the requirements of OAC rule 3745-15-06.

IV. Reporting Requirements (continued)

7. The permittee shall report the venting of coke oven gas through a bypass bleeder stack, that is not vented through the emergency bypass bleeder flare system, as soon as practical but no later than 24 hours after the beginning of the event.

A written report which includes a description of the event shall be submitted within 30 days after occurrence.

These reports shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Portsmouth local air agency.

8. The permittee shall submit semi-annual reports which provide the following information for each period during which the emergency bypass bleeder flare is operated:

a. the date the flare was operated;

b. the time interval over which the flare operated;

c. the malfunction(s) which necessitated the operation of the flare;

d. the corrective action which has been or will be taken to prevent similar malfunction(s) in the future; and

e. if the flare was not operated during the previous 6-month period, a statement to that effect.

These semi-annual certifications shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Portsmouth local air agency.

9. The permittee shall notify the Portsmouth local air agency within 24 hours of a malfunction in accordance with the startup, shutdown, and malfunction plan and this notification shall include an explanation if the certified Method 303 observer was not notified as required in section A.III.6.c of this permit.

Within 14 days of the notification required above, the permittee shall submit a written report to the permitting authority describing the date, time, and circumstances of the startup, shutdown, or malfunction event and describing actions taken that may be inconsistent with the startup, shutdown, and malfunction plan.

10. The permittee shall submit semi-annual compliance certifications in accordance with the requirements of 40 CFR Part 63.311, which are signed by the permittee, certifying the following:

a. no coke oven gas was vented, except through the bypass/bleeder stack flare system, during the reporting period or that a venting report has been submitted in accordance with section A.IV.7 of this permit;

b. a startup, shutdown, or malfunction event did not occur during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted in accordance with section A.IV.9 of this permit; and

c. that work practices were implemented, as applicable, under the work practice plan required in section A.III.5 of this permit.

These semi-annual certifications shall be submitted to the U. S. EPA Region 5 Administator, with a copy to the Portsmouth local air agency.

11. Within 45 days of the compliance date listed in section A.I.2.g of these terms and conditions, the permittee shall submit a written statement to the U. S. EPA Region 5 Administrator, with a copy to the Portsmouth local air agency, signed by the permittee, certifying compliance with the emission limitation required by section A.I.2.g.

12. The permittee shall submit quarterly deviation (excursion) reports identifying any periods of time when a pilot flame was not present on the emergency bleeder flare and describing any corrective actions taken to relight and maintain a pilot flame.

IV. Reporting Requirements (continued)

13. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-350, modified on 6/9/99: A.IV.1 through A.IV.12. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from coke oven firing (combustion stack) shall not exceed 0.184 pound per mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor of 0.47 pound of particulates/tons of coal charged, by the maximum quantity of coal charged per hour, in tons, divided by the heat content of the coke oven gas in mmBtu/hour. The particulate emission factor was obtained from Table 12.2-2 of the AP-42 document dated September 2000.

If required, compliance shall be demonstrated in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

The hydrogen sulfide content of the coke oven gas combusted in this emissions unit shall not exceed 800 grains per 100 dry standard cubic feet of coke oven gas.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements in section A.III.1 and the reporting requirements in section A.IV.2.

If required, compliance shall also be demonstrated based on the requirements specified in 40 CFR Part 60, Appendix A, Method 15.

1.d Emission Limitation:

The emergency bypass bleeder flare shall be operated with no visible emissions except for periods not to exceed 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 22 and the methods and procedures specified in OAC rule 3745-17-03(B)(4) with an observation period of 2 hours.

V. Testing Requirements (continued)

1.e Emission Limitations:

During charging operations, visible particulate emissions shall not exceed 12 seconds per charge.

Applicable Compliance Method:

Using the observations obtained in accordance with section A.III.3 of these terms and conditions, compliance shall be demonstrated by calculating the logarithmic 30-day, rolling average of the seconds of visible emissions per charge using the equation in section 3.9 of 40 CFR Part 63, Appendix A, Method 303.

1.f Emission Limitations:

There shall be no visible particulate emissions from more than 3.0 percent of the offtake systems.
There shall be no visible particulate emissions from more than 0.6 percent of the topside port lids.
There shall be no visible particulate emissions from more than 5.5 percent of the oven doors. On and after January 1, 2003, there shall be no visible particulate emissions from more than 5.0 percent of the oven doors.

Applicable Compliance Method:

Using the observations obtained in accordance with section A.III.3 of these terms and conditions, compliance shall be demonstrated by calculating the 30-run, rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems using the equation in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of 40 CFR Part 63, Appendix A, Method 303.

1.g Emission Limitation:

Particulate emissions from the emergency bypass bleeder flare shall not exceed 56.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate of 70 tons of coal charged per hour times the emission factor of 40 pounds of particulates per ton of coal charged (from Table 12.2-5 of the draft AP-42 document dated May 1995, MRI Project #4602-01) times a control factor of .02 (98% efficiency).

1.h Emission Limitation:

Sulfur dioxide emissions from the emergency bypass bleeder flare shall not exceed 910.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate of 70 tons of coal charged per hour times the emission factor of 13 pounds of SO2 per ton of coal charged (from Table 12.2-5 of the draft AP-42 document dated May 1995, MRI Project #4602-01).

1.i Emission Limitation:

Nitrogen oxide emissions from the emergency bypass bleeder flare shall not exceed 32.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying 61,172 pounds of raw coke oven gas flared per hour times the heat content of 0.007833 mmBtu per pound, times the emission factor of 0.068 pound of NOx per mmBtu of actual heat input (from Table 13.5-1 of the AP-42 document dated January 1995).

V. Testing Requirements (continued)

1.j Emission Limitation:

Hydrocarbon emissions from the emergency bypass bleeder flare shall not exceed 246.5 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate of 70 tons of coal charged per hour times the emission factor of 3.52 pounds of HC per ton of coal charged (from Table 12.2-5 of the draft AP-42 document dated May 1995, MRI Project #4602-01: sum of emission factors for heavy hydrocarbons, methane, ethane, propane, butane, ethylene, propylene, butene, pentene, benzene, toluene, xylene, and acetylene).

1.k Emission Limitation:

Emissions from the emergency bypass bleeder flare shall not exceed:

1.01 tpy of particulates
16.38 tpy of sulfur dioxide
0.59 tpy of nitrogen oxides
4.44 tpy of hydrocarbons

Applicable Compliance Method:

Multiply the hours of operation per year of the emergency bypass/bleeder flare by the hourly emission limits (listed in section A.I.1), and divide by 2000 lbs/ton.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-350, modified on 6/9/99: A.V.1. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways (F001)

Activity Description: Emissions from plant roadways and parking areas

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
plant roadways and parking areas	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a This facility is located in Scioto County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Storage and Handling (F002)

Activity Description: Emissions from coal storage and handling activities

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
coal handling: including storage in railcars and piles, railcar load-in, pulverizing, screening, conveying and transfer	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a This facility is located in Scioto County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coke Storage and Handling (F003)

Activity Description: Emissions from coke storage and handling activities

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
coke storage and handling: including grinding, screening, conveying and transfer, railcar load-out and storage in railcars and piles	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a This facility is located in Scioto County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tar Load-out (J001)

Activity Description: Emissions from tar load-out activities

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
crude coal tar loading rack with vapor balance	OAC rule 3745-31-05(A)(3) (PTI 07-265)	0.81 lb/hr of VOC 3.55 tpy of VOC See A.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall operate and maintain a vapor balance system. The vapor balance system shall be designed and operated to route at least 98%, by weight, of the organic compounds in the displaced vapors from the loaded truck or railcar to the coke battery collection main, and shall be equipped with a means to prevent the discharge into the atmosphere of displaced vapors from an unconnected vapor line.

2.b There shall be no leaks in the vapor and liquid lines during the transfer of crude coal tar. All loading lines, unloading lines, and vapor lines shall be equipped with fittings which are vapor tight.

II. Operational Restrictions

1. The permittee shall maintain the vapor balance system in good working order and shall use the vapor balance system at all times during transfer to trucks or railcars.

2. The delivery hatches shall be closed at all times during the loading of the delivery vessel.

3. The permittee shall not permit crude coal tar to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a monthly record of the number of gallons of crude coal tar loaded.

2. The permittee shall perform an inspection of the vapor balance system on a monthly basis to ensure that it is operating properly and that there are no leaks in the vapor and liquid lines.

The permittee shall maintain a record that details the results of each monthly inspection of the vapor balance system.

IV. Reporting Requirements

1. The permittee shall submit a quarterly report that identifies any leaks detected during the monthly inspection of the vapor balance system and the date when each leak was repaired.

V. Testing Requirements

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

1.a Emission Limit:

0.81 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum crude coal tar loading rate, in 1,000 gallons/hour, by the 0.045 pound/1,000 gallon controlled emission factor. The VOC emission factor was calculated in accordance with EPA document "Hazardous Waste Treatment, Storage, Disposal Facilities (TSDF) - Air Emission Models.

1.b Emission Limit:

3.55 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the annual crude coal tar loaded, in 1,000 gallons/year, by the 0.045 pound/1,000 gallon controlled emission factor, and by dividing by 2,000 pounds per ton. The VOC emission factor was calculated in accordance with EPA document "Hazardous Waste Treatment, Storage, Disposal Facilities (TSDF) - Air Emission Models.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Wastewater Treatment Facility (P001)

Activity Description: Emissions from treatment of weak ammonia liquor (wastewater).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
wastewater treatment facility controlled with a thermal oxidizer	OAC rule 3745-31-05(A)(3) (PTI 07-418)	2.38 lbs/hr of sulfur dioxide (SO2) from the thermal oxidizer 10.40 tpy of SO2 from the thermal oxidizer 8.82 lbs/hr of nitrogen oxides (NOx) from the thermal oxidizer 38.63 tpy of NOx from the thermal oxidizer 16.07 tpy of particulates from the thermal oxidizer
	OAC rule 3745-17-07(A)	See A.I.2.b below.
	OAC rule 3745-17-11(B)	3.67 lbs/hr of particulates from the thermal oxidizer
	40 CFR Part 61, Subpart L	no detectible fugitive volatile organic compounds (VOC) emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service See A.I.2.c below.
	40 CFR Part 61, Subpart FF	See A.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall be exempt from the requirements of paragraphs (b) and (c) of 40 CFR Part 61, Subpart FF, Section 61.342 if the total annual benzene quantity from facility waste is less than ten (10) megagrams per year (Mg/yr).

2.b Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions (continued)

2.c In accordance with 40 CFR 61.242-11(c) and section A.III.10.b below, the thermal oxidizer shall be designed and operated either to reduce the volatile hazardous air pollutant emissions vented to it with an efficiency of 95% or greater or to provide a minimum residence time of 0.50 second at a minimum temperature of 760 degrees Celsius.

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the tanks in benzene service in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

II. Operational Restrictions (continued)

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

9. The permittee shall operate and maintain the carbon adsorption canisters which are employed as a back-up to the coke oven gas blanketing system for all tanks in benzene service in accordance with the provisions in 40 CFR 61.139.

10. The thermal oxidizer, including all associated equipment and piping, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

11. The average temperature of the gas stream in the combustion zone of the thermal oxidizer for any 3-hour block of time, shall not be less than 774 degrees Celsius.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.135(d)]
Each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 CFR 61.245(b) except as provided in 40 CFR 61.136(d) and 40 CFR 61.135(e) through (g).

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

b. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

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

5. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

6. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

7.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

7.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

7.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

7.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

7.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

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

7.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

7.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

7.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

8. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

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

9. [40 CFR 61.242-10]
a. Delay of repair of equipment for which leaks have been detected shall 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.

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

c. Delay of repair for valves shall be allowed if:

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

d. Delay of repair for pumps shall be allowed if:

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

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

e. Delay of repair beyond a process unit shutdown shall 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 shall not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

10. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61, Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

10.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

10.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees C.

10.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61, Subpart V shall comply with the requirements of 40 CFR 60.18.

10.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61, Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

10.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

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

11. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

12. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

12.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

12.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

12.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

13. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

14. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

15. [40 CFR 61.138(b)]
The following information pertaining to emissions units subject to 40 CFR 61.132 and emissions units subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the emissions unit or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

16. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

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

17. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

18. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

19. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a).

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

20. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

21. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

22. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61 Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit, and

b. an analysis demonstrating that equipment is not in VHAP service.

23. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

24. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the combustion zone of the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Celsius. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee. The temperature sensor shall be installed at a representative location in the combustion chamber.

25. [40 CFR 61.355(a)]
The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

25.a [40 CFR 61.355(a)(1)]
For each waste stream subject to 40 CFR Part 61, Subpart FF 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:

i. determine the annual waste quantity for each waste stream using the procedures specified in sections A.III.18 and A.III.19, and 40 CFR Part 61.355(b);

ii. determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in section A.III.20 and 40 CFR 61.355(c); and

iii. 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.

25.b [40 CFR 61.355 (a)(2)]
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).

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

25.c [40 CFR 61.633(a)(3)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 mg/yr, then the permittee shall comply with the requirements of 40 CFR 61.342(c), (d), or (e).

25.d [40 CFR 61.355(a)(4)]
If the total annual benzene quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the permittee shall:

i. comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357; and

ii. 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 or more.

26. [40 CFR 61.355(b)(2)]
The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by 40 CFR Part 61, Subpart L or at the exit of the ammonia still, provided that the following conditions are met:

a. the transfer of wastes between units complying with the control requirements of 40 CFR Part 61, Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system; and

b. the ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.

27. [40 CFR 61.355(b)(5), (6), & (7)]
The permittee shall determine the annual waste quantity by one of the methods given in (a) through (c) below:

a. 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;

b. use the maximum design capacity of the waste management unit; or

c. use measurements that are representative of maximum waste generation rates.

28. [40 CFR 61.355(c)]
For the purposes of the calculation required by 40 CFR 61.355(a), the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in (c)(1) using either of the methods given in 40 CFR 61.355(c)(2) and (c)(3).

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

28.a [40 CFR 61.355(c)(1)]
The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

i. The determination for wastes at coke by-product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 of Subpart L shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(a) the transfer of wastes between units complying with the control requirements of 40 CFR Part 61 Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system; and

(b) the ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.

ii. Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

iii. Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination-to reduce the benzene concentration.

iv. The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in 40 CFR 61.355(c)(1)(i).

v. 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.

28.b [40 CFR 61.355(c)(2)]
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 40 CFR 61.355(c)(3) shall be used to resolve the disagreement.

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

28.c [40 CFR 61.355(c)(3)]
Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

i. 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.

ii. For waste in enclosed pipes, the following procedures shall be used:

(a) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.
(b) 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.
(c) The sampling tap shall be located within two pipe diameters of the static mixer outlet.
(d) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.
(e) 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.
(f) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 degrees Celsius.
(g) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.
(h) The sample containers shall immediately be cooled and maintained at a temperature below 10 degrees C for transfer to the laboratory.

iii. 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.

iv. Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(a) Method 8020, Aromatic Volatile Organics, in ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication No. SW-846;
(b) 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;
(c) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication No. SW-846;
(d) 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;
(e) 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
(f) 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.

v. The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses using the formula in 40 CFR 61.355(c)(3)(v) where:

C = flow-weighted annual average benzene concentration for waste stream, in ppmw;
Qt = total annual waste quantity for waste stream, in kg/yr;
n = number of waste samples (at least 3);
Qi = annual waste quantity for waste stream represented by Ci, in kg/yr; and
Ci = measured concentration of benzene in waste sample i, in ppmw.

29. [40 CFR 61.356(b)(1) and (2)]
The permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, Subpart FF and indicate whether or not the waste stream is controlled for benzene emissions in accordance with Subpart FF. In addition the permittee shall maintain the following records:

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

29.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.

29.b For each waste stream exempt from 40 CFR 61.342(c)(1) in accordance with 40 CFR 61.342(c)(3), the records shall include: 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.

30. For bypass lines that could divert a vent stream away from a control device required by the terms and conditions of this permit, the permittee shall comply with A.III.30.a or A.III.30.b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this monitoring.

30.a Properly install, maintain, and operate a flow indicator and recorder that takes a reading at least once every 15 minutes. 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. The following information shall be recorded in a log:

i. hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour; and

ii. records of times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

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

i. records that monthly inspections were performed; and

ii. records of all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

31. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-418, modified on 7/21/99: A.III.1 through A.III.30. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in (a) through (e) below.

a. For emissions units subject to 40 CFR 61.132 and emissions units subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. For equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b).

c. For each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135 (d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135 (d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period.

d. A statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period.

e. Revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2 (c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

3. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the combustion zone of the thermal oxidizer did not comply with the temperature limitation specified above.

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.

IV. Reporting Requirements (continued)

4. If the total annual benzene quantity from facility waste is less than 10 mg/yr but is equal to or greater than 1 Mg/yr, then the permittee shall submit to the USEPA Region V-Administrator, with a copy to the Portsmouth local air agency a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to ten Mg/yr or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 is not changed in the following year, the permittee shall submit a statement to that effect. This report is due by January 31 of each year.

5. Any malfunction which necessitates a vent stream be diverted from a control device to the atmosphere shall be reported to the Portsmouth local air agency in accordance with the requirements of OAC rule 3745-15-06.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-418, modified on 7/21/99: A.IV.1 through A.IV.4. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

1.c Emission Limitation:

3.67 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the requirements specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.e Emission Limitation:

8.82 lbs/hr of NOx

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7E.

1.f Emission Limitation:

2.38 lbs/hr of SO2

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6C.

1.g Emission Limitation:

38.63 tpy of NOx

Applicable Compliance Method:

Calculate the emission factor (lb/ton) from the most recent stack test results and multiply by the maximum process rate in tons/hour, times 8760 hours/year, and divide by 2000 lbs/ton.

1.h Emission Limitation:

10.40 tpy of SO2

Applicable Compliance Method:

Calculate the emission factor (lb/ton) from the most recent stack test results and multiply by the maximum process rate in tons/hour, times 8760 hours/year, and divide by 2000 lbs/ton.

1.i Emission Limitation:

16.07 tpy of particulates

Applicable Compliance Method:

Calculate the emission factor (lb/ton) from the most recent stack test results and multiply by the maximum process rate, in tons/hour, times 8760 hours/year, and divide by 2000 lbs/ton.

V. Testing Requirements (continued)

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

a. The emission testing for particulates, SO2, and NOx shall be conducted 6 months prior to permit expiration. The emission testing for volatile hazardous air pollutants shall be conducted within 3 months of permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, SO2, and NOx and the control efficiency for volatile hazardous air pollutants.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: Methods 1 through 5, 6C, 7E, and 18 of 40 CFR Part 60, Appendix A. Alternative U. S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and the outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 18. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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

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

A comprehensive written report on the results of the emission test shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or Portsmouth Local Air Agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-418, modified on 7/21/99: A.V.1 and A.V.2. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Quenching (P002)

Activity Description: Emissions from coke quenching activities

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
quenching, with clean water and a baffle system	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	47.8 lbs/hr of particulates See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack, during quenching, shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b The particulate emission limitation was established based upon Table 1 of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emissions cannot be ascertained.

2.c Upon promulgation, the permittee shall comply with the requirements in 40 CFR Part 63, Subpart CCCCC, National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks.

II. Operational Restrictions

1. The permittee shall use only river water in its quenching operation.

2. The permittee shall maintain a baffle system in the quench tower which shall provide coverage of not less than 95% of the cross sectional area of the tower.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which something other than river water is used in the quenching operation, the permittee shall maintain a record of the type and quantity used.

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

2. The permittee shall inspect the baffle system on a weekly basis. The results of the weekly inspections shall be maintained in a log including the following information:

a. the date of the inspection;

b. the name of the inspector;

c. a description of the condition of the baffles; and

d. a description of corrective actions taken as a result of the inspection.

The permittee shall clean the baffle system on a monthly basis, and as needed, based on the weekly inspection. A record of each baffle cleaning shall also be maintained in a log, including the date and name of operator.

Written inspection and cleaning procedures shall be maintained on site and available for review during normal business hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when something other than river water was used in the quenching operation. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify the following:

a. any week when an inspection of the baffle system was not performed;

b. any corrective actions initiated as a result of a weekly inspection; and

c. any month when the baffle system was not cleaned.

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

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

47.8 lbs/hr of particulates

Applicable Compliance Method:

Complicance shall be demonstrated by muliplying the particulate emission factor of 0.31 pound per ton of coal charged by the maximum hourly tons of coal charged. The particulate emission factor was obtained from section 1.4, Table 12.2-12 of the draft AP-42 document dated August 2001. This emission factor was based on quenching with clean water (water with total disolved solids of less than or equal to 500 mg/l). Site specific Method 209C test data shows the total dissolved solids of river water is typically less than 500 mg/l (based upon a weekly average of three 8-hour composite samples).

1.b Emission Limitation:

20% opacity as a 6-minute average during quenching

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: By Products Tar Recovery Plant (P801)

Activity Description: Emissions from tar decanter, tar receiver, tar condensate sump, weak liquor storage tank and loading facilities.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
by-products crude coal tar recovery plant with steam blanketing	OAC rule 3745-31-05(A)(3) (PTI 07-255)	1.56 tpy of volatile organic compounds (VOC)
	40 CFR Part 61, Subpart L	no detectible fugitive VOC emissions from equipment in benzene service (see A.I.2.a)
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service

2. Additional Terms and Conditions

2.a Any excess "clean" coke oven gas that cannot be combusted in the coke oven battery, the boilers, or the thermal oxidizer must be combusted in the flare, pursuant to 40 CFR 61.132(a)(2). There shall be no visible emissions from the flare except for 5 minutes in a 60-minute period.

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the by-products recovery plant in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

9. A pilot flame shall be maintained at all times in the flare's pilot light burner.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

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

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.135(d)]
Each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 CFR 61.245(b) except as provided in 40 CFR 61.136(d) and 40 CFR 61.135(e) through (g).

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

b. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

6. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

7.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

7.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

7.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

7.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

7.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

7.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

7.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

7.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

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

8. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

9. [40 CFR 61.242-10]
a. 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.

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

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

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

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

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

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

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the 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.

10. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

10.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

10.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760?C.

10.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61 Subpart V shall comply with the requirements of 40 CFR 60.18.

10.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

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

10.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

11. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

12. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

12.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

12.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

12.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

13. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

14. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

15. [40 CFR 61.138(b)]
The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

16. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.

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

17. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

18. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

19. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

20. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

21. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

22. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

23. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

24. The permittee shall properly operate and maintain a device to continuously monitor the excess coke oven gas bleeder flare pilot flame. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which there was no pilot flame; and

b. the downtime for the flare, monitoring equipment, and the associated emissions unit.

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

25. For bypass lines that could divert a vent stream away from a control device required by the terms and conditions of this permit, the permittee shall comply with a or b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this monitoring.

a. Properly maintain and operate a flow indicator and recorder that takes a reading at least once every 15 minutes. 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. The following information shall be recorded in a log:

i. hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour; and

ii. records of times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

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

i. records that monthly inspections were performed; and

ii. records of all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

26. The permittee shall verify the presence of a pilot flame on the excess coke oven gas bleeder flare at a minimum of once per shift. The permittee shall maintain records of the presence of a pilot flame on the excess coke oven gas bleeder flare at a minimum of once per shift.

27. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-255, issued on 6/19/91: A.III.1 through A.III.26. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in a through e below.

a. for sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the excess coke oven gas bleeder flare pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

4. Any malfunction which necessitates a vent stream be diverted from a control device to the atmosphere shall be reported to the Portsmouth local air agency in accordance with the requirements of OAC rule 3745-15-06.

5. The permittee shall submit quarterly deviation (excursion) reports identifying any periods of time when a pilot flame was not present on the excess coke oven gas bleeder flare and describing any corrective actions taken to relight and maintain a pilot flame.

IV. Reporting Requirements (continued)

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-255, issued on 6/19/91: A.IV.1 through A.IV.5. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

V. Testing Requirements (continued)

1.c Emission Limitation:

1.56 tpy of VOC

Applicable Compliance Method:

Compliance shall be determined by calculating the sum of the following:

i. Emissions from the tar decanter: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.154 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), and divide by 2000 pounds/ton.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 77 g of benzene/Mg coke to pounds/ton.

ii. Emissions from the tar-intercepting sump: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.19 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), and divide by 2000 pounds/ton.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 95 g of benzene/Mg coke to pounds/ton.

iii. Emissions from the flushing liquor circulation tank: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.018 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), and divide by 2000 pounds/ton.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 9 g of benzene/Mg coke to pounds/ton.

iv. Emissions from the tar receiver: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.042 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), and divide by 2000 pounds/ton.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 21 g of benzene/Mg coke to pounds/ton.

1.d Emissions Limitation:

no visible emissions from the flare except for 5 minutes in a 60-minute period

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-255, issued on 6/19/91: A.V.1. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Light Oil Recovery Plant (P802)

Activity Description: Emissions from wash oil still and separators, primary and secondary condensers, light oil storage and loading facilities.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
by-products light oil recovery plant with coke oven gas blanketing	OAC rule 3745-31-05(A)(3) (PTI 07-255)	1.70 tpy of volatile organic compounds (VOC)
	40 CFR Part 61, Subpart L	no detectible fugitive VOC emissions from equipment in benzene service (see A.I.2.a)
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service
	OAC rule 3745-21-09(DD)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Any excess "clean" coke oven gas that cannot be combusted in the coke oven battery, the boilers, or the thermal oxidizer must be combusted in the flare, pursuant to 40 CFR 61.132(a)(2). There shall be no visible emissions from the flare except for 5 minutes in a 60-minute period.

2.b [OAC rule 3745-12-09(DD)(2)(a)]
A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in paragraphs (DD)(2)(b) to (DD)(2)(m) of OAC rule 3745-21-09.

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the by-products recovery plant in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

9.a [OAC rule 3745-12-09(DD)(4)]
Pressure relief devices in gas/vapor service

i. Except as otherwise provided in paragraph (DD)(4)(e) of OAC rule 3745-21-09, any pressure relief device in gas/vapor service in the process unit shall comply with the requirements specified in paragraphs (DD)(4)(b) to (DD)(4)(d) of OAC rule 3745-21-09.

ii. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. No later than 5 calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iv. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than 5 calendar days after the pressure release, except for a delay of repair as provided in paragraph (DD)(11) of OAC rule 3745-21-09.

v. Excluded from the requirements of paragraphs (DD)(4)(b) to (DD)(4)(d) of OAC rule 3745-21-09 is any pressure relief device that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to control equipment, provided the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of OAC rule 3745-21-09.

II. Operational Restrictions (continued)

9.b [OAC rule 3745-12-09(DD)(5)]
Sampling connection system

i. Except as otherwise provided in paragraph (DD)(5)(c) of OAC rule 3745-21-09, any sampling connection system in the process unit shall comply with the requirements specified in paragraph (DD)(5)(b) of OAC rule 3745-21-09.

ii. The sampling connection system shall be equipped with a closed purge system or a closed vent system that meets one of the following requirements:

(1) the purged process fluid is returned directly to the process line with zero VOC emissions to the ambient air;

(2) the purged process fluid is collected and recycled with zero VOC emissions to the ambient air; or

(3) the closed purge system or closed vent system is designed and operated to capture and transport all the purged process fluid to control equipment that meet the requirements specified in paragraph (DD)(10) of OAC rule 3745-21-09.

iii. Excluded from the requirements of paragraph (DD)(5)(b) of OAC rule 3745-21-09 is any sampling connection system that is an in-situ sampling system.

9.c [OAC rule 3745-12-09(DD)(6)]
Open-ended valves or lines

i. Any open-ended valve or line in the process unit shall be equipped with a cap, blind flange, plug, or second valve and shall comply with the requirements specified in paragraphs (DD)(6)(b) to (DD)(6)(d) of OAC rule 3745-21-09.

ii. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.

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

iv. If 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 (DD)(6)(b) of OAC rule 3745-21-09 at all other times.

9.d [OAC rule 3745-12-09(DD)(7)]
Equipment designated for no detectable emissions

i. Any equipment (pump, valve, or compressor) designated for no detectable emissions pursuant to paragraph (DD)(2)(d)(i), (DD)(2)(d)(iv) or (DD)(3)(c) of OAC rule 3745-21-09 shall comply with the requirements specified in paragraphs (DD)(7)(b) to (DD)(7)(d) of OAC rule 3745-21-09.

ii. The equipment shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background as measured by paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. The equipment shall be tested for compliance with paragraph (DD)(7)(b) of OAC rule 3745-21-09 initially upon designation and annually.

iv. The designation of the equipment shall be signed by the permittee of the equipment in the log kept pursuant to paragraph (DD)(14)(b) of OAC rule 3745-21-09.

II. Operational Restrictions (continued)

9.e [OAC rule 3745-12-09(DD)(8)]
Barrier fluid systems and sensors for pumps and compressors

i. When a pump or compressor is equipped with a seal that has a barrier fluid system and sensor which are employed to meet the requirements of paragraph (DD)(2)(d)(ii) or (DD)(3)(a) of OAC rule 3745-21-09, the requirements of paragraphs (DD)(8)(b) to (DD)(8)(d) of OAC rule 3745-21-09 shall be met.

ii. The barrier fluid system shall meet one of the following conditions:

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

(2) the barrier fluid system is equipped with a barrier fluid degassing reservoir that is connected by a closed vent system to control equipment and the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of OAC rule 3745-21-09; or

(3) the barrier fluid system is equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the ambient air.

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

iv. The barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both based on criteria determined by the permittee from design considerations and operating experience.

9.f [OAC rule 3745-12-09(DD)(9)]
Closed vent systems

i. Any closed vent system that is used to comply with the requirements of paragraph (DD)(2)(d)(iii), (DD)(3)(d), (DD)(4)(e), or (DD)(8)(b)(ii) of OAC rule 3745-21-09 shall comply with the requirements specified in paragraphs (DD)(9)(b) to (DD)(9)(d) of OAC rule 3745-21-09.

ii. The closed vent system shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. The closed vent system shall be tested for compliance with paragraph (DD)(9)(b) of OAC rule 3745-21-09 initially and annually.

iv. The closed vent system shall be operated at all times when emissions may be vented to it.

II. Operational Restrictions (continued)

9.g [OAC rule 3745-12-09(DD)(10)]
Control equipment

i. Any control equipment that is used to comply with the requirements of paragraph (DD)(2)(d)(iii), (DD)(3)(d), (DD)(4)(e), (DD)(5)(b)(iii), (DD)(8)(b)(ii), or (DD)(11)(d)(ii) of OAC rule 3745-21-09 shall comply with the requirements specified in paragraphs (DD)(10)(b) to (DD)(10)(f) of OAC rule 3745-21-09.

ii. If the control equipment is a vapor recovery system, it shall be designed and operated to recover VOC emissions vented to it with an efficiency of at least 95% by weight.

iii. If the control equipment is an enclosed combustion device, it shall be designed and operated to reduce the VOC emissions vented to it with an efficiency of at least 95% by weight, or to provide a minimum residence time of 0.75 second at a minimum temperature of 1500 degrees Fahrenheit.

iv. If the control equipment is a flare, it shall meet the following requirements:

(1) The flare shall be designed for and operated with no visible emissions as determined by "Method 22, 40 CFR, Part 60, Appendix A," except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

(2) The flare shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame. If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect any failure.

(3) The flare shall be steam-assisted, air-assisted or nonassisted.

(4) The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be 300 Btu/scf or greater if the flare is steam-assisted or air-assisted, or shall be 200 Btu/scf or greater if the flare is nonassisted.

(5) Except as provided in paragraph (DD)(10)(d)(vi) of OAC rule 3745-21-09, the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than 60 feet per second if the flare is steam-assisted or nonassisted, or less than the maximum permitted velocity, as determined in paragraph (P)(4) of rule 3745-21-10 of the Administrative Code, if the flare is air-assisted.

(6) Excluded from the requirements of paragraph (DD)(10)(d)(v) of OAC rule 3745-21-09 is any steam-assisted or nonassisted flare that meets both of the following requirements:

(a) the net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be greater than 1000 Btu/scf; and

(b) the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than 400 feet per second.

v. The permittee of the control equipment shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.

vi. The control equipment shall be operated at all times when emissions may be vented to it.

II. Operational Restrictions (continued)

9.h [OAC rule 3745-12-09(DD)(11)]
Delay of repair

i. A delay of repair that is employed pursuant to paragraph (DD)(2)(i) or (DD)(4)(d) of OAC rule 3745-21-09 shall be allowed only as provided in paragraphs (DD)(11)(b) to (DD)(11)(f) of OAC rule 3745-21-09.

ii. A delay of repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.

iii. A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

iv. A delay of repair for a valve shall be allowed if:

(1) the permittee of the valve demonstrates that the emission of purged material resulting from immediate repair is greater than the emission likely to result from delay of repair; and

(2) when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in paragraph (DD)(10) of OAC rule 3745-21-09.

v. A delay of repair for a pump shall be allowed if:

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

(2) the repair is completed as soon as practicable, but no later than 6 months after the leak was detected.

vi. A delay of repair beyond a process unit shutdown shall be allowed for a valve if a 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. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

9.i [OAC rule 3745-12-09(DD)(12)]
Alternative monitoring schedule for valves based on a skip period

i. The permittee of a process unit may elect to implement an alternative monitoring schedule in lieu of the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, as provided in paragraph (DD)(2)(c)(iii) of OAC rule 3745-21-09. The alternative monitoring schedule shall be based on skipping quarterly monitoring periods provided the percentage of valves leaking is no more than 2.0. The permittee who elects to implement an alternative monitoring schedule shall comply with the requirements specified in paragraphs (DD)(12)(b) to (DD)(12)(h) of OAC rule 3745-21-09.

ii. The permittee must notify the Director prior to implementing this alternative monitoring schedule. Such notification must identify which valves will be subject to this alternative monitoring schedule and which work practice within paragraph (DD)(12)(e) of OAC rule 3745-21-09 will be implemented. Any valve in vacuum service, in heavy liquid service, or not in VOC service, shall be excluded from this alternative monitoring schedule.

iii. Any valve subject to this alternative monitoring schedule shall comply initially with the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09.

II. Operational Restrictions (continued)

iv. Any valve subject to this alternative monitoring schedule shall continue to be subject to the requirements specified in paragraphs (DD)(2)(g) to (DD)(2)(m) of OAC rule 3745-21-09.

v. One of the following two alternative work practices for skipping monitoring periods may be implemented:

(1) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first quarter of every two consecutive quarterly leak detection periods is skipped.

(2) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first three quarters of every four consecutive quarterly periods is skipped.

vi. If the percentage of valves leaking is greater than 2.0, the permittee shall comply with the monitoring requirements as specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, but may again elect to use this alternative monitoring schedule.

vii. The percentage of valves leaking shall be determined for the valves subject to this alternative monitoring schedule as the sum of the number of those valves found leaking during any portion of the current monitoring period and the number of those valves found leaking during a previous monitoring period for which repair has been delayed during the current monitoring period, divided by the total number of valves, and multiplied by 100.

viii. The following information pertaining to valves subject to this alternative monitoring schedule shall be recorded in a log that is kept in a readily accessible location:

(1) a schedule of monitoring; and

(2) the percentage of valves leaking during each monitoring period.

9.j [OAC rule 3745-12-09(DD)(12)]
Alternative monitoring standard for valves based on the allowable percentage of valves leaking

i. The permittee of a process unit may elect to implement an alternative monitoring standard in lieu of the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, as provided in paragraph (DD)(2)(d)(v) of OAC rule 3745-21-09. The alternative monitoring standard shall be based on maintaining the percentage of valves leaking at 2.0 or less. The permittee who elects to implement an alternative monitoring standard shall comply with the requirements specified in paragraphs (DD)(13)(b) to (DD)(13)(g) of OAC rule 3745-21-09.

ii. The permittee must notify the Director prior to implementing this alternative monitoring standard.

iii. All valves in gas/vapor service or in light liquid service in the process unit shall be subject to this alternative monitoring standard, except for those valves which are designated as unsafe to monitor as provided in paragraph (DD)(2)(c)(ii) of OAC rule 3745-21-09, those valves not in VOC service, and those valves in vacuum service.

II. Operational Restrictions (continued)

iv. The percentage of valves leaking, as determined in accordance with paragraph (DD)(13)(f) of OAC rule 3745-21-09, shall not exceed 2.0. If the percentage of valves leaking is greater than 2.0, the permittee shall comply with the monitoring requirements as specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, but may again elect to use this alternative monitoring standard.

v. All valves subject to this alternative monitoring standard shall be tested for compliance with paragraph (DD)(13)(d) of OAC rule 3745-21-09 initially upon implementation and annually.

vi. A compliance test shall be conducted in the following manner:

(1) all valves subject to this alternative monitoring standard shall be monitored for leaks within a one-week period by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code;

(2) if an instrument reading of 10,000 ppmv or greater is measured, a leak is detected; and

(3) the percentage of valves leaking shall be determined as the number of valves for which a leak is detected, divided by the number of valves monitored, and multiplied by 100.

vii. When a leak is detected as described in paragraph (DD)(13)(f)(ii) of OAC rule 3745-21-09, the leaking valve shall be repaired in accordance with paragraphs (DD)(2)(h) and (DD)(2)(i) of OAC rule 3745-21-09.

10. A pilot flame shall be maintained at all times in the flare's pilot light burner.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

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

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.135(d)]
Each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 CFR 61.245(b) except as provided in 40 CFR 61.136(d) and 40 CFR 61.135(e) through (g).

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

b. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

6. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

7.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

7.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

7.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

7.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

7.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

7.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

7.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

7.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

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

8. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

9. [40 CFR 61.242-10]
a. 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.

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

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

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

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

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

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

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the 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.

10. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

10.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

10.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760?C.

10.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61 Subpart V shall comply with the requirements of 40 CFR 60.18.

10.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

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

10.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

11. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

12. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

12.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

12.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

12.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

13. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

14. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

15. [40 CFR 61.138(b)]
The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

16. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

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

17. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

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

18. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

19. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

20. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

21. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

22. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

23. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

24.a [OAC rule 3745-12-09(DD)(2)(b)]
Except as otherwise provided in paragraphs (DD)(2)(c) and (DD)(2)(d) of OAC rule 3745-21-09, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:

i. Any pump in light liquid service shall be monitored monthly.

ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.

iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:

(a) any pump in heavy liquid service;

(b) any valve in heavy liquid service;

(c) any pressure relief device in light liquid service or in heavy liquid service; and

(d) any flange or other connector.

iv. Any equipment in which a leak is detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09 shall be monitored within 5 working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

24.b [OAC rule 3745-12-09(DD)(2)(c)]
For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09 as follows:

i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:

(a) construction of the process unit commenced prior to May 9, 1986;

(b) the permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 6 feet above a support surface; and

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

ii. 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:

(a) 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 monthly basis; and

(b) the permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.

iii. The valve is subject to an alternative monitoring schedule based on a skip period as specified in paragraph (DD)(12) of OAC rule 3745-21-09.

24.c [OAC rule 3745-12-09(DD)(2)(d)]
Excluded from the monitoring requirements of paragraph (DD)(2)(b) of OAC rule 3745-21-09 are the following equipment:

i. any pump that has no externally actuated shaft penetrating the pump housing and that is designated for no detectable emissions as provided in paragraph (DD)(7) of OAC rule 3745-21-09;

ii. any pump that is equipped with a dual mechanical seal which has a barrier fluid system and sensor that comply with the requirements specified in paragraph (DD)(8) of OAC rule 3745-21-09;

iii. any pump that is equipped with a closed vent system capable of capturing and transporting any leakage from the pump seal to control equipment, provided the closed vent system and the control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of OAC rule 3745-21-09;

iv. any valve that has no externally actuated stem penetrating the valve and that is designated for no detectable emissions as provided in paragraph (DD)(7) of OAC rule 3745-21-09; and

v. any valve that is subject to the alternative monitoring standard for valves based on the percentage of valves leaking as provided in paragraph (DD)(13) of OAC rule 3745-21-09.

24.d [OAC rule 3745-12-09(DD)(2)(e)]
Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, unless the pump is equipped with a closed vent system capable of transporting any leakage from the pump seal to control equipment, and the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of OAC rule 3745-21-09.

24.e [OAC rule 3745-12-09(DD)(2)(f)]
Any sensor employed pursuant to paragraph (DD)(2)(d)(ii) or (DD)(3)(b) of OAC rule 3745-21-09 shall be checked daily, unless the sensor is equipped with an audible alarm.

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

24.f [OAC rule 3745-12-09(DD)(2)(g)]
A leak is detected:

i. when a concentration of 10,000 ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code;

ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service; or

iii. when a sensor employed pursuant to paragraph (DD)(2)(d)(ii) or (DD)(3)(b) of OAC rule 3745-21-09 indicates failure of the seal system, the barrier fluid system, or both.

24.g [OAC rule 3745-12-09(DD)(2)(h)]
When a leak is detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09, the following procedures shall be followed:

i. a weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment;

ii. a record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to paragraph (DD)(2)(k) of OAC rule 3745-21-09;

iii. the identification tag attached to the leaking equipment, other than a valve that is monitored pursuant to paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, may be removed after the leaking equipment is repaired; and

iv. the identification tag attached to a leaking valve that is monitored pursuant to paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09 may be removed after the leaking valve is repaired, monitored for leaks for 2 consecutive months as specified in paragraph (DD)(2)(b)(ii) of OAC rule 3745-21-09, and found to have no detected leaks during those 2 consecutive months.

24.h [OAC rule 3745-12-09(DD)(2)(i)]
When a leak is detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09, the leaking equipment shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except for a delay of repair as provided in paragraph (DD)(11) of OAC rule 3745-21-09. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to paragraph (DD)(2)(b)(iv) of OAC rule 3745-21-09 is less than 10,000 ppmv.

24.i [OAC rule 3745-12-09(DD)(2)(j)]
When a leak is detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09, a first attempt at repair shall be made no later than 5 calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

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

24.j [OAC rule 3745-12-09(DD)(2)(k)]
When a leak is detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09, the following information shall be recorded in a leak repair log:

i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;

ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;

iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;

iv. the methods of repair applied in each attempt to repair the leaking equipment;

v. one of the following entries within 5 working days after each attempt to repair the leaking equipment:

(a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or

(b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:

(i) the actual reading, in ppmv; or

(ii) "below 10,000," denoting less than 10,000 ppmv; or

(iii) "above 10,000," denoting not less than 10,000 ppmv;

vi. if the leak is not repaired within 15 calendar days after the date on which it was detected:

(a) "repair delayed" and the reason for the delay;

(b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the permittee whose decision it was that repair is technically infeasible without a process unit shutdown;

(c) the expected date of successful repair of the leak;

(d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and

vii. the date on which the leak was successfully repaired.

24.k [OAC rule 3745-12-09(DD)(2)(l)]
The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of 2 years after the date on which the record was made.

24.l [OAC rule 3745-12-09(DD)(14)(a)]
Each permittee of a process unit as described in paragraph (DD)(1) of OAC rule 3745-21-09 shall comply with the record keeping requirements of paragraphs (DD)(14)(b) to (DD)(14)(g) of OAC rule 3745-21-09. The permittee of more than one process unit may use one record keeping system to comply with the record keeping requirements, provided the system identifies each record by each process unit.

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

24.m [OAC rule 3745-12-09(DD)(14)(b)]
The following information shall be recorded in a log that is kept in a readily accessible location:

i. a list of identification numbers for equipment subject to the requirements of paragraphs (DD)(2) to (DD)(10) of OAC rule 3745-21-09;

ii. a list of identification numbers for equipment designated for no detectable emissions as provided in paragraph (DD)(7) of OAC rule 3745-21-09, and a signature of the permittee authorizing such designation;

iii. a list of identification numbers for pressure relief devices subject to paragraph (DD)(4) of OAC rule 3745-21-09;

iv. a list of identification numbers for closed vent systems subject to paragraph (DD)(9) of OAC rule 3745-21-09; and

v. for compliance tests required under paragraphs (DD)(4)(c), (DD)(7)(c), and (DD)(9)(c) of OAC rule 3745-21-09:

(a) the date of each compliance test;

(b) the background level measured during each compliance test; and

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

24.n [OAC rule 3745-12-09(DD)(14)(c)]
The following information pertaining to valves subject to an alternative monitoring schedule, as provided in paragraph (DD)(2)(c) of OAC rule 3745-21-09, shall be recorded in a log that is kept in a readily accessible location:

i. a list of identification numbers for valves 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;

ii. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and

iii. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.

24.o [OAC rule 3745-12-09(DD)(14)(d)]
The following information pertaining to closed vent systems and control equipment described in paragraphs (DD)(9) and (DD)(10) of OAC rule 3745-21-09 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, as required in paragraph (DD)(10)(d) of OAC rule 3745-21-09, to ensure that the control equipment is operated and maintained in conformance with its design, and an explanation of the reason for selecting such parameter or parameters;

iv. periods when the closed vent systems and control equipment are not operated as designed, including periods when a flare pilot light does not have a flame; and

v. dates of startups and shutdowns of the closed vent systems and control equipment.

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

24.p [OAC rule 3745-12-09(DD)(14)(e)]
The following information pertaining to barrier fluid systems and sensors described in paragraph (DD)(8) of OAC rule 3745-21-09 shall be recorded in a log that is kept in a readily accessible location:

i. a list of identification numbers of pumps and compressors equipped with such barrier fluid systems and sensors;

ii. the criteria that indicate failure of the seal system, the barrier fluid system, or both, as required in paragraph (DD)(8)(d) of OAC rule 3745-21-09 and an explanation of the criteria; and

iii. any changes to such criteria and the reasons for the changes.

24.q [OAC rule 3745-12-09(DD)(14)(f)]
The following information for use in determining an exemption for the process unit as provided in paragraph (DD)(17)(a) of OAC rule 3745-21-09 shall be recorded in a log that is kept in a readily accessible location:

i. an analysis demonstrating the design capacity of the process unit;

ii. a statement listing the feed and raw materials and products from the process unit and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohols; or

iii. an analysis demonstrating that no equipment is in VOC service.

24.r [OAC rule 3745-12-09(DD)(4)(g)]
The following information pertaining to specific equipment that are exempt as provided in paragraph (DD)(17)(b) of OAC rule 3745-21-09 shall be recorded in a log that is kept in a readily accessible location:

i. a list of identification numbers of equipment in vacuum service;

ii. a list of identification numbers of equipment not in VOC service and the information or data used to demonstrate that the equipment is not in VOC service; and

iii. a list of equipment subject to an equivalent emission requirement that is approved by the director pursuant to paragraph (DD)(16) of OAC rule 3745-21-09.

25. The permittee shall properly operate and maintain a device to continuously monitor the excess coke oven gas bleeder flare pilot flame. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

a. all periods during which there was no pilot flame; and

b. the downtime for the flare, monitoring equipment, and the associated emissions unit.

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

26. For bypass lines that could divert a vent stream away from a control device required by the terms and conditions of this permit, the permittee shall comply with a or b below. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this monitoring.

a. Properly maintain and operate a flow indicator and recorder that takes a reading at least once every 15 minutes. 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. The following information shall be recorded in a log:

i. hourly records of whether the flow indicator was operating and whether diversion was detected at any time during each hour; and

ii. records of times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

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

i. records that monthly inspections were performed; and

ii. records of all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

27. The permittee shall verify the presence of a pilot flame on the excess coke oven gas bleeder flare at a minimum of once per shift. The permittee shall maintain records of the presence of a pilot flame on the excess coke oven gas bleeder flare at a minimum of once per shift.

28. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 07-255, issued on 6/19/91: A.III.1 through A.III.27. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in a through e below.

a. for sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133:

i. a brief description of any visible defect in the source or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

IV. Reporting Requirements (continued)

3. [OAC rule 3745-12-09(DD)(2)(m)]
Semiannual reports shall be submitted to the Director by the first day of February and August and shall include the following information for the preceding semiannual periods:

i. the process unit identification;

ii. the number of pumps in light liquid service excluding those pumps designated for no detectable emissions under the provision of paragraph (DD)(2)(d)(i) of OAC rule 3745-21-09 and those pumps complying with paragraph (DD)(2)(d)(iii) of OAC rule 3745-21-09;

iii. the number of valves in gas/vapor service or in light liquid service excluding those valves designated for no detectable emission under the provision of paragraph (DD)(2)(d)(iv) of OAC rule 3745-21-09 and those valves subject to the alternative standard for monitoring under the provision of paragraph (DD)(2)(d)(v) of OAC rule 3745-21-09;

iv. the number of compressors, excluding those compressors designated for no detectable emissions under the provision of paragraph (DD)(3)(c) of OAC rule 3745-21-09 and those compressors complying with paragraph (DD)(3)(d) or (DD)(3)(e) of OAC rule 3745-21-09;

v. for each month during the semiannual period:

(a) the number of pumps in light liquid service for which leaks were detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09;

(b) the number of pumps in light liquid service for which leaks were not repaired within 15 calendar days after the date of leak detection;

(c) the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in paragraph (DD)(2)(g) of OAC rule 3745-21-09;

(d) the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within 15 calendar days after the date of leak detection;

(e) the number of compressors for which leaks were detected as described in paragraph (DD) of OAC rule 3745-21-09;

(f) the number of compressors for which leaks were not repaired within 15 calendar days after the date of leak detection; and

(g) the facts that explain each delay of repair allowed pursuant to paragraph (DD)(11) of OAC rule 3745-21-09; and

vi. the dates of process unit shutdowns that occurred within the semiannual period.

IV. Reporting Requirements (continued)

4. [OAC rule 3745-12-09(DD)(15)]
Reporting.

i. The permittee of a process unit as described in paragraph (DD)(1) of OAC rule 3745-21-09 shall comply with the reporting requirements specified in paragraphs (DD)(15)(b) to (DD)(15)(d) of OAC rule 3745-21-09.

ii. For compliance tests required under paragraphs (DD)(7)(c) and (DD)(9)(c) of OAC rule 3745-21-09, the requirements of paragraphs (A)(3) and (A)(4) of rule 3745-21-10 of the Administrative Code (pertaining to notification of intent to test) shall be met. The results of such compliance tests shall be reported to the Portsmouth local air agency within 30 days after the test date.

iii. The results of compliance tests required under paragraph (DD)(4)(c) of OAC rule 3745-21-09 shall be reported semiannually to the Portsmouth local air agency. The semiannual reports shall be submitted by the first day of February and August and shall include information for the preceding semiannual period.

iv. Any semiannual reports required under paragraph (DD)(2)(m) of OAC rule 3745-21-09 may be sent to the Portsmouth local air agency.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the excess coke oven gas bleeder flare pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

6. Any malfunction which necessitates a vent stream be diverted from a control device to the atmosphere shall be reported to the Portsmouth local air agency in accordance with the requirements of OAC rule 3745-15-06.

7. The permittee shall submit quarterly deviation (excursion) reports identifying any periods of time when a pilot flame was not present on the excess coke oven gas bleeder flare and describing any corrective actions taken to relight and maintain a pilot flame.

8. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #07-255, issued on 6/19/91: A.IV.1 through A.IV.7. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

V. Testing Requirements (continued)

1.c Emission Limitation:

1.70 tpy of VOC

Applicable Compliance Method:

Compliance shall be determined by calculating the sum of the following:

i. Emissions from the wash oil decanter, wash oil circulation tank, and wash oil pump tank: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.0076 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), divide by 2000 pounds/ton, and then multiply by 3 for the three tanks.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 3.8 g of benzene/Mg coke to pounds/ton.

ii. Emissions from the two light oil condenser vents: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.18 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), divide by 2000 pounds/ton, and then multiply by 2 for the two condensers.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 89 g of benzene/Mg coke to pounds/ton.

iii. Emissions from the two light oil separators: multiply the maximum daily coke production, in tons (1059.3 ton/day), times the 0.03 pound/ton emission factor, times 365 days/year, times the 0.02 control efficiency (98% control efficiency for gas blanket system), divide by 2000 pounds/ton, and then multiply by 2 for the two light oil separators.

The VOC emission factor was obtained from USEPA Document EPA-450/3-83-016(a), dated May 1984, converted from 15 g of benzene/Mg coke to pounds/ton.

1.d Emissions Limitation:

no visible emissions from the flare except for 5 minutes in a 60-minute period

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 22.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #07-255, issued on 6/19/91: A.V.1. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

VI. Miscellaneous Requirements

1. The permittee shall apply for and obtain a Permit to Install (PTI) for the light oil loading rack. This loading rack was not included as a part of PTI number 07-255 issued on 6/19/91 and is a separate emissions unit from the light oil recovery plant.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tar Storage Tank # 703 (T016)

Activity Description: Emissions from tar storage tank # 703

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
crude coal tar storage tank (#703) fixed roof with steam blanket	OAC rule 3745-31-05(A)(3) (PTI 07-254)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 61, Subparts L and V.
	40 CFR Part 61, Subpart L	no detectible fugitive VOC emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the tar storage tank in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

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

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

6.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

6.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

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

6.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

6.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

6.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

6.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

6.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

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

7. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

8. [40 CFR 61.242-10]
a. 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.

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

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

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

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

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

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

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the 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.

9. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

9.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

9.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees C.

9.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61, Subpart V shall comply with the requirements of 40 CFR 60.18.

9.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61, Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

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

9.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

10. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

11. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

11.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

11.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

11.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

12. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

13. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

14. [40 CFR 61.138(b)]
The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

15. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

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

16. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months; and

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

17. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

18. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

19. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

20. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

21. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

22. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in A.IV.1.a through A.IV.1.e below:

a. for emissions units subject to 40 CFR 61.132 and emissions units subject to 40 CFR 61.133:

i. a brief description of any visible defect in the emissions unit or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made;

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

IV. Reporting Requirements (continued)

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tar Storage Tank # 704 (T017)

Activity Description: Emissions from tar storage tank #704

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
crude coal tar storage tank (#704) fixed roof with steam blanket	OAC rule 3745-31-05(A)(3) (PTI 07-254)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 61, Subparts L and V.
	40 CFR Part 61, Subpart L	no detectible fugitive volatile organic compounds (VOC) emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the tar storage tank in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

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

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

6.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

6.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

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

6.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

6.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

6.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

6.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

6.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

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

7. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

8. [40 CFR 61.242-10]
a. 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.

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

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

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

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

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

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

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the 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.

9. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

9.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

9.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees C.

9.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61, Subpart V shall comply with the requirements of 40 CFR 60.18.

9.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61, Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

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

9.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

10. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

11. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

11.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

11.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

11.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

12. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

13. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

14. [40 CFR 61.138(b)]
The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

15. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

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

16. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months; and

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

17. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

18. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

19. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

20. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

21. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

22. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in A.IV.1.a through A.IV.1.e below.

a. for emissions units subject to 40 CFR 61.132 and emissions units subject to 40 CFR 61.133:

i. a brief description of any visible defect in the emissions unit or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made;

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

IV. Reporting Requirements (continued)

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Light Oil Storage Tank # 713 (T018)

Activity Description: Emissions from light oil storage tank #T713

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
light oil storage tank (#713) fixed roof with coke oven gas blanket	OAC rule 3745-31-05(A)(3) (PTI 07-254)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 61, Subparts L and V.
	40 CFR Part 61, Subpart L	no detectible fugitive volatile organic compounds (VOC) emissions from equipment in benzene service
	40 CFR Part 61, Subpart V	leak detection and repair program for fugitive VOC emissions from equipment in benzene service
	OAC rule 3745-21-07(D)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 61, Subparts L & V and OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate and maintain a gas blanketing system for the light oil storage tank in accordance with the requirements of 40 CFR 61.132.

1.a [40 CFR 61.132(a)]
The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

The permittee shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

II. Operational Restrictions (continued)

i. Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

ii. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

1.b [40 CFR 61.132(d)]
The permittee shall comply with the requirements of 40 CFR 61.132 for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

2.a [40 CFR 61.133(a)]
The permittee shall enclose and seal the liquid surface of the light oil sump to form a closed system to contain the emissions.

i. Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

ii. Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

iii. The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

2.b [40 CFR 61.133(b)]
The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

3. [40 CFR 61.135(a)]
The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in 40 CFR 61.135.

4. [40 CFR 61.135(c)]
Each piece of equipment in benzene service to which 40 CFR Part 61, Subpart L applies shall be clearly marked so that it can be distinguished readily from other equipment in benzene service. The method in 40 CFR 61.137(b) shall be used to determine if equipment is in benzene service.

5. [40 CFR 242-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6. [40 CFR 61.242-5]
The permittee shall equip each sampling connection system with a closed-purge system or a closed-vent system.

Each closed-purge system or closed-vent system as required in 40 CFR 61.242-5(a) shall:

a. return the purged process fluid directly to the process line with zero VHAP emissions to atmosphere; or

b. collect and recycle the purged process fluid with zero VHAP emissions to atmosphere; 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 40 CFR 61.242-11.

In-situ sampling systems are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

II. Operational Restrictions (continued)

7. [40 CFR 61.242-6]
The permittee shall equip each open ended valve or line with a cap, blind flange, plug or 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.

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.

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 40 CFR 61.242-6(a) at all other times.

8. [40 CFR 61.242-11(g)]
Closed-vent systems and control devices use to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 61.132(b)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.132(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

2. [40 CFR 61.132(c)]
Following the installation of any control system used to meet the requirements of 40 CFR 61.132(a), the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

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

3. [40 CFR 61.133(c)]
Following the installation of any control equipment used to meet the requirements of 40 CFR 61.133(a), the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and the procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

4. [40 CFR 61.242-2]
Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and 40 CFR 61.242-2(d), (e), and (f). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5. [40 CFR 242-4(b)]
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 each pressure release, except as provided in 40 CFR 61.242-10.

No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

6.a [40 CFR 61.242-7(a)]
Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b) through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h) and 40 CFR 61.242-1(c).

6.b [40 CFR 61.242-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

6.c [40 CFR 61.242-7(c)]
i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

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

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

6.d [40 CFR 61.242-7(d)]
i. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10.

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

6.e [40 CFR 61.242-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i. tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

6.f [40 CFR 61.242-7(f)]
Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

i. has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

iii. is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

6.g [40 CFR 61.242-7(g)]
Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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 complying with 40 CFR 61.242-7(a); and

ii. the permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

6.h [40 CFR 61.242-7(h)]
Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

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

ii. the process unit within which the valve is located is an existing process unit; and

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

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

7. [40 CFR 61.242-8]
Pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, except at provided in 40 CFR 61.242-1(c). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

8. [40 CFR 61.242-10]
a. 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.

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

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

i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

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

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

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

e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the 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.

9. [40 CFR 61.242-11(a)]
The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61 Subpart V shall comply with the provisions 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).

9.a [40 CFR 61.242-11(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.

9.b [40 CFR 61.242-11(c)]
Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees C.

9.c [40 CFR61.242-11(d)]
Flares shall used to comply with 40 CFR Part 61, Subpart V shall comply with the requirements of 40 CFR 60.18.

9.d [40 CFR 61.242-11(e)]
The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61, Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

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

9.e [40 CFR 61.242-11(f)]
Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).

Closed-event systems shall be monitored to determine compliance with 40 CFR Part 61, Subpart V initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Administrator.

Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

10. [40 CFR 61.245(b)]
Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

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

b. The detection instrument shall meet the performance criteria of Reference Method 21.

c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

d. Calibration gases shall be:

i. zero air (less than 10 ppm of hydrocarbon in air); and

ii. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

11. [40 CFR 61.137 (b)]
To determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 40 CFR 61.245(d).

11.a [40 CFR 61.245(d)(1)]
Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

11.b [40 CFR 61.245(d)(2)]
The permittee may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

11.c [40 CFR 61.245(d)(3)]
Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

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

12. [40 CFR 61.245(e)]
a. Method 22 of Appendix A of 40 CFR Part 60 shall be used to determine compliance of flares with the visible emission provisions of 40 CFR 61.245.

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 equation in 40 CFR 61.245(e)(3).

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 Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

e. The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the equation in 40 CFR 61.245(e)(5) the equation in 40 CFR 61.245(e)(3).

13. [40 CFR 61.138(a) & 40 CFR 61.246(d)]
The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 and the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

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

c. a description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), 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;

d. periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame; and

e. dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

14. [40 CFR 61.138(b)]
The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

a. the date of the inspection and the name of the inspector;

b. a brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;

c. the presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and

d. a brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

15. [40 CFR 61.246(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 61, Subpart V may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by each process unit.

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

16. [40 CFR 61.246(b)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

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

b. the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months; and

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

17. [40 CFR 61.246(c)]
When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. ``above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. ``repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

18. [40 CFR 61.246(e)]
The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart;

b. a list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background (the designation of this equipment for no detectable emissions shall be signed by the permittee);

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a);

d. the dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test; and

e. a list of identification numbers for equipment in vacuum service.

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

19. [40 CFR Part 61.246(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

a. 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; and

b. 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 planned schedule for monitoring each valve.

20. [40 CFR Part 61.246(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

b. any changes to this criterion and the reasons for the changes.

21. [40 CFR 61.246(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR Part 61, Subparts L and V:

a. an analysis demonstrating the design capacity of the process unit; and

b. an analysis demonstrating that equipment is not in VHAP service.

22. [40 CFR 61.246(j)]
Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

IV. Reporting Requirements

1. [40 CFR 61.138(f)]
A report shall be submitted semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the information in A.IV.1.a through A.IV.1.e below.

a. for emissions units subject to 40 CFR 61.132 and emissions units subject to 40 CFR 61.133:

i. a brief description of any visible defect in the emissions unit or ductwork;

ii. the number of leaks detected and repaired; and

iii. a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made;

b. for equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b);

c. for each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period:

i. the number of exhausters for which leaks were detected as described in 40 CFR 61.135(d) and (e)(5);

ii. the number of exhausters for which leaks were repaired as required in 40 CFR 61.135(d) and (e)(6); and

iii. the results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period;

d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period; and

e. revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

IV. Reporting Requirements (continued)

2. [40 CFR 61.247(b)]
The semiannual reports shall also include the following information:

a. process unit identification;

b. for each month during the semiannual reporting period:

i. the number of valves for which leaks were detected as described in 40 CFR 61.242-7(b);

ii. the number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d);

iii. the number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6);

iv. the number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6); and

v. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible; and

c. the dates of process unit shutdowns which occurred within the semiannual reporting period.

V. Testing Requirements

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

1.a Emission Limitation:

no detectible fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance with 40 CFR Part 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

1.b Emission Limitation:

leak detection and repair program for fugitive VOC emissions from equipment in benzene service [40 CFR Part 61, Subpart V]

Applicable Compliance Method:

Compliance with this 40 CFR Part 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

****

THIS IS THE LAST PAGE OF THE PERMIT

****