Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

7/8/2015

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: Lima Refining Company
Facility ID: 0302020012
Permit Type: Minor Permit Modification
Permit Number: P0118532

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA DAPC, Northwest District Office

PROPOSED

Division of Air Pollution Control
Title V Permit
for
Lima Refining Company

Facility ID:	0302020012
Permit Number:	P0118532
Permit Type:	Minor Permit Modification
Issued:	7/8/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
Lima Refining Company

Table of Contents

Authorization 1

A. Standard Terms and Conditions 2

1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance 6
4. Risk Management Plans 7
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 9
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 12
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 13
20. Permit to Install Requirement 13
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements 15
28. Permit Transfers 15

Ohio Environmental Protection Agency

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15

30. Submitting Documents Required by this Permit 16

B. Facility-Wide Terms and Conditions 17

C. Emissions Unit Terms and Conditions 33

1. Emissions Unit Group - Process Heaters Group #1: B001, B003, B007 34

2. B002, Process Heater 46

3. B004, Process Heater 60

4. B006, UltraFormer Process Preheater,, Reheater 1, Reheater 2, Reheater 3 (PR 175156-175159) 71

5. Emissions Unit Group - Process Heaters Group #4: B022, B024 102

6. B026, Steam Generating Unit 110

7. B027, Process Heater 122

8. B028, Process Heater 130

9. B029, Process Heater 137

11. B032, PR-170026, Nebraska Boiler 146

10. B033, PR 170020 157

11. B034, PR 170021 170

12. B035, B & W Boiler 180

13. F001, Roadways 201

14. J001, Loading Rack 203

15. J002, Propane and Propylene Railcar Loading/Unloading Facilities 204

16. J004, Loading Rack 207

17. J007, Decanted Oil Loading Rack 210

18. J010, Railcar Distillate Loading Rack 213

19. P005, Process 220

20. P006, Refinery Flare 223

21. P007, Refinery Flare 230

22. P010, Process 240

23. P012, Process 265

24. P014, Process 267

25. P017, Process 270

26. P018, Process 273

27. P023, Loading Rack 275

28. P025, Oil/Water Separator System 290

29. P027, Process 299

30. P028, Process 301

31. P030, Process 303

Ohio Environmental Protection Agency

32. Emissions Unit Group - Knock Motors: P031, P032 307
33. P033, SRU Cooling Tower 309
34. P034, BH Cooling Tower 312
35. P036, Acid Gas Flare 315
36. P037, LIU Cooling Tower 321
37. P038, FCC Cooling Tower 324
38. P040, Sulfur Recovery Unit 328
39. P041, Butane-Butylene Treater 342
40. P047, Backup AWWT Pump 351
41. P048, Wastewater Treatment Plant 358
42. P801, Sewers 363
43. P803, Piping Components 364
44. T009, Tank 100216 368
45. Emissions Unit Group – Internal Floating Roof Group 1 Vessels subject to 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 61, Subpart FF; 40 CFR, Part 63, Subpart CC; and 40 CFR, Part 63, Subpart DD: T078, T220 374
46. Emissions Unit Group – External Floating Roof Group 1 Vessels subject to 40 CFR, Part 63, Subpart CC: T017, T020, T021, T025, T027, T028, T029, T033, T034, T037, T039, T042, T043, T044, T049, T205, T206, T207, T208 379
47. T023, Tank 100204 385
48. Emissions Unit Group – External Floating Roof Group 2 Vessels subject to 40 CFR, Part 63, Subpart CC: T018, T019 392
49. Emissions Unit Group – External Floating Roof Group 1 Vessels subject to 40 CFR, Part 63, Subpart CC; and Storage Tank Emission Reduction Partnership Program 65 Federal Register 19891 (April 13, 2000): T026, T030, T036, T038, T040 395
50. Emissions Unit Group – Internal Floating Roof Group 1 Vessels subject to 40 CFR, Part 63, Subparts G and CC: T031, T032, T041 401
51. T045, Tank 100248 406
52. Emissions Unit Group – Fixed Roof Group 2 Vessels subject to 40 CFR, Part 63, Subpart CC: T053, T054, T057, T058, T059, T060, T061, T065, T066, T067, T068, T093, T123, T164, T177, T178, T195 411
53. Emissions Unit Group – Fixed Roof Group 2 Vessels subject to 40 CFR, Part 60, Subpart Ka and 40 CFR, Part 63, Subpart CC: T055, T064 414
54. Emissions Unit Group – Internal Floating Roof Group 1 Vessels subject to 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 63, Subpart CC; : T071, T072, T073, T075 418
55. T074, Tank 100253 425
56. T076, Tank 100219 432
57. T083, Tank 164559 435
58. T088, Tank 100169 442

59. Emissions Unit Group – Fixed Roof Group 1 Wastewater Vessels subject to 40 CFR, Part 61, Subpart FF and 40 CFR, Part 63, Subpart CC: T010, T011, T090, T091 449
60. T121, Tank 100391 455
61. T161, Tank 100057 460
62. T190, Tank 100044 464
63. Emissions Unit Group – Internal Floating Roof Group 1 vessels subject to 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC (PTI No. 03-13794) T191, T192 469
64. T196, Tank 100006 477
65. T197, Tank 100005 485
66. T198, Tank 100024 488
67. T200, Tank 164788 491
68. T201, Tank 100038 493
69. Emissions Unit Group – Fixed Roof Group 1 Vessels subject to 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC: T202, T203, T204 503
70. T212, Tank 100072 507
71. Emissions Unit Group - Fixed Roof Group 2 Vessels subject to 40 CFR, Part 60, Subpart Ka and 40 CFR, Part 63, Subpart CC : T213, T214 512
72. T217, Tank 164468 ("E-tank") 516
73. T222, Tank 100056 522
74. T223, Tank 100071 525
75. T236, Tank 108 536
76. T238, Tank 107 545
77. T239, Tank 100110 549
78. Emissions Unit Group – Decanted Oil Group 2 Vessels: T268, T269, T270 558
79. T271, Tank 100128 562
80. T272, Tank 100129 571
81. T273, Tank 100120 580
82. T274, Tank 100121 583
83. T280, VAC Bottoms Tank 586

Authorization

Facility ID:	0302020012
Facility Description:	Petroleum Refinery and Storage
Application Number(s):	A0052333, A0053736
Permit Number:	P0118532
Permit Description:	Title V Minor Permit Modification to incorporate various PTIs.
Permit Type:	Minor Permit Modification
Issue Date:	7/8/2015
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0117366

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Lima Refining Company
1150 South Metcalf Street
Lima, OH 45804

Ohio Environmental Protection Agency (EPA)District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submittedscheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northwest District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally

enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. 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.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. 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.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. 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.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. 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 (18) 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.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. 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.

(Authority for term: OAC rule 3745-77-07(B))

13. 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

Officialthat, 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:

(1) 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.

(2) 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.

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

(4) 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 Ohio EPA DAPC, Northwest District Office 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:

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

(2) 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 Director (the Ohio EPA DAPC, Northwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) 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.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. 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.

(Authority for term: OAC rule 3745-77-07(F))

15. 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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. 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.

(Authority for term: OAC rule 3745-77-07(G))

17. 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 of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions 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.

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.

(Authority for term: OAC rule 3745-77-07(I))

18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theOhio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Ohio EPA DAPC, Northwest District Office 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).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) 30.

2. Alternative Leak Detection and Repair (LDAR) Monitoring Plan

   The facility must maintain an up-to-date LDAR Monitoring Plan on-site. The LDAR Monitoring Plan must address all currently applicable federal and state rules for fugitive equipment leaks, including the refinery's federal Consent Decree addendum,civil action No. SA07CA0683RF dated 11/20/07. The LDAR Monitoring Plan must also be updated to address the requirements of new rules as those new rules become applicable to the refinery and refinery processes. The current version of the LDAR Monitoring Plan must be readily available for review upon inspection and provided to the Ohio EPA upon request.

   The director may accept an alternative monitoring, recordkeeping and reporting program for that required by paragraph (T)(1) of OAC rule 3745-21-09 if the permittee of a petroleum refinery can demonstrate to the satisfaction of the director that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in paragraph (T)(1) of OAC rule 3745-21-09. For purposes of this paragraph, any proposed alternative monitoring, recordkeeping and reporting program that the director finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of OAC rule 3745-21-09 or for any individual equipment component, finds equivalent to the federal requirements specified in 40 CFR, Part 60, Subparts VV and GGG or 40 CFR, Part 63, Subparts H and CC shall be acceptable to the director.

   Pursuant to paragraph (a) of OAC rule 3745-21-09(T)(4), the alternative monitoring, recordkeeping and reporting program entitled "Premcor Lima Refinery, LDAR Plan" and dated November 19, 2002 is approved by the director as an acceptable alternative program for the "Lima Refining Company.

   The permittee shall comply with the standards, monitoring and recordkeeping requirements, reporting requirements, and test methods under 40 CFR, Part 60, Subpart VV, including the following sections:

60.480(a)(1)	Applicability
60.480(a)(2)	Affected Facility
60.480(a)(3)	Affected Facility – Compressors
60.480(d)(1)	Exemptions – Maintain Records, Note: this is equivalent to item 60.480(b)(1) in the alternative LDAR monitoring plan
60.480(d)(2)	Exemptions – Affected Facility with No Equipment in VOC Service, Note: this is equivalent to item 60.480(b)(2) in the alternative LDAR monitoring plan
60.481	Definitions

60.482-1(a)	Compliance Date
60.482-1(b)	Compliance Determination
60.482-1(c)(1)	Equivalence of Means of Emission Limitation – Request
60.482-1(c)(2)	Equivalence of Means of Emission Limitation – Compliance
60.482-1(d)	Vacuum Service Exclusion
60.482-1(e)(1), 60.482-1(e)(2), 60.482-1(e)(3)(i) and 60.482-1(e)(3)(ii)	Compressors in Hydrogen Service Exclusion – Demonstration, Demonstration by Engineering Judgment, and Demonstration Revision
60.482-1(f)	Light Liquid Service: Additional Provision
60.482-2(a)(1), 60.482-2(a)(2), 60.482-2(b)(1), 60.482-2(b)(2), 60.482-2(c)(1), 60.482-2(c)(2), 60.482-2(d), 60.482-2(d)(1) through 60.482-2(d)(4), 60.482-2(d)(5)(i), 60.482-2(d)(5)(ii), and 60.482-2(d)(6)(i) through 60.482-2(d)(6)(iii)	Light Liquid Pumps: Monthly Monitoring; Weekly Visual Inspection; Leak Detection - 2,000 ppm*; Leak Detection – Drips; Repair Requirements; Dual Mechanical Seal Exemption – Barrier Fluid Options, Barrier Fluid Heavy Liquid or Not VOC, Barrier Fluid Sensor, Weekly Visual Inspection, Daily Sensor Check or Alarm, Failure Criteria, Leak Detection, Repair Requirements *the leak detection for pumps is 2,000 ppm in lieu of 10,000 ppm per federal Consent Decree addendum,civil action No. SA07CA0683RF, dated 11/20/07
60.482-2(e)(1) through 60.482-2(e)(3)	No Detectable Emissions Pump Exemption – No Shaft, Demonstration, and Annual Testing
60.428-2(f)	Pumps with Closed Vent System Exemption
60.482-2(g), and 60.482-2(g)(1) through 60.482-2(g)(2)	Unsafe-to-Monitor Pump Exemption: Immediate Danger and Written Monitoring Plan
60.482-3(a) through 60.482-3(d), 60.482-3(e)(1), 60.482-3(e)(2), 60.482-3(f), 60.482-3(g)(1) and 60.482-3(g)(2)	Compressor Seal System: Design and Operation, Heavy Liquid Service or Non-VOC Barrier Fluid, Sensor, Daily Sensor Check or Audible Alarm, Failure Criteria,

	Leak Detection, Repair Requirements
60.482-3(h)	Compressor with Closed Vent System Exemption
60.482-3(i), 60.482-3(i)(1) and 60.482-3(i)(2)	No Detectable Emissions Compressor Exemption: Demonstration and Annual Testing
60.482-3(j)	Reciprocating Compressor Exemption
60.482-4(a), 60.482-4(b)(1), 60.482-4(b)(2), 60.482-4(c), 60.482-4(d)(1) and 60.482-4(d)(2)	Gas/Vapor Pressure Relief Device No Detectable Emissions (NDE); Gas/Vapor Pressure Release Return to NDE; Gas/Vapor Pressure Release Monitor Within 5 Days; Gas/Vapor Pressure Relief Device Routed to Process, Fuel Gas, or Closed Vent/Control Device Exemption; Gas/Vapor Pressure Relief Device Rupture Disk Exemption; and Gas/Vapor Pressure Relief Device Rupture Disk Replacement
60.482-5(a) through 60.482-5(c)	Sampling Connection System Design and Operation, In Situ Sampling Systems and Sampling Systems Without Purges Exemption
60.482-6(a)(1), 60.482-6(a)(2), and 60.482-6(b) through 60.482-6(e)	Open Ended Valves or Lines: Equipment, Cap Operation, Valve Operation, Double Block and Bleed Operation, Emergency Shutdown Exemption, and Polymerization and Safety Hazard Exemption
60.482-7(a) through 60.482-7(c), 60.482-7(d)(1), 60.482-7(d)(2), 60.482-7(e), 60.482-7(f)(1) through 60.482-7(f)(3), 60.482-7(g)(1), 60.482-7(g)(2), and 60.482-7(h)(1) through 60.482-7(h)(3)	Gas/Vapor and Light Liquid Valves: Monthly Monitoring; Leak Definition – 500 ppm*; Quarterly Monitoring Option; Repair Within 15 Days; First Attempt at Repair Including Best Practices; No Detectable Emissions (NDE) Exemption/No External Actuation; NDE Definition; Annual Testing; Unsafe to Monitor Exemption – Immediate Danger and Written Monitoring Plan; Difficult to Monitor Exemption – Demonstration, Process Unit Conditions and Written Plan *the leak definition for valves is 500 ppm in lieu of 10,000 ppm per federal Consent

	Decree addendum,civil action No. SA07CA0683RF, dated 11/20/07
60.482-8(a), 60.482-8(b), 60.482-8(c)(1), 60.482-8(c)(2) and 60.482-8(d)	Heavy Liquid Pumps and Valves, Liquid Pressure Relief Devices and Connectors: Potential Leak, Leak Definition, Repair Within 15 Days, First Attempt at Repair Including Best Practices
60.482-9(a), 60.482-9(b), 60.482-9(c)(1), 60.482-9(c)(2), 60.482-9(d)(1), 60.482-9(d)(2) and 60.482-9(e)	Delay of Repair: Technical Infeasibility, Valves not in VOC Service, Valves Emissions Demonstration, Valves Collect Purged Material, Pumps Dual Mechanical Seal Required, Pumps Repair Within 6 Months
60.482-10(a) through 60.482-10(e), 60.482-10(f)(1)(i), 60.482-10(f)(1)(ii), 60.482-10(f)(2), 60.482-10(g), 60.482-10(g)(1), 60.482-10(g)(2), 60.482-10(h), 60.482-10(i), 60.482-10(j)(1), 60.482-10(j)(2), 60.482-10(k)(1) through 60.482-10(k)(3), 60.482-10(l) through 60.482-10(n)	Closed Vent and Control Device Systems: Vapor Recovery; Enclosed Combustion Devices; Flares; Monitoring; Hard Piping Initial Monitoring; Hard Piping Annual Inspection; Ductwork Annual Monitoring; Repair Leaks as soon as Practical; First Attempt at Repair Within 5 Days; Repair Completion Within 15 Days; Delay of Repair; Vacuum Exemption, Unsafe to Inspect Exemption - Imminent or Potential Danger and Written Inspection Plan; Difficult to Inspect Exemption - Determination, Process Unit Criteria and Written Inspection Plan; Recordkeeping; Operation Requirement; Surge Control Vessels and Bottoms Receivers in Benzene Service
60.483-1(a), 60.483-1(b)(1) through 60.483-1(b)(3), 60.483-1(c)(1) through 60.483-1(c)(3) and 60.483-1(d)	Allowable Percentage of Valves Leaking: Notification, Performance Test Procedures, Repair, Performance Test Leak Definition, Performance Test Leak Percentage, 2% Leak Percentage Limit for Affected Facility
60.483-2(a)(1), 60.483-2(a)(2), 60.483-2(b)(1) through 60.483-2(b)(6)	Skip Period Valves: Notification, Initial Compliance, Semiannual Monitoring, Annual Monitoring, Procedure for Greater Than 2% Leak Rate, Percent Leaking Calculation, Recordkeeping
60.484(a) through 60.484(f)	Equivalence of Means of Emission Limitation: Determination – Equipment,

	Design and Operation; Work Practices; Unique Demonstration Approach; Notice in Federal Register by Administrator; Procedure for VOC Equipment Leak Control Manufacturers
60.485(a) through 60.485(g)	Performance Tests Required by 40 CFR 60.8, Compliance Determination with 60.482 through 60.484, Compliance Determination with No Detectable Emission Standards, Test Each Piece of Equipment Unless Process Unit is not in VOC Service, Demonstration of Light Liquid Service, Representative Samples, Flare Compliance Determination
60.486(a), 60.486(b)(1) through 60.486(b)(3), 60.486(c) through 60.486(k)	Recordkeeping; Leak Detected – Tag and Tag Removal; Leak Detected – Log; Closed Vent/Control Device Design Records; Equipment Identification Records; Difficult and Unsafe to Monitor Records; Skip Period Records; Leak Sensor Criteria Records; Exemption Records; Equipment Not in VOC Service Records; 40 CFR Part 60, Subpart A Provisions
60.487(a) through 60.487(f)	Semi-annual Reporting: Initial and Subsequent Content Requirements; Notification – Alternative Valve Standard; Performance Test Reporting; Requirements of 60.487(a) through 60.487(c) Remain in Force

[OAC rule 3745-21-09(T)(4)(a) and 40 CFR, Part 60, Subpart VV]

3. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart J, Standards of Performance for Petroleum Refineries: B002, B003, B004, B005, B007, B008, B009, B016, B022, B024, B026, B027, B028, B029, B033, B034, P006, P040 and P041. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart J. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart J, and Subpart A.

[40 CFR, Part 60, Subpart J]

4. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart Ja, Standards of Performance for Petroleum Refineriesfor Which Construction, Reconstruction, or Modification Commenced After May 14, 2007: B001, B006, B035 and P007. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart Ja. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart Ja, and Subpart A.

   [40 CFR, Part 60, Subpart Ja]

5. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart Db, Standards of Performance for Industrial/Commercial/Institutional Steam Generating Units: B026, B032 and B035. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart Db. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart Db, and Subpart A.

   [40 CFR, Part 60, Subpart Db]

6. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart Ka, Standards of Performance for Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after May 18, 1978 and Prior to July 23, 1984: T055, T064, T071, T072, T073, T074, T075, T076, T083, T084, T085, T086, T087, T088, T213, T214 and T217. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart Ka. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart Ka, and Subpart A.

   [40 CFR, Part 60, Subpart Ka]

7. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984: T009, T045, T071, T072, T073, T074, T075, T078, T081, T121, T161, T190, T191, T192, T196, T197, T198, T201, T212, T220, T222, T223, T231, T236, T237, T238, T239, T268, T269, T270, T271, T272, T273, T274T275, T276, T277, T278 and T279. The complete NSPS requirements, including the

NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart Kb. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart Kb, and Subpart A.

[40 CFR, Part 60, Subpart Kb]

8. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry for which Construction, Reconstruction or Modification Commenced after January 5, 1981 and on or before November 7, 2006: B029, B033, P018, P028, P040 and P041. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart VV. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart VV, and Subpart A.

   [40 CFR, Part 60, Subpart VV]

9. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart GGG, Standards of Performance for Equipment Leaks in Petroleum Refineries for which Construction, Reconstruction or Modification Commenced after January 4, 1983 and on or before November 7, 2006: B029, B033, P018, P028, P040 and P041. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart GGG. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart GGG, and Subpart A.

   [40 CFR, Part 60, Subpart GGG]

10. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart GGGa, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006:J010, P803. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart GGGa. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart GGGa, and Subpart A.

[40 CFR, Part 60, Subpart GGGa]

11. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems: P025, T071, T072, T073, T074, T075, T275, T276, T277, T278 and T279. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart QQQ. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart QQQ, and Subpart A.

    [40 CFR, Part 60, Subpart QQQ]

12. The facility is subject to 40 CFR, Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart IIII. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions).

    Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart IIII, and Subpart A. The permittee shall submit a permit to install application if any emissions unit(s) become affected sources under 40 CFR Part 60, Subpart IIII.

    [40 CFR, Part 60, Subpart IIII]

13. The facility is subject to 40 CFR, Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart JJJJ. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions).

    Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart JJJJ, and Subpart A. The permittee shall submit a permit to install application if any emissions unit(s) become affected sources under 40 CFR Part 60, Subpart JJJJ.

[40 CFR, Part 60, Subpart JJJJ]

14. The facility is subject to 40 CFR, Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart KKKK. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions).

    Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 60, Subpart KKKK, and Subpart A. The permittee shall submit a permit to install application if any emissions unit(s) become affected sources under 40 CFR Part 60, Subpart KKKK.

    [40 CFR, Part 60, Subpart KKKK]

15. The following emissions units contained in this permit are subject to 40 CFR, Part 61, Subpart J, National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene: P017 and P023. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart J. The permittee shall also comply with all applicable requirements of 40 CFR, Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 61, Subpart J, and Subpart A.

    [40 CFR, Part 61, Subpart J]

16. The following emissions units contained in this permit are subject to 40 CFR, Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources): B029, B033, P017, P023, P040 and P041. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart V. The permittee shall also comply with all applicable requirements of 40 CFR, Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 61, Subpart V, and Subpart A.

    [40 CFR, Part 61, Subpart V]

17. The following emissions units contained in this permit are subject to 40 CFR, Part 61, Subpart Y, National Emission Standard for Benzene Emissions from Benzene Storage Vessels: T084, T085, T086 and T087. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart Y. The permittee shall also comply with all applicable requirements of 40 CFR, Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 61, Subpart Y, and Subpart A.

[40 CFR, Part 61, Subpart Y]

18. The following emissions unit contained in this permit is subject to 40 CFR, Part 61, Subpart BB, National Emission Standard for Benzene Emissions from Benzene Transfer Operations: P023. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart BB. The permittee shall also comply with all applicable requirements of 40 CFR, Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 61, Subpart BB, and Subpart A.

    [40 CFR, Part 61, Subpart BB]

19. The following emissions units contained in this permit are subject to 40 CFR, Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations: B029, B033, J010, P025, P040, P041, T009, T010, T011, T071, T072, T073, T074, T075, T078, T090, T091, T191, T192, T202, T203, T204, T212, T217 and T220. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart FF. The permittee shall also comply with all applicable requirements of 40 CFR, Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 61, Subpart FF, and Subpart A.

    [40 CFR, Part 61, Subpart FF]

20. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater:T009, T023, T031, T032, T035, T041, T046, T084, T085, T086, T087 and T088. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart G. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart G, and Subpart A.

    [40 CFR, Part 63, Subpart G]

21. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries: B029, B033, J002, J007, P006, P007, P014, P027, P033, P034, P037, P038, P040, P041, T009, T010, T011, T017, T018, T019, T020, T021, T023, T025, T026, T027, T028, T029, T030, T031, T032, T033, T034, T035, T036, T037, T038, T039, T040, T041, T042, T043, T044, T045, T046, T049, T053, T054, T055, T057, T058, T059, T060, T061, T064, T065, T066, T067, T068, T071, T072, T073, T074, T075, T076, T078, , T083, T084, T085, T086, T087, T088, T090, T091, T093, T121, T123, T161, T164, T177, T178, T190, T191, T192, T195, T196, T197, T198, T200, T201, T202, T203, T204, T205, T206, T207, T208, T212, T213, T214, T217, T220, T222, T223, T231, T236, T237, T238, T239, T268, T269, T270, T271, T272, T273, T274, T275, T276, T277, T278 and T279. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart CC. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart CC, and Subpart A.

    [40 CFR, Part 63, Subpart CC]

22. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-site Waste and Recovery Operations: P025, T010, T011, T078, T090, T091, T191, T192, T202, T203, T204, T212, T217 and T220. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart DD. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart DD, and Subpart A.

    [40 CFR, Part 63, Subpart DD]

23. The following emissions unit contained in this permit is subject to 40 CFR, Part 63, Subpart SS, National Emission Standard for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process: P023. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart SS. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart SS, and Subpart A.

    [40 CFR, Part 63, Subpart SS]

24. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart UUU, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries – Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Units: P007, P010, P030, P036 and P040. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart UUU. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart UUU, and Subpart A.

    [40 CFR, Part 63, Subpart UUU]

25. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart EEEE, National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-gasoline): P017 and P023. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart EEEE. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart EEEE, and Subpart A.

    [40 CFR, Part 63, Subpart EEEE]

26. The facility is subject to 40 CFR, Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart ZZZZ. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions).

    Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart ZZZZ, and Subpart A. The permittee shall submit a permit to install application if any emissions unit(s) become affected sources under 40 CFR Part 63, Subpart ZZZZ.

    [40 CFR, Part 63, Subpart ZZZZ]

27. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters: B001, B002, B003, B004, B006, B007, B008, B016, B022, B024, B026, B027, B028, B029, B032, B033, B034 and B035. The complete NESHAPS requirements, including the NESHAPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart DDDDD. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart DDDDD, and Subpart A.

[40 CFR, Part 63, Subpart DDDDD]

28. The site remediation activities at the referenced facility are exempt from the requirements of 40 CFR, Part 63, Subpart GGGGG (site remediation MACT) pursuant to 40 CFR 63.788(b)(3). The remediation activities are being conducted pursuant to the Resource Conservation and Recovery Act (RCRA) under U.S. EPA Identification Number OHD 005 051 826.

29. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit to install or in the SIP-approved versions of OAC Chapters 3745-17 and 3745-21:

a) G001 – refinery gasoline/distillate dispensing facility for plant vehicles

(PR 164966/164967/164968/164969);

b) P035 – two diesel-operated firewater pumps (permit by rule #PBR07426, effective 11/24/09);

c) T183 – organic liquids storage tank #100272 – 2,000 gallons capacity;

d) T224 – methanol storage tank (PR 164405) – 16,100 gallons capacity;

e) T225 – methanol storage tank (PR 164417) – 1,500 gallons capacity;

f) T226 – methanol storage tank (PR 164418) – 1,500 gallons capacity;

g) T227 – methanol storage tank (PR 100384) – 1,100 gallons capacity;

h) T228 - methanol storage tank (PR 100341) – 1,175 gallons capacity;

i) T229 – methanol storage tank (PR 164419) – 1,000 gallons capacity;

j) T230 – methanol storage tank (PR 164215) – 20,000 gallons capacity;

k) T275 – above ground fixed roof flow equalization storage tank A No. 100152 – 10,150 gallons capacity (PTI# P0109018);

l) T276 – above ground fixed roof flow equalization storage tank B No. 100153 – 10,150 gallons capacity(PTI# P0109018);

m) T277 – above ground fixed roof flow equalization storage tank C No. 100154 – 10,150 gallons capacity (PTI# P0109018);

n) T278 – above ground fixed roof west skimmed oil transfer storage tank No. 100155 – 11,092 gallons capacity (PTI# P0109018); and

o) T279 – above ground fixed roof east skimmed oil transfer storage tank No. 100156 – 11,092 gallons capacity (PTI# P0109018).

[OAC rule 3745-77-07(A)(13)]

30. The following insignificant emissions units are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

a) F003 – coke storage pile;

b) F004 – spent catalyst storage pile;

c) L001 – solvent degreasers;

d) P046 – two diesel-operated light trees;

e) T082 – organic liquids storage tank (PR 100161) – 7,168 gallons capacity;

f) T193 – organic liquids storage tank (PR 100471) – 10,000 gallons capacity;

g) T240 – storage tanks for inorganic liquids (no company tank identification number) – various capacities;

h) T241 – organic liquids storage tanks (no company tank identification number) – each has a capacity less than 10,000 gallons;

i) T242 – acid storage tanks (no company tank identification number) – each has a capacity less than 7,500 gallons;

j) T243 – advanced wastewater treatment plant aeration tanks A and B (no company tank identification number) – each has a capacity of 6,600,000 gallons;

k) T244 – Baker storage tank #511 – 4,000 gallons capacity;

l) T245 – caustic spent degasser storage tank (PR 164581) – 11,900 gallons capacity;

m) T246 – SWS feed water storage tank (PR 164118) – 4,512 gallons capacity;

n) T247 – pour point depressant storage tank (PR 104220) – 27,918 gallons capacity;

o) T248 – pour point depressant drum (PR 164656) – 35,665 gallons capacity;

p) T249 – chloride storage drum (PR 164383) – 4,512 gallons capacity;

q) T250 – emulsion breaking storage tank (PR 100067) – 6,000 gallons capacity;

r) T251 – organic liquids storage tank (tank #N85187) – 2,000 gallons capacity;

s) T252 – fuel corrosion inhibitor storage tank (tank #336) – 8,650 gallons capacity;

t) T253 – organic liquids storage tank (PR 164534) – 6,400 gallons capacity;

u) T254 – organic liquids storage tank (PR 194044) – 8,500 gallons capacity;

v) T255 – organic liquids storage tank (PR 164040) – 5,000 gallons capacity;

w) T256 – Nalco 5551 storage tank (PR 340) – 8,481 gallons capacity;

x) T257 – red dye storage tank (PR 43) – 7,520 gallons capacity;

y) T258 – lube oil storage tank (PR 164408) – 17,061 gallons capacity;

z) T259 – foul water storage tank (PR 164116) – 5,000 gallons capacity;

aa) T260 – DMDS drum (PR 164042) – 4,160 gallons capacity;

bb) T261 – chemical feed drum (PR 164081) – 2,203 gallons capacity;

cc) T262 - hydraulic oil storage tank (PR4518) – 2,539 gallons capacity;

dd) T263 – hydraulic oil storage tank (PR 4507) – 1,128 gallons capacity;

ee) T264 - hydraulic oil storage tank (PR4508) – 1,129 gallons capacity;

ff) T265 – Nalco bulk storage tank (C 13331) – 6,400 gallons capacity;

gg) T266 – CATFLOC/CFL storage tank (C 13332) – 2,000 gallons capacity; and

hh) T267 – amine storage tank (PR 164110) – 14,700 gallons capacity.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Process Heaters Group #1: B001, B003, B007

EU ID	Operations, Property and/or Equipment Description
B001	Refinery fuel gas or natural gas fired Vacuum unit II heater with ultra low NOx burners, 102.3 million Btu/hr maximum heat input (PR 175151)
B003	Refinery Fuel Gas or natural gas fired ISO I & II Heaters, 74.7 million Btu/hr maximum heat input (PR 175152/PR 175153)
B007	Refinery Fuel Gas or natural gas fired Reformer Regenerator Heater, 85.3 million Btu/hr maximum heat input (PR 175162)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-18-08(C)(1)	0.15 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)d.]
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)a., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
e.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		40 CFR 63.1 - 63.15 apply.
f.	40 CFR, Part 60, Subpart J	See b)(2)b. and b)(2)c.
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
h.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	B001 – 0.133 lb nitrogen oxides (NOx)/million Btu of actual heat input based upon a 3-hour block average [See b)(2)f.] B001 – 0.03 lb of NOx/million Btu of actual heat input, based upon a 365-day rolling average [See b)(2)f.] B003 – 0.009 lb NOx/million Btu of actual heat input based upon a 365-day rolling block average B007 - 0.116 lb NOx/million Btu of actual heat input based upon a 3-hour block average See b)(2)e.

(2) Additional Terms and Conditions

a. These emissions unit are subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

b. 40 CFR, Part 60 - Subpart J is an applicable rule for these emissions units. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

c. The permittee shall not burn any refinery fuel gas in these emissions units that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume of H2S). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

d. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(5) is less stringent than the hydrogen sulfide (H2S) concentration limit of 230 mg/dscm

(0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) established by Subpart J, 40 CFR 60.104(a)(1). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

e. The NOx emissions limitations are established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07. Pursuant to paragraph No. 17 of the consent decree addendum, emissions units B003 is one of the four emissions units (B002, B003, B006 and B008) chosen by the company for installation of NOx control equipment. Selective catalytic reduction was installed on B002, B003 and B006on December 17, 2011 to meet this requirement.

As required by the consent decree addendum, the NOx emissions limitations are established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

f. **This permit term is applicable only to emissions unit B001**: The Vac II heater (B001) will be reconstructed as part of the Lima Refinery's Crude Oil Flexibility (COF) project. Lima Refining Company is requesting that the limit proposed (0.133 lb NOx/million Btu of actual heat input based upon a 3-hour block average) in the administrative permit modification (PTI No. P0116161) apply to B001 only until it is reconstructed. After B001 is reconstructed with ultra-low NOx burners, the lower BACT limit of 0.03 lb of NOx/million Btu of actual heat input, based upon a 365-day rolling average established in the issued COF PTI No. P0114527 will replace the limit in this permit to install.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1)b.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)c. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment at a minimum frequency of once every three years. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be

made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1);40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record H2S from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1);40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 121 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1);40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(6) **This permit term is applicable only to emissions unit B003:** The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from these emissions units, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(6)g. and d)(6)h.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(7) **This permit term is applicable only to emissions unit B003:** The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(8) **This permit term is applicable only to emissions unit B003:** The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(9) **This permit term is applicable only to emissions unit B003:** The permittee shall install, operate and maintain equipment to continuously monitor and record oxygen (O2) emitted from these emissions units, in units of percent O2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring system including, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(9)f. and d)(9)g.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(10) **This permit term is applicable only to emissions unit B003:** The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(11) **This permit term is applicable only to emissions unit B003:** The permittee shall maintain a written quality assurance/quality control plan for the continuous O2 monitoring system designed to ensure continuous valid and representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the O2 CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the O2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(12) **This permit term is applicable only to emissions unit B003:** Pursuant to the approval letter from U.S. EPA dated July 28, 2010, the permittee shall install and operate monitoring equipment in the selective catalytic reduction bypass stack to continuously monitor the temperature and draft pressure in the selective catalytic reduction bypass stack, subject to the following condition:

a. The permittee must measure, report and comply with the temperature and pressure readings obtained in the bypass stack during normal operation as measured when stack testing the main stack to demonstrate initial compliance with applicable limits (i.e. – ambient temperature and a slight negative pressure in the bypass stack when the selective catalytic reduction induced draft fan is

operating). The temperature and pressure readings are hereby incorporated into this permit as a means to assure compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1);40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); and PTI No. P0116161]

(5) **This permit term is applicable only to emissions unit B003:** The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any NOx CEMS downtime while the

emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(6) **This permit term is applicable only to emissions unit B003:** The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any O2 CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(7) **This permit term is applicable only to emissions unit B003:** The permittee shall include in its quarterly excess emission reports each period of time when the selective catalytic reduction bypass dampers are not 100 percent closed, the reason why they were not 100 percent closed and the actions taken to prevent such occurrence from happening again.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

0.020 lb of PE per million Btu of actual heat input

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures

specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

b. Emission Limitation:

0.15 lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section 1.b)(2)c., compliance with the SO2 limitation will be assumed. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4, and 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) through d)(5) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

e. Emission Limitations:

B001 - 0.133 lb NOx/million Btu of actual heat input based upon a 3-hour block average

B001 - 0.03 lb of NOx/million Btu of actual heat input, based upon a 365-day rolling average

B007 - 0.116 lb NOx/million Btu of actual heat input based upon a 3-hour block average

Applicable Compliance Method:

Compliance with the lb of NOx per million Btu emissions limitations have been demonstrated by past stack testing.

If required, the permittee shall determine compliance with the NOx emissions limitations by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f. Emission Limitations:

B003 – 0.009 lb NOx/million Btu of actual heat input based upon a 365-day block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(12) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

2. B002, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired ISO Stabilizer/Splitter Heaters, 170.3 million Btu/hr maximum heat input (PR 170003/PR 175155) with selective catalytic reduction

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-18-08(C)(2)	1.0 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)h.]
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0116163, modification issued 5/20/14)	<u>Emissions from fugitive equipment leaks:</u> 0.3925 ton of volatile organic compounds (VOC)/month, averaged over a rolling, 12-month period [See b)(2)c.]
e.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)d.
f.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)e., c)(2) through c)(5) 63.7500(a) Table 3 requirements
g.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
h.	40 CFR, Part 60, Subpart J	See b)(2)f. and b)(2)g.
i.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
j.	OAC rule 3745-31-05(D) (PTI No. P0116163, modification issued 5/20/14)	0.009 lb nitrogen oxides (NOx)/million Btu of actual heat input based upon a rolling, 365-day block average See b)(2)i.

(2) Additional Terms and Conditions

a. PTI No. P0106610 was issued to add 40 CFR, Part 60, Subpart J as an applicable rule for this emissions unit. The permittee is required to comply with this new sourceperformance standard for fuel combustion by 12/31/09, per paragraph No. 118 and Appendix O of thefederal consent decree addendum, civil action No. SA07CA0683RF dated 11/20/07.

PTI No. P0106610 includedrevisions to relative accuracy test audit permit terms for the hydrogen sulfide (H2S) continuous emission monitor (CEM) to the frequency defined (once every three years) in paragraph No. 121 of the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07; and deletion of refinery fuel gas sampling requirements, due to use of the H2S CEM.

PTI No.P0112538 includes all previously established emissions limitations, and permitterms and conditions from PTI No. P0106610 which was issued final on 8/2/10.

b. The ISO Stabilizer/Splitter Heaters were not modified with issuance of PTI No. P0116163. The only change to equipment previously involved modifying the ISO Recycle Splitter Tower kerosene rundown line to increase production throughput of the kerosene stream by 20,000 barrels per day, and simultaneously reducing naphtha production. New trays will be installed on the ISO Splitter Kerosene Stripper Tower (part of the isocracker process unit), along with a new air cooler and spare pumps.

c. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-

05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/controls measures no longer apply.

d. OAC rule 3745-31-05(A)(3)(a)(ii) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of VOC from this air contaminant source since the uncontrolled potential to emit for VOC are less than 10 tons per year.

e. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., it is not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

f. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

g. In accordance with Federal Consent Decree No. SA07CA0683RF, dated 11/20/07, the permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume).

This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

h. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(2) is less stringent than the hydrogen sulfide (H2S) concentration limit of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) established by Subpart J, 40 CFR 60.104(a)(1). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

i. The NOx emissions limitation is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07. Pursuant to paragraph No. 17 of the consent decree addendum, this emissions unit is one of four emissions units (B002, B003, B006 and B008) chosen by the company for installation of NOx control equipment. Selective catalytic reduction was installed on December 17, 2011 to meet this requirement.

As required by the consent decree addendum, the NOx emissions limitation is established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

This permit establishes the following federally enforceable emissions limitation for the purpose of representing the potential to emit of this emissions unit:

i. 0.009 lb NOx/million Btu of actual heat input based upon a rolling, 365-day block average.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116163]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116163]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116163]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116163]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116163]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1)and PTI No. P0116163]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)c. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment at a minimum frequency of once every three years. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116163]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116163]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record H2S from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116163]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 121 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116163]

(6) The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(6)g. and d)(6)h.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(8) The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(9) The permittee shall install, operate and maintain equipment to continuously monitor and record oxygen (O2) emitted from this emissions unit, in units of percent O2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring system including, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(9)f. and d)(9)g.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(11) The permittee shall maintain a written quality assurance/quality control plan for the continuous O2 monitoring system designed to ensure continuous valid and representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the O2 CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the O2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(12) Pursuant to the approval letter from U.S. EPA dated July 28, 2010, the permittee shall install and operate monitoring equipment in the selective catalytic reduction bypass stack to continuously monitor the temperature and draft pressure in the selective catalytic reduction bypass stack, subject to the following condition:

a. The permittee must measure, report and comply with the temperature and pressure readings obtained in the bypass stack during normal operation as measured when stack testing the main stack to demonstrate initial compliance with applicable limits (i.e. – ambient temperature and a slight negative pressure in the bypass stack when the selective catalytic reduction induced draft fan is operating). The temperature and pressure readings are hereby incorporated into this permit as a means to assure compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(13) The permittee shall include the ISO Recycle Splitter Tower process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-wide Terms and Conditions of the Title V permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(14) The permittee shall maintain monthly records of the fugitive VOC emissions from this emissions unit; and at the end of 12 months of operation, the rolling 12-month summation of fugitive VOC emissions and the average calculated over each rolling 12-month period.

Note: The above records shall be determined in accordance with the emissions calculations presented to the Ohio EPA in the permit application submitted by the permittee.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116163]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116163]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116163]

(5) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any NOx CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(6) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any O2 CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(7) The permittee shall include in its quarterly excess emission reports each period of time when the selective catalytic reduction bypass dampers are not 100 percent closed, the reason why they were not 100 percent closed and the actions taken to prevent such occurrence from happening again.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(8) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

(9) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.020 lb of PE per million Btu of actual heat input

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then

dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1)and PTI No.P0116163]

b. Emission Limitation:

1.0lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent that firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section c)(1), compliance with the SO2 limitation will be assumed.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and P0116163]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No.P0116163]

d. Emission Limitation:

0.014 lb NOx/million Btu of actual heat input based upon a rolling, 365-day block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(12) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116163]

e. Emission Limitation:

0.3925 ton of VOC/month, averaged over a rolling, 12-month period from fugitive equipment leaks

Applicable Compliance Method:

The emission limitation is associated with the modification to the Isocracker Recycle Splitter tower section to increase kerosene production to 20,000 barrels per day, based on the maximum expected number of new leak detection and repair (LDAR) components and calculations provided by the permittee using U.S. EPA Protocol Document for Equipment Leaks, EPA-453/R-95-017, November 1995.

Compliance with the ton(s) of VOC per month emission limitation, averaged over a 12-month rolling period, shall be determined in accordance with the record keeping requirements established in d)(14) above.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

f. Emission Limitation:

0.009 lb NOx/million Btu of actual heat input based upon a rolling, 365-day block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(12) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116163]

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) through d)(5) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116163]

g) Miscellaneous Requirements

(1) None.

3. B004, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired Crude II Heater with Low Nitrogen Oxide Burners, 615.4 million Btu/hr, maximum heat input (PR 175150)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-18-08(C)(2)	1.0 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)e.]
d.	OAC rule 3745-31-05(A)(3) (PTI No. P0116161, modification issued 5/20/14)	24.62 lbs of carbon monoxide (CO)/hr, 107.82 tons of CO/yr See b)(2)a.
e.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	0.035 lb of nitrogen oxides (NOx) per million Btu of actual heat input, based upon a 365-day rolling block average See b)(2)f.
f.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this	See b)(2)b., and c)(2) through c)(5) 63.7500(a) Table 3 requirements

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	section.]	
g.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
h.	40 CFR, Part 60, Subpart J	See b)(2)c. and b)(2)d.
i.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19

(2) Additional Terms and Conditions

a. In a previously issued PTI No. P0107906, the permittee requested federally enforceable limitations for NOx of 0.10 lb per million Btu of actual heat input, 269.55 tons NOx/yr, 24.62 lbs CO/hr, and 107.82 tons CO/yr. The federally enforceable limitations were established in accordance with OAC rule 3745-31-05(A)(3). The permittee originally requested federally enforceable NOx and CO emission limitations for purposes of avoiding Prevention of Significant Deterioration (PSD) permitting by emissions netting, as established in PTI No. 03-13794, which was superseded by PTI No. P0107906. PTI No. P0109701 established a new NOx emission limitation of 0.035 lb per million Btu of actual heat input, consistent with the requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

b. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

c. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

d. The permittee shall not burn any refinery fuel gas in this emissions unit that contains H2S in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

e. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(5) is less stringent than the hydrogen sulfide (H2S) concentration limit of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume)

established by Subpart J, 40 CFR 60.104(a)(1). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

f. The NOx emissions limitation is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF which became effective on 11/20/07.

As required by the consent decree addendum, the NOx emissions limitations are established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

This permit establishes the following federally enforceable emission limitations for the purpose of representing the potentials to emit of this emissions unit:

i. 0.035 lb of NOx per million Btu of actual heat input, based upon a 365-day rolling block average.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1).

[OAC rule 3745-77-07(A)(1) and PTI No.P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No.P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No.P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No.P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR,

Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No.P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burnedin this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)f. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment at a minimum frequency of once every three years. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record H2S from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 121 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(6) Pursuant to the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee shall by December 31, 2013 install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(6)g. and d)(6)h.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(8) The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(9) Pursuant to the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee shall by December 31, 2013 install, operate and maintain equipment to continuously monitor and record oxygen (O2) emitted from this emissions unit, in units of percent O2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring system including, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(9)f. and d)(9)g.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(11) The permittee shall maintain a written quality assurance/quality control plan for the continuous O2 monitoring system designed to ensure continuous valid and representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the O2 CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the O2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by

January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times.

These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(5) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any NOx CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(6) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any O2 CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

0.020 lb of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by dividing the appropriate particulate emission factor of 1.9 lbs per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), by the heat content of 853 Btu per standard cubic foot for the refinery fuel gas fired in this emissions unit.

If natural gas is solely being fired, the permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

b. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

c. Emission Limitation:

1.0 lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section c)(1), compliance with the SO2 limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

d. Emission Limitation:

24.62 lbs of CO/hr, 107.82 tons of CO/yr

Applicable Compliance Method:

Compliance with the hourly mass emission limitation has been demonstrated by past performance testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

e. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) through d)(5) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

f. Emission Limitation:

0.035 lb of NOx per million Btu of actual heat input, based upon a 365-day rolling block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(11) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

g) Miscellaneous Requirements

(1) None.

4. B006, UltraFormer Process Preheater,, Reheater 1, Reheater 2, Reheater 3 (PR 175156-175159)

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or natural gas fired 822 mmBtu/hr U/F PRE, 1, 2, & 3 Heater (PR 175156-175159)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-18-08(C)(1)	0.15 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)e.]
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)a., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
e.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
f.	40 CFR, Part 60, Subpart J & Ja	See b)(2)b. through b)(2)d.
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
h.	OAC rule 3745-31-05(D)	0.008 lb NOx/million Btu of actual heat

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(PTI No. P0118574, modification issued 5/14/15)	input based upon a 365-day rolling block average See b)(2)d.

(2) Additional Terms and Conditions

a. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., it is not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

b. This permit action addresses a project which will allow for the replacement of radiant furnace modules, tubes, and headers. The replacement activities result in “reconstruction” and as such the process heaters become affected facilities (fuel gas combustion devices) applicable to 40 CFR, Part 60 – Subpart Ja.

40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, Per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

c. The requirements of 40 CFR, Part 60 - Subpart Ja are equivalent to and/or more stringent than the requirements of 40 CFR, Part 60 - Subpart J. Therefore, the requirements of 40 CFR, Part 60, Subpart J will not be listed in this permit modification.This emissions unit is an affected fuel gas combustion device, pursuant to the definition in 40 CFR 60.101a and is therefore subject to the emissions limitations in 40 CFR 60.102a. Pursuant to 40 CFR 60.102a(g)(1)(ii), the permittee has elected to comply with the SO2 emissions limitations in this rule by monitoring the refinery fuel gas quality with a hydrogen sulfide (H2S) continuous emissions monitor.

Therefore, the permittee shall not burn in this emissions unit any refinery fuel gas that contains H2S in excess of 162 parts per million by volume (ppmv) determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis. This H2S standard in 40 CFR 60.102a(g)(1)(ii) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101a.

d. Since this emissions unit has a rated capacity of greater than 40 million Btu per hour, it is subject to the NOx emission limitation in 40 CFR 60.102a(g)(2). The 0.040 lb NOx/million Btu HHV basis is determined daily on a 30-day rolling average basis. It is also subject to the limitation of 0.008 lb NOx/million Btu of

actual heat input based on a 365-day rolling block average established pursuant to OAC rule 3745-31-05(D).

e. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(5) is less stringent than the hydrogen sulfide (H2S) concentration 162 ppmv established by Subpart Ja, 40 CFR 60.102a(g)(1)(ii). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

f. The NOx emissions limitation is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07. Pursuant to paragraph No. 17 of the consent decree addendum, emissions unit B006 is one of the four emissions units (B002, B003, B006 and B008) chosen by the company for installation of NOx control equipment. Selective catalytic reduction was installed on B002, B003 and B006on December 17, 2011 to meet this requirement.

As required by the consent decree addendum, the NOx emissions limitation is established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

g. The purpose of this permit is to address the emissions unit's reconstruction under applicable rules promulgated by the administrator under Section 112 of the Clean Air Act pursuant to OAC rule 3745-31-01(SSS)(1)(a)(iv) [See g)(1) below].

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1)f.

[OAC rule 3745-77-07(A)(1) and PTI No. P0118574]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0118574]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0118574]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0118574]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0118574]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(2) In order to demonstrate compliance with the emission limitation of 162 ppmv of H2S in the refinery fuel gas [and if applicable, combined fuel firing as noted in b)(2)c. above], the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.107a, as follows:

a. The span value for this instrument is 300 ppmv of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment per d)(5) below using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record H2S from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 121 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(6) The permittee shall conduct a root cause analysis and a corrective action analysis for a fuel gas combustion device, each exceedance of an applicable short-term emissions limit in §60.102a(g)(1) if the SO2 discharge to the atmosphere is 227 kg (500 lb) greater than the amount that would have been emitted if the emissions limits had been met during one or more consecutive periods of excess emissions or any 24-hour period, whichever is shorter.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(7) A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting one of the conditions specified in d)(6).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(8) The permittee shall implement the corrective action(s) identified in the corrective action analysis conducted pursuant to 40 CFR 60.103a(d) in accordance with the applicable requirements in 40 CFR 60.103a paragraphs (e)(1) through (3).

a. All corrective action(s) must be implemented within 45 days of the discharge for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If the permittee concludes that corrective action should not be conducted, the permittee shall record and explain the basis for that conclusion no later than 45 days following the discharge as specified in 40 CFR 60.108a(c)(6)(ix);

b. For corrective actions that cannot be fully implemented within 45 days following the discharge for which the root cause and corrective action analyses were required, the permittee shall develop an implementation schedule to complete the corrective action(s) as soon as practicable; and

c. No later than 45 days following the discharge for which a root cause and corrective action analyses were required, the permittee shall record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates as specified in §60.108a(c)(6)(x).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(9) The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(9)g. and d)(9)h.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(11) The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(12) The permittee shall install, operate and maintain equipment to continuously monitor and record oxygen (O2) emitted from these emissions units, in units of percent O2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring system including, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(12)f. and d)(12)g.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(13) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(14) The permittee shall maintain a written quality assurance/quality control plan for the continuous O2 monitoring system designed to ensure continuous valid and representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the O2 CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the O2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(15) Pursuant to the approval letter from U.S. EPA dated July 28, 2010, the permittee shall install and operate monitoring equipment in the selective catalytic reduction bypass stack to continuously monitor the temperature and draft pressure in the selective catalytic reduction bypass stack, subject to the following condition:

a. The permittee must measure, report and comply with the temperature and pressure readings obtained in the bypass stack during normal operation as measured when stack testing the main stack to demonstrate initial compliance with applicable limits (i.e. – ambient temperature and a slight negative pressure in the bypass stack when the selective catalytic reduction induced draft fan is operating). The temperature and pressure readings are hereby incorporated into this permit as a means to assure compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis

The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 162 ppmv during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(5) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any NOx CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(6) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any O2 CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(7) The permittee shall include in its quarterly excess emission reports each period of time when the selective catalytic reduction bypass dampers are not 100 percent closed, the reason why they were not 100 percent closed and the actions taken to prevent such occurrence from happening again.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

(8) The permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of §60.7(c) except that the report shall contain the information specified in paragraphs (d)(8)(a) through (8)(g) below.

a. The date that the exceedance occurred;

b. An explanation of the exceedance;

c. Whether the exceedance was concurrent with a startup, shutdown, or malfunction of an affected facility or control system; and

d. A description of the action taken, if any.

e. The information described in 40 CFR 60.108a(c)(6)(i) through (xi) for all discharges listed in 40 CFR 60.108a(c)(6).

f. For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

g. A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

0.020 lb of PE per million Btu of actual heat input

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

b. Emission Limitation:

0.15 lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section 1.b)(2)c., compliance with the SO2 limitation will be assumed. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4, and 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

d. Emission Limitation:

Refinery fuel gas that contains H2S in excess of 162 parts per million by volume (ppmv) determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis in the refinery fuel gas, or combined fuel stream if applicable.

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) through d)(8) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Ja; and PTI No. P0118574]

e. Emission Limitations:

0.008 lb NOx/million Btu of actual heat input based upon a 365-day block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(9) through d)(15) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118574]

g) Miscellaneous Requirements

(1) This permit action addresses a project which will allow for the replacement of radiant furnace modules, tubes, and headers. The furnace burners will be replaced decreasing the maximum heat input capacity of the burners from 843.4 million Btu/hour to 822 million Btu/hour.

a. The permittee has demonstrated that no major modification will occur under Prevention of Significant Deterioration (PSD) regulations as the “net emissions increase” was not triggered as a result of this project. This was achieved through a comparison of baseline actual emissions to potential emissions.

b. The permittee has demonstrated that the allowable emissions will not increase as a result of the reconstruction project. As such, the emission limitations will not be modified with this permitting action. Additionally, Best Available Technology is not applicable.

[PTI No. P0118574]

4. B008, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired HDS Heater, with low nitrogen oxide burners, 156.4 million Btu/hr maximum heat input (PR 175169)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-18-08(C)(1)	0.15 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)e.]
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)a., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
e.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
f.	40 CFR, Part 60, Subpart J	See b)(2)b. and b)(2)c.
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
h.	OAC rule 3745-31-05(D)	0.050 lb of nitrogen oxides (NOx) per

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(PTI No. P0116161, modification issued 5/20/14)	million Btu of actual heat input, based upon a 365-day rolling block average See b)(2)f.

(2) Additional Terms and Conditions

a. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

b. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

c. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

d. PTI No. P0106732 which was previously issued, involved installation of new continuous emission monitors (CEMS) for nitrogen oxides (NOx) and oxygen (O2) for this emissions unit, as listed in paragraph Nos. 29, 30 and 292 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

The CEMS were installed on 5/3/10 and certification testing was completed on 5/18/10, and a certification letter was issued to the permittee on 7/1/10 stating that the CEMS certification date is 5/18/10.

e. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(5) is less stringent than the hydrogen sulfide (H2S) concentration limit of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) established by Subpart J, 40 CFR 60.104(a)(1). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

f. The NOx emissions limitation is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

As required by the consent decree addendum, the NOx emissions limitations are established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)c. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment at a minimum frequency of once every three years. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 121 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(6) The permittee shall operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(6)g. and d)(6)h.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(8) The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(9) The permittee shall operate and maintain equipment to continuously monitor and record oxygen (O2) emitted from this emissions unit, in units of percent O2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring system including, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(9)f. and d)(9)g.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(11) The permittee shall maintain a written quality assurance/quality control plan for the continuous O2 monitoring system designed to ensure continuous valid and representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the O2 CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the O2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any NOx CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(6) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any O2 CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

0.020 lb of PE per million Btu of actual heat input

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4, and 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

b. <u>Emission Limitation</u>:

0.15 lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section 1.b)(2)c., compliance with the SO2 limitation will be assumed.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4, and 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above 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).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) through d)(5) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

e. Emission Limitation:

0.050 lb of NOx per million Btu of actual heat input, based upon a 365-day rolling block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(11) for this emissions unit. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

5. B016, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired FCC Furnace, 76.8 million Btu/hr maximumheat input (PR 175025)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions (PE) per million Btu of actual heat input
b.	OAC rule 3745-18-08(C)(1)	0.15 lb of sulfur dioxide (SO2) per million Btu of actual heat input [See b)(2)d.]
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)b., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
e.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
f.	40 CFR, Part 60, Subpart J	See b)(2)a., b)(2)c., d)(2) through d)(5), e)(3) and e)(4)
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	0.150 lb NOx/million Btu of actual heat input based upon a 3-hour block average See b)(2)e.

(2) Additional Terms and Conditions

a. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

b. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

c. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

d. The SO2 emissions limitation established in OAC rule 3745-18-08(C)(5) is less stringent than the hydrogen sulfide (H2S) concentration limit of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) established by Subpart J, 40 CFR 60.104(a)(1). Therefore, compliance with the SO2 limit is ensured by compliance with the H2S limit.

e. The NOx emissions limitations are established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

As required by the consent decree addendum, the NOx emissions limitation is established to reflect the final voluntary limit to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section b)(1).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1);40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf) (the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)c above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument in 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct a relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment at a minimum frequency of once every three years. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall maintain records of all data obtained by the H2S CEMS, including, but not limited to parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60, except as noted below.

Pursuant to paragraph No. 30 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the H2S CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the H2S CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA Northwest District Office documenting any CEMS downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective actions taken. The permittee shall provide the emission unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and CEMS malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(3) The permittee shall notify the Director (the Ohio EPA Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA Northwest District Office) by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emission unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.020 lb of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by dividing the appropriate particulate emission factor of 7.6 pounds per million standard cubic feet, from AP-42 (7/98) by the standard natural gas heat content; 1,020 Btu per standard cubic feet, as specified by footnote 'a' from Table 1.4-1 for proper conversion from lb/MMscf to lb/MMBtu.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

b. Emission Limitation:

0.15 lb of SO2 per million Btu of actual heat input

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S operational restriction in section c)(1), compliance with the SO2 limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections d)(2) and d)(4) of this permit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

e. Emission Limitation:

0.150 lb NOx/million Btu of actual heat input based upon a 3-hour block average

Applicable Compliance Method:

Compliance with the lb of NOx per million Btu emission limitation has been demonstrated by past stack testing.

If required, the permittee shall determine compliance with the NOx emission limitations by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group -Process Heaters Group #4: B022, B024

EU ID	Operations, Property and/or Equipment Description
B022	Refinery Fuel Gas or Natural Gas Fired Hot Belt Oil Heater-Aromatics, 201.1 million Btu/hr maximumheat input (PR 175102)
B024	Refinery Fuel Gas or Natural Gas Fired Isomerization Heater, 46.5 million Btu/hr maximum heat input (PR 175110)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR, Part 60, Subpart J	See b)(2)a., b)(2)b., d)(1) through d)(4), e)(3) and e)(4)
b.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-31-05(A)(3) (PTI No. P0116161, modification issued 5/20/14)	0.014 lb of PE per million Btu of actual heat input 0.024 lb of sulfur dioxide (SO2) per million Btu of actual heat input, as a monthly average 0.082 lb of carbon monoxide (CO) per million Btu of actual heat input [See b)(2)c.] See b)(2)d.
f.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575)	See b)(2)e., and c)(2) through c)(5)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	63.7500(a) Table 3 requirements
g.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
h.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	B022 – 0.084 lb NOx/million Btu of actual heat input based upon a 3-hour block average B024 - 0.109 lb NOx/million Btu of actual heat input based upon a 3-hour block average See b)(2)f.

(2) Additional Terms and Conditions

a. 40 CFR, Part 60 - Subpart J is an applicable rule for these emissions units. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

b. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

c. The CO emission limitation is based on a revised emission factor published in AP-42, Fifth Edition, Section 1.4 (July 1998).

d. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR 60.104(a)(1).

e. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

f. The NOx emissions limitations are established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF which became effective on 11/20/07.

As required by the consent decree addendum, the NOx emissions limitations are established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)a. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(2) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. A logbook dedicated

to the monitoring system must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuelother than refinery fuel gas or natural gas is burned in this emissions unit. Each reportshall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken.

The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and CEMS malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No.P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30 and

October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(1) and d)(3) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

b. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

0.014 lb of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in

pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

0.024 lb of SO2 per million Btu of actual heat input, as a monthly average

Applicable Compliance Method:

This limit is less stringent than firing refinery fuel gas (or combined fuel stream, if applicable) with a maximum H2S content of 230 mg/dscm (0.10 grain/dscf) in this emissions unit. As long as the permittee maintains compliance with the H2S additional term in section b)(2)b., compliance with the SO2 limitation will be assumed.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e. Emission Limitation:

0.082 lb of CO per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate CO emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f. Emission Limitations:

B022 – 0.084 lb NOx/million Btu of actual heat input based upon a 3-hour block average

B024 – 0.109 lb NOx/million Btu of actual heat input based upon a 3-hour block average

Applicable Compliance Method:

Compliance with the lb of NOx per million Btu emission limitation has been demonstrated by past stack testing.

If required, the permittee shall determine compliance with the NOx emission limitations by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

6. B026, Steam Generating Unit

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired CE Power Boiler, 329.7 million Btu/hr maximum heat input (PR 175007)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	40 CFR, Part 60, Subpart Db	See b)(2)a.
d.	OAC rule 3745-31-05(A)(3) (PTI No. P0116161, modification issued 5/20/14)	2.86 lbs of PE per hour [See b)(2)b.] 31.65 lbs of carbon monoxide (CO)/hr [See b)(2)b.] 2.07 lbs of volatile organic compounds (VOC)/hr [See b)(2)b. and b)(2)c.] 10.12 lbs of sulfur dioxide (SO2)/hr See b)(2)f.
e.	40 CFR, Part 60, Subpart J	See b)(2)d., b)(2)e., d)(2) through d)(5), e)(3) and e)(4)
f.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
g.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575)	See b)(2)g., and c)(2) through c)(5) 63.7500(a) Table 3 requirements

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	
h.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
i.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	0.100 lb NOx/million Btu of actual heat input, based upon a 365-day rolling block average See b)(2)h.

(2) Additional Terms and Conditions

a. 40 CFR, Part 60, Subpart Db is an applicable rule for this emissions unit, since the emissions unit was constructed after June 19, 1984 and the heat input capacity is greater than 100 million Btu per hour. Natural gas and/or a mixture of natural gas and refinery fuel gas are burned in this emissions unit. The NOx limitations listed in 40 CFR 60.44b are applicable as well as the performance test methods, monitoring, recordkeeping and reporting requirements for NOx listed under 40 CFR 60.46b, 60.48b and 60.49b. The NOx emission limitation of 0.20 lb/million Btu in 40 CFR 60.44b is less stringent than the NOx emission limitation of 0.13 lb/million Btu established by OAC rule 3745-31-05(A)(3) for this emissions unit.

Coal and oil are not burned in this emissions unit; therefore, the SO_2, PE and visible PE limitations listed in 40 CFR 60.42b and 60.43b are not applicable; and performance test methods, monitoring, recordkeeping and reporting requirements in 40 CFR 60.45b and 60.47b are also not applicable.

b. The PE, CO and VOC emission limitations are based on revised emission factors published in AP-42, Fifth Edition, Section 1.4 (July 1998).

c. The emission limitation of 2.07 lbs of VOC/hr includes fugitive VOC emissions.

d. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent

decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

e. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

f. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR, Part 60, Subpart J.

g. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

h. The NOx emission limitation of 0.100 lb NOx/million Btu of actual heat input, based upon a 365-day rolling block average is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07, and is the long-term emission limitation.

The previously established emission limitation of 0.13 lb NOx/million Btu of actual heat input is less stringent than the emission limitation established pursuant to the federal consent decree addendum, and is retained in this permit as a short-term emission limitation.

As required by the consent decree addendum, the NOx emissions limitations are established to reflect the final voluntary limits to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)d. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(6) In order to demonstrate compliance with the emission limitations of 0.13 lb NOx/million Btu of actual heat input and 0.100 lb NOx/million Btu of actual heat input based upon a rolling 365-day average, the permittee shall operate and maintain an instrument for continuously monitoring and recording NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13, as follows:

a. The span value for this instrument is 200 parts per million of NOx.

b. The performance evaluations for this NOx monitor under 40 CFR 60.13(c) shall use Performance Specification 2 of 40 CFR, Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the NOx continuous emission monitoring equipment. Method 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(7) A statement of certification of the existing NOx continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specifications 2. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(8) The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(9) The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(10) The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken.

The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times.

These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northwest District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR, Part 60; OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits or linearity checks;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

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

<u>Applicable Compliance Method</u>:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

b. Emission Limitation:

2.86 lbs of PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

0.13 lb of NO_x per million Btu of actual heat input

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(10) for this emissions unit. If required, the permittee shall determine compliance with the NO_x emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

31.65 lbs of CO/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate carbon monoxide emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e. Emission Limitation:

2.07 lbs of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate volatile organic compound emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f. Emission Limitation:

10.12 lbs of SO2/hr

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(1) through d)(3) for this emissions unit, based on use of CEM data for H2S. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(1) through d)(3) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

h. Emission Limitation:

0.100 lb NOx/million Btu of actual heat input, based upon a 365-day rolling block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(6) through d)(10) for this emissions unit. If required, the permittee shall determine compliance with the NO_x emission limitation by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

7. B027, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired Coker Furnace, 211.3 million Btu/hr maximum heat input (PR 170002)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0116161, modification issued 5/20/14)	1.84 lbs of particulate emissions (PE) per hour [See b)(2)a.] 20.29 lbs of carbon monoxide (CO)/hr [See b)(2)a.] 1.33 lbs of volatile organic compounds (VOC)/hr [See b)(2)a.] 6.49 lbs of sulfur dioxide (SO2)/hr See b)(2)b.
b.	40 CFR, Part 60, Subpart J	See b)(2)c., b)(2)d., d)(1) through d)(4), e)(3) and e)(4)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit	See b)(2)e., and c)(2) through c)(5) 63.7500(a) Table 3 requirements

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	
g.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
h.	OAC rule 3745-31-05(D) (PTI No. P0116161, modification issued 5/20/14)	0.060 lb nitrogen oxides (NOx)/million Btu of actual heat input based upon a 3-hour block average See b)(2)f.

(2) Additional Terms and Conditions

a. The PE, CO and VOC emission limitations are based on revised emission factors published in AP-42, Fifth Edition, Section 1.4 (July 1998).

b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR 60.104(a)(1).

c. 40 CFR, Part 60 - Subpart J is an applicable rule for this emissions unit. The permittee was required to comply with this New Source Performance Standard for fuel combustion by 1/18/08, per paragraph No. 115 of the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

d. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

e. This emissions unit is subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

f. The NOx emission limitation is established pursuant to requirements in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07.

As required by the consent decree addendum, the NOx emissions limitation is established to reflect the final voluntary limit to meet a system-wide average NOx performance level of 0.044 lb per million Btu.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116161]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart DDDDD; and PTI No. P0116161]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)c. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR, Part 60, Appendix B.

The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S in units of the applicable standard (grain/dscf and parts per million by volume) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(5) The permittee shall maintain a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken.

The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

(4) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

b. Emission Limitation:

1.84 lbs of PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the coker furnace. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

c. Emission Limitation:

20.29 lbs of CO/hr

Applicable Compliance Method:

The permittee has demonstrated compliance with this emission limitation through past emission testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4, and 10.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

d. Emission Limitation:

1.33 lbs of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate volatile organic compound emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the coker furnace. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

e. Emission Limitation:

6.49 lbs of SO2/hr

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(1) and d)(3) for this emissions unit, based on use of CEM data for H2S. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

f. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections d)(2) and d)(4) for this emissions unit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 15 of 40 CFR, Part60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0116161]

g. Emission Limitation:

0.060 lb NOx/million Btu of actual heat input based upon a 3-hour block average

Applicable Compliance Method:

Compliance with the lb of NOx per million Btu emission limitation has been demonstrated by past stack testing.

If required, the permittee shall determine compliance with the NOx emission limitations by using Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116161]

g) Miscellaneous Requirements

(1) None.

8. B028, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired Process Heater for Catalytic Gasoline Hydrotreating Unit, with Low Nitrogen Oxide Burners, 24.6 million Btu/hr maximum heat input (PR 170007)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107904, modification issued 6/9/11)	3.31 tons sulfur dioxide (SO2)/yr 0.043 lb of nitrogen oxides (NOx) per million Btu of actual heat input [See b)(2)a.] 4.63 tons NOx/yr 2.36 lbs carbon monoxide (CO)/hr, 10.34 tons CO/yr 0.155 lb volatile organic compounds (VOC)/hr, 0.68 ton VOC/yr 0.214 lb particulate emissions (PE)/hr, 0.94 ton PE/yr See b)(2)c.
b.	OAC rule 3745-17-07(A)	Visible PE from anystack shall not exceed 20% opacity, as a 6-minute average, except asprovided by the rule.
c.	OAC rule 3745-17-10(B)(1)	See b)(2)d.
d.	OAC rule 3745-18-06(E)	See b)(2)e.
e.	40 CFR, Part 60, Subpart J	See b)(2)b., d)(2) through d)(5), e)(3) and e)(4)
f.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
g.	40 CFR, Part 63, Subpart DDDDD	See b)(2)f.

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit have been determined to be use of low NOx burners meeting 0.043 lb NOx per millionBtu of actual heat input.

b. The permittee shall not burn any refinery fuel gas in this emissions unit that containshydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalentconcentration is 162 parts per million by volume). This H2S standard in 40 CFR60.104(a)(1) is also applicable if the permittee combines and combusts natural gasin any proportion with refinery fuel gas in this emissions unit, according to the fuelgas definition in 40 CFR 60.101(d).

c. The requirements of this rule also include compliance with the requirements ofOAC rule 3745-17-07(A) and 40 CFR, Part 60, Subpart J.

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

e. This emissions unit is fuel burning equipment which combusts refinery fuel gas ornatural gas. When firing natural gas, the emissions unit is exempt from OAC rule3745-18-06 per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule3745-18-06(E) does not establish an emission limitation because the processweight rate is equal to zero. "Process weight" is defined in OAC rule 3745-18-01(B)(14).

f. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR, Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR, Part 63, Subpart DDDDD.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107904]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas ornatural gas, the permittee shall maintain a record of the type and quantity of fuel burnedin this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162ppm) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)b. above), the permittee shall operate and maintain an instrument for

continuouslymonitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas orcombined fuel stream before being burned in this emissions unit. The monitoring shallbe conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is a ppm equivalent of 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may bemonitored at only one location, if monitoring at this location accurately representsthe concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shalluse Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permitteeshall conduct an annual relative accuracy test audit (RATA) for the H2Scontinuous emission monitoring equipment. Method 15 of 40 CFR, Part 60,Appendix A, or other approved U.S. EPA methods shall be used for conductingthe annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

(3) A statement of certification of the existing H2S continuous emission monitoring system(CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPAdetailing the results of an Agency review of the certification tests and a statement by theAgency that the system is considered certified in accordance with the requirements of40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shallbe made available to representatives of the Ohio EPA Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

(4) The permittee shall operate and maintain existing equipment to continuously monitorand record hydrogen sulfide from this emissions unit in units of the applicable standard.Such continuous monitoring and recording equipment shall comply with therequirements specified in 40 CFR Part 60.13.The permittee shall maintain records of all data obtained by the H2S CEMS including,but not limited to, parts per million of H2S for each cycle time of the analyzer, with no resolution less than one data point per minute required,emissions of H2S in units of the applicable standard as a rolling, 3-hour average, theresults of daily zero/span calibration checks, and the magnitudes of manual calibrationadjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

(5) The permitteeshall maintain a quality assurance/quality control plan for the refinery fuel gasH2S continuous emission monitor designed to ensure continuous valid andrepresentative readings of H2S. The plan shall follow the requirements of 40 CFR, Part60, Appendix F. A logbook dedicated to the monitoring system must be kept on site andavailable for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

(2) The permittee shall submit reports within thirty (30) days following the end of eachcalendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time,duration, and reason), along with any corrective action(s) taken. The permittee shallprovide the emissions unit operating time during the reporting period and the date, time,reason, and corrective action(s) taken for each time period of source and controlequipment malfunctions. The total operating time of the emissions unit and the totaloperating time of the analyzer while the emissions unit was on line shall be included thequarterly report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which theaverage concentration of H2S as measured by the H2S CEMS under 40 CFR60.105(a)(4) exceeded 230 mg/dscm (162 ppm). The rolling, 3-hour average shall bedetermined as the arithmetic average of three contiguous 1-hour averages. Thenotification shall include a copy of the record and shall be sent to the Director (theOhio EPA, Northwest District Office) by January 30, April 30, July30, and October 30 of each year and shall address the data obtained during previouscalendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

(4) If there were no concentrations of H2S in the refinery fuel gas (or combined fuel stream,if applicable) that exceeded the value specified in section b)(2)b. during the calendarquarter, then the permittee shall submit a statement to that effect along with theemissions unit and monitor operating times. These quarterly reports shall be submittedby January 30, April 30, July 30, and October 30 of each year and shall address thedata obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions ofthis permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.214 lb PE/hr, 0.94 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation bymultiplying the maximum hourly refinery fuel gas or natural gas combustion rate,in million standard cubic feet per hour, by the appropriate particulate emissionfactor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98),and then dividing by the maximum heat input to the process heater. If required,the permittee shall demonstrate compliance with this emission limitation byconducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 5 of 40CFR, Part 60, Appendix A,

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

b. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visibleparticulate emission limitation above in accordance with the methods andprocedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and therequirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

c. Emission Limitation:

3.31 tons SO2/yr

Applicable Compliance Method:

The annual emission limitation was established in accordance with the followingequation:

Tons SO2/yr = (0.10 gr H2S/scf)(lb H2S/7,000 gr H2S)

(64.1 lb SO2/34.1 lb H2S)(28,114 cf/hr)(8,760 hrs/yr)(ton/2,000 lbs)

where:

(0.10 gr H2S/scf) = 40 CFR 60.104(a)(1) emission limitation

(64.1 lb SO2/34.1 lb H2S) = conversion of hydrogen sulfide to sulfurdioxide assuming all H2S is converted toSO2

(28,114 cf/hr) = maximum fuel flow rate

(8,760 hrs/yr) = maximum operating schedule

All other values are conversion factors.

Compliance with the annual emission limitation will be shown as long as thepermittee maintains compliance with the H2S emission limitation in 40 CFR60.104(a)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

d. Emission Limitation:

0.043 lb NOx per million Btu of actual heat input, 4.63 tons NOx/yr

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data forlow NOx burners to be installed on this emissions unit. If required, the permitteeshall demonstrate compliance with this emission limitation by conductingemission testing in accordance with the requirements specified in Methods 1 through 4, and 7 of 40 CFR, Part60, Appendix A,.

The annual emission limitation was derived by multiplying the 0.043 lb of NOx permillion Btu emission limitation times the maximum heat input capacity of 24.6 million Btu/hr for the process heater, then multiplying by 8,760 hrs/yr and dividingby 2,000 lbs/ton. Compliance with the annual limitation shall be shown as longas compliance with the 0.043 lb of NOx per million Btu emission limitation ismaintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

e. Emission Limitation:

2.36 lbs CO/hr, 10.34 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation bymultiplying the maximum hourly refinery fuel gas or natural gas combustion rate,in million standard cubic feet per hour, by the appropriate CO emission factor, in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and thendividing by the maximum heat input to the process heater. If required, thepermittee shall demonstrate compliance with the hourly emission limitation byconducting emission testing in accordance with Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance

with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

f. Emission Limitation:

0.155 lb VOC/hr, 0.68 ton VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation bymultiplying the maximum hourly refinery fuel gas or natural gas combustion rate,in million standard cubic feet per hour, by the appropriate VOC emission factor,in lb(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), andthen dividing by the maximum heat input to the process heater. If required, thepermittee shall demonstrate compliance with the hourly emission limitation byconducting emission testing in accordance with Methods 1 through 4, and 18, 25, or 25A, as appropriate of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordancewith the continuous emission monitoring requirements specified in section d)(2) through d)(4).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107904]

g) Miscellaneous Requirements

(1) None.

9. B029, Process Heater

Operations, Property and/or Equipment Description:

Refinery Fuel Gas or Natural Gas Fired Reactor Feed Furnace for Diesel Hydrotreater Unit, with Low Nitrogen Oxide Burners, 29.7 million Btu/hr maximum heat input

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107905, modification issued 6/9/11)	7.77 tons sulfur dioxide (SO2)/yr 0.06 lb of nitrogen oxides (NOx) per million Btu of actual heat input [see b)(2)a.] 7.81 tons NOx/yr 5.54 lbs carbon monoxide (CO)/hr, 24.28 tons CO/yr 0.36 lb volatile organic compounds (VOC)/hr, 1.59 ton VOC/yr 0.502 lb particulate emissions (PE)/hr, 2.2 ton PE/yr See b)(2)c.
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(B)(1)	See b)(2)d.
d.	OAC rule 3745-21-09(T)	See b)(2)f.
e.	OAC rule 3745-18-06(E)	See b)(2)e.
f.	OAC rule3745-21-09(DD)	See b)(2)f.
g.	40 CFR, Part 60, Subpart J	See b)(2)b., d)(2) through d)(5), e)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		through e)(4), and f)(1)
h.	40 CFR,Part 60, SubpartVV	See b)(2)f.
i.	40 CFR, Part 60, Subpart GGG	See b)(2)f.
j.	40 CFR,Part 61, Subpart V	See b)(2)f.
k.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
l.	40 CFR, Part 61, Subpart FF	See b)(2)g.
m.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
n.	40 CFR,Part 63, Subpart CC	See b)(2)f., b)(2)h., c)(2), d)(6) and e)(5)
o.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
p.	40 CFR, Part 63, Subpart DDDDD	See b)(2)i.

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit has beendetermined to be use of low NOx burners meeting 0.06 lb NOx per million Btu of actualheat input.

b. The permittee shall not burn any refinery fuel gas in this emissions unit that containshydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalentconcentration is 162 parts per million by volume). This H2S standard in 40 CFR60.104(a)(1) is also applicable if the permittee combines and combusts natural gasin any proportion with refinery fuel gas in this emissions unit, according to the fuelgas definition in 40 CFR 60.101(d).

c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR, Part 60, Subpart J.

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

e. This emissions unit is fuel burning equipment which combusts refinery fuel gas or naturalgas. When firing natural gas, the emissions unit is exempt from OAC rule 3745-18-06per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule 3745-18-06(E)does not establish an emission limitation because the process weight rate is equal to zero."Process weight" is defined in OAC rule 3745-18-01(B)(14).

f. The previously issued permit, PTI #03-16188 for this emissions unit, was issued to accommodate production of federally mandated low sulfur diesel fuel. The diesel hydrotreater unit (DHT)point sourceemissions are from the reactor feed furnace, emissions unit B029.

The remainder of theemissions from the DHT are fugitive VOC.Fugitive VOC emissions from the DHT are subject to the appropriateprovisions (including operational restrictions, monitoring and record keeping, reporting, andtesting) of OAC rule 3745-21-09(T) - Leaks from petroleum refinery equipment; OAC rule3745-21-09(DD) - Leaks from process units that produce organic chemicals; 40 CFR,Part 60, SubpartVV (Standards of Performance for Equipment Leaks of VOC in the Synthetic OrganicChemicals Manufacturing Industry); 40 CFR, Part 60, Subpart GGG (Standards of Performance forEquipment Leaks of VOC in Petroleum Refineries; 40 CFR,Part 61, Subpart V (National Emission Standard for Equipment Leaks - Fugitive Emission Sources); and 40 CFR,Part 63, Subpart CC (Petroleum RefineryMACT Standards).

The permittee has submitted an alternative leak detection and repair (LDAR) monitoring planpursuant to OAC rule 3745-21-09(T)(4) and 40 CFR,Part 63, Subpart CC. The permittee shallinclude the fugitive VOC emission sources for the DHT into the alternativeLDAR plan, which has been incorporated into Section B.2 - Facility-Wide Terms and Conditions.

g. The permittee shall include the DHT in the current site benzene waste operations program. Theprogram shall comply with the appropriate provisions (includes operational restrictions,monitoring and record keeping, reporting, and testing) of 40 CFR,Part 61, Subpart FF.

h. The previously issued permit, PTI #03-16188, for this emissions unit included three process vent emission sources that are subject to regulations in 40CFR, Part 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants FromPetroleum Refineries. These process vents include the vacuum dryer, sour water flash drum, andamine stripper flash drum. Each of the three vents is considered a Group 1 miscellaneousprocess vent, as defined in 40 CFR 63.641: Group 1 miscellaneous process vent means amiscellaneous process vent for which the total organic HAP concentration is greater than orequal to 20 parts per million by volume, and the total volatile organic compound emissions aregreater than or equal to 33 kilograms per day for existing sources and 6.8 kilograms per day fornew sources at the outlet of the final recovery device (if any) and prior to any control device andprior to discharge to the atmosphere.

i. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR, Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR, Part 63, Subpart DDDDD.

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107905]

(2) The permittee shall comply with the applicable miscellaneous process vent provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.643(a)	Control requirements for HAPs

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107905]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas,the permittee shall maintain a record of the type and quantity of fuel burned in this emissionsunit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162 ppm) ofH_2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in Section b)(2)b. above), the permittee shall operate and maintain an instrument for continuously monitoring andrecording the concentration (dry basis) of H_2S in the refinery fuel gas or combined fuel streambefore being burned in this emissions unit. The monitoring shall be conducted in accordancewith 40 CFR 60.105(a)(4), as follows:

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

b. Fuel gas combustion devices having a common source of fuel gas may be monitored atonly one location, if monitoring at this location accurately represents the concentration ofH_2S in the fuel gas being burned.

c. The performance evaluations for this H_2S monitor under 40 CFR 60.13(c) shall usePerformance Specification 7 of 40 CFR, Part 60, Appendix B. The permittee shallconduct an annual relative accuracy test audit (RATA) for the H_2S continuous emissionmonitoring equipment. Method 15 of 40 CFR, Part 60, Appendix A, or other approvedU.S. EPA methods shall be used for conducting the annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(3) A statement of certification of the existing H_2S continuous emission monitoring system (CEMS)shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results ofan Agency review of the certification tests and a statement by the Agency that the system isconsidered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B,Performance Specification 7. Proof of certification shall be made available to representatives ofthe Ohio EPA, Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(4) The permittee shall operate and maintain existing equipment to continuously monitor and recordhydrogen sulfide from this emissions unit in units of the applicable standard.

Such continuousmonitoring and recording equipment shall comply with the requirements specified in 40 CFRPart 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including, but notlimited to, parts per million of H2Sfor each cycle time of the analyzer, with no resolution less than one data point per minute required, emissions of H2S inunits of the applicable standard as a rolling, 3-hour average, the results of daily zero/spancalibration checks, and the magnitudes of manual calibration adjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(5) The permittee shall maintain a quality assurance/quality control plan for the refinery fuel gas H2Scontinuous emission monitor designed to ensure continuous valid and representative readings ofH2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. A logbookdedicated to the monitoring system must be kept on site and available for inspection duringregular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(6) The permittee shall comply with the applicable monitoring and recording requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.644(a) through (e)	Monitoring provisions for miscellaneous process vents
40 CFR 63.655(i)*	Record keeping

* except for section 63.655(i)(1) which is not applicable

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107905]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel otherthan refinery fuel gas or natural gas was burned in this emissions unit. Each report shall besubmitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

(2) The permittee shall submit reports within thirty (30) days following the end of each calendarquarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime whilethe emissions unit was on line (date, time, duration, and reason), along with any correctiveaction(s) taken. The permittee shall provide the emissions unit operating time during thereporting period and the date, time, reason, and corrective action(s) taken for each time period ofsource and control equipment malfunctions. The total operating time of the emissions unit andthe total operating time of the analyzerwhile the emissions unit was on line shall be included the quarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterlybasis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S asmeasured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeded 230 mg/dscm (162 ppm). Therolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-houraverages.

The notification shall include a copy of the record and shall be sent to the Director(the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 ofeach year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(4) If there were no concentrations of H2S in the refinery fuel gas (or combined fuel stream, ifapplicable) that exceeded the value specified in Section b)(2)b during the calendar quarter, thenthe permittee shall submit a statement to that effect along with the emissions unit and monitoroperating times. These quarterly reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

(5) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.655(e) through 63.655(h)*	Reporting requirements

* except for sections 63.655(f)(1)(i), 63.655(f)(1)(v), 63.655(f)(5), 63.655(g)(1) through 63.655(g)(5), 63.655(g)(8), 63.655(h)(2), 63.655(h)(3) and 63.655(h)(6)(ii), which are not applicable

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107905]

f) Testing Requirements

(1) Compliance with the emissions limitations in Section b)(1) of the terms and conditions of thispermit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

7.77 tons SO2/yr

<u>Applicable Compliance Method:</u>

The annual emission limitation was established in accordance with the followingequation:

Tons SO2/yr = (0.10 gr H2S/scf)(lb H2S/7,000 gr H2S)(64.1 lb SO2/34.1 lb H2S)

(66,000 cf/hr)(8,760 hrs/yr)(ton/2,000 lbs)

where:

(0.10 gr H2S/scf) = 40 CFR 60.104(a)(1) emission limitation

(64.1 lb SO2/34.1 lb H2S) = conversion of hydrogen sulfide to sulfur dioxide

assuming all H2S is converted to SO2

(66,000 cf/hr) = maximum fuel flow rate

(8,760 hrs/yr) = maximum operating schedule

All other values are conversion factors.

Compliance with the annual emission limitation will be shown as long as the permitteemaintains compliance with the H2S emission limitation in 40 CFR 60.104(a)(1).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

b. Emission Limitation:

0.06 lb NOx per million Btu of actual heat input, 7.81 tons NOx/yr

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for lowNOx burners to be installed on this emissions unit. If required, the permittee shalldemonstrate compliance with this emission limitation by conducting emission testing inaccordance with the requirements specified in Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the 0.06 lb of NOx permillion Btu emission limitation times the maximum heat input capacity of 29.7 millionBtu/hr for the process heater, then multiplying by 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliancewith the 0.06 lb of NOx per million Btu emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

c. Emission Limitation:

5.54 lbs CO/hr, 24.28 tons CO/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying theappropriate CO emission factor of 84 lbs per million standard cubic feet, from AP-42Chapter 1.4 (7/98), by the maximum fuel flow rate of 66,000

standard cubic foot/hr. Ifrequired, the permittee shall demonstrate compliance with the hourly emission limitationby conducting emission testing in accordance with Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitationtimes 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitationshall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

d. Emission Limitation:

0.36 lb VOC/hr, 1.59 tons VOC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying theappropriate VOC emission factor of 5.5 lbs per million standard cubic feet, fromAP-42 Chapter 1.4 (7/98), by the maximum fuel flow rate of 66,000 standard cubicfoot/hr. If required, the permittee shall demonstrate compliance with the hourly emissionlimitation by conducting emission testing in accordance with Methods 1 through 4, and 18, 25, or 25A, as appropriate of 40 CFR, Part 60, AppendixA.

The annual emission limitation was derived by multiplying the hourly emission limitationtimes 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitationshall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

e. Emission Limitation:

0.502 lb PE/hr, 2.2 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying theappropriate particulate emission factor of 7.6 lbs per million standard cubic feet,from AP-42 Chapter 1.4 (7/98), by the maximum fuel flow rate of 66,000 standard cubicfoot/hr. If required, the permittee shall demonstrate compliance with this emissionlimitation by conducting emission testing in accordance with the requirements specifiedin Methods 1 through4, and 5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitationtimes 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitationshall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

f. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minuteaverage, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulateemission limitation above in accordance with the methods and procedures specified in Method 9 of 40CFR, Part 60, Appendix A, and the requirements specified in OAC rule3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107905]

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordance with thecontinuous emission monitoring requirements specified in Sections d)(2) through d)(4).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107905]

g) Miscellaneous Requirements

(1) None.

11. B032, PR-170026, Nebraska Boiler

Operations, Property and/or Equipment Description:

247.7 mmBtu/hr Natural Gas-Fired Steam Boiler

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI No. P0109701, modification issued 6/6/12)	0.035 lb of nitrogen oxides (NOx)/mmBtu of actual heat input, based upon a 365-day rolling block average 0.075 lb of carbon monoxide (CO)/mmBtu of actual heat input See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0109701, modification issued 6/6/12)	0.0075 lb of particulate matter 10 microns less than in size (PM_{10})/mmBtu and 8.14 tons PM_{10}/yr 0.0054 lb of volatile organic compounds (VOC)/mmBtu and 5.86 tons VOC/yr 0.0006 lb sulfur dioxide (SO2)/mmBtu and 0.66 ton SO2/yr See b)(2)b., b)(2)c. and b)(2)d.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)e.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input [See b)(2)f.]
f.	OAC rule 3745-18-06	Exempt [See b)(2)g.]
g.	OAC rule 3745-110-03	See b)(2)h.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	40 CFR, Part 60, Subpart Db	No permittee shall cause to be discharged into the atmosphere any gases that contain NOx in excess of 0.20 lb/mmBtu [See b)(2)h.]
i.	40 CFR, Part 63, Subpart DDDDD	See b)(2)i.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be use of low NOx burners and flue gas recirculation and emission limitations of 0.035 lb of NOx/mmBtu of actual heat input and 0.075 lb of CO/mmBtu of actual heat input.

b. The mass emission rate limitation in b)(1)a. and b)(1)b. above represent the potential to emit (PTE) (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with the CO emission limitation. For NOx emissions, the permittee is required to operate a continuous emission monitor pursuant to paragraphs 29 and 29.a. in the federal consent decree addendum, civil action No. SA07CA0683RF, which became effective on 11/20/07, since the NOx emission limit is less than 0.06 lb/million Btu of actual heat input.

c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) have been determined to be use of low NOx burners and flue gas recirculation and compliance with the terms and conditions of this permit.

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/controls measures no longer apply.

e. OAC rule 3745-31-05(A)(3)(a)(ii) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of SO2, VOC, and PM_{10} from this air

contaminant source since the uncontrolled potential to emit for SO2, VOC, and PM_{10} are each less than 10 tons per year.

f. This emission limitation established by this rule is less stringent than the PM_{10} limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. All emissions of particulate matter from this emissions unit are PM_{10}.

g. This emission unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A).

h. The requirements of this rule are less stringent than those required under ORC 3704.03(T).

i. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR, Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR, Part 63, Subpart DDDDD.

j. Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. Prior to the certification testing of the continuous NOx monitoring system(s) required by permit term C.1.f)(3), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60 and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

k. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

c) Operational Restrictions

(1) The permittee shall only burn natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0109701]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

(2) Pursuant to the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee shall by December 31, 2013 install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee has installed this CEM previously to meet requirements for monitoring in 40 CFR, Part 60, Subpart Db.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment.

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system.

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(2)g. and d)(2)h. [40 CFR Part 60.13 and 40 CFR, Part 60, Appendices B & F]

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

(3) A copy of the NOx CEM letter/document of certification shall be maintained on-site and shall be made available to the Northwest District Office upon request. [40 CFR Part 60.13 and 40 CFR, Part 60, Appendix B]

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

(4) The permittee is subject to the monitoring requirements specified in 40 CFR Part 60.48b and the recordkeeping requirements specified in 40 CFR Part 60.49b.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

(2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Northwest District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR, Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement, and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emissions monitoring system (CEMS), including any changes to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out of control and the compliant results following any corrective actions;

xi. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in e)(2)b.xi and e)(2)b.xii.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report.

** each downtime and malfunction event shall be reported regardless if there is an exceedance of the applicable limit.

Each report shall address the operations conducted and data obtained during the previous calendar quarter. [40 CFR Part 60.7]

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

(3) The permittee is subject to the reporting requirements specified in 40 CFR Part 60.49b.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

f) Testing Requirements

(1) 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 six months prior to expiration of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the lb of CO/mmBtu emission limitation.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Ohio EPA, Northwest District Office. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

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

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

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

[OAC rule 3745-77-07(C)(1)]

(2) Compliance with the emission limitations in section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.035 lb of nitrogen oxides (NOx)/mmBtu of actual heat input, based upon a 365-day rolling block average

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(2) and d)(3) for this emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

b. Emission Limitation:

0.075 lb of CO/mmBtu of actual heat input

Applicable Compliance Method:

This emission limitation represents the potential to emit of this unit and is based on manufacturer's data.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

c. Emission Limitation:

0.0075 lb of PM_{10}/mmBtu

Applicable Compliance Method:

This emission limitation represents the potential to emit. The PTE is based on a heat content of 1020 Btu/scf and a PM_{10} emission factor of 7.60 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 201 or 201A of 40 CFR, Part 51, Appendix M.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

d. Emission Limitation:

8.14 tons PM_{10}/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the lb/mmBtu limitation, the maximum heat input capacity of 247.7 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

e. Emission Limitation:

0.0054 lb of VOC/mmBtu

Applicable Compliance Method:

This emission limitation represents the potential to emit. The PTE is based on a heat content of 1020 Btu/scf and a VOC emission factor of 5.50 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

f. Emission Limitation:

5.86 tons VOC/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the lb/mmBtu limitation, the maximum heat input capacity of 247.7 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

g. Emission Limitation:

0.0006 lb SO2/mmBtu

Applicable Compliance Method:

This emission limitation represents the potential to emit. The PTE is based on a heat content of 1,020 Btu/scf and a SO2 emission factor of 0.60 lb/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

h. Emission Limitation:

0.66 ton SO2/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the lb/mmBtu limitation, the maximum heat input capacity of 247.7 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

i. Emission Limitation:

No permittee shall cause to be discharged into the atmosphere any gases that contain NOx in excess of 0.20 lb/mmBtu

Applicable Compliance Method:

If required, compliance with the limitation above shall be determined in accordance with Methods 1 – 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

j. Emission Limitation:

Visible PE shall not exceed 20% opacity as a six-minute average except as provided by rule

Applicable Compliance Method:

If required, compliance with the visible emission limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

k. Emission Limitation:

0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly gas consumption rate (245,000 ft^3/hr) by the emission factor from AP-42, Table 1.4-2 (7/98) of 1.90 lbs of PE (filterable)/$mmft^3$, and then dividing by the maximum heat input capacity of the boiler (247.7 mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0109701]

g) Miscellaneous Requirements

(1) None.

10. B033, PR 170020

Operations, Property and/or Equipment Description:

Refinery Fuel Gas/Natural Gas Fired Feed Heater for Catalytic Kerosene Hydrotreating (KHT) Unit, with Low Nitrogen Oxide Burners, 30.0 million Btu/hr maximum heat input

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI No. P0107028, issued 3/2/11)	0.168 lb of carbon monoxide (CO)/mmBtu heat input See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0107028, issued 3/2/11)	0.060 lb of nitrogen oxides (NOx)/mmBtu heat input and 7.9 tons NOx/yr 0.0152 lb of particulate matter 10 microns less than in size (PM10)/mmBtu heat input and 2.0 ton PM10/yr Visible particulate emissions (PE) shall not exceed 5% opacity as a six-minute average. 0.011 lb of volatile organic compounds (VOC)/mmBtu heat input and 1.4 tons VOC/yr 2.6 tons sulfur dioxide (SO2)/yr Fugitive VOC emissions shall not exceed 4.6 tons per year. See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		as a six-minute average, except as provided by rule. See b)(2)g.
e.	OAC rule 3745-17-10(B)(1)	0.20 lb of PE/mmBtu heat input See b)(2)f.
f.	OAC rule 3745-18-06(E)	See b)(2)h.
g.	OAC rule 3745-21-09(T)(4)(a)	See facility-wide term and condition B.2
h.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)k., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
i.	40 CFR, Part 60, Subpart J	See b)(2)e., d)(2) through d)(5), e)(3), e)(4), and f)(1)g.
j.	40 CFR, Part 61, Subpart FF	See b)(2)j.
k.	40 CFR, Part 60, Subpart GGG	See b)(2)i.
l.	40 CFR, Part 61, Subpart V	See b)(2)i.
m.	40 CFR, Part 60, Subpart VV	See b)(2)i.
n.	40 CFR, Part 63, Subpart CC	See b)(2)i., c)(6), d)(6), e)(5) and f)(2)
o.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be an emission limitation of 0.168 lb of CO/mmBtu heat input.

b. The mass emission rate limitations in b)(1)a. and b)(1)b. above represent the potentials to emit (PTE) (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)a. through f)(1)g. for details regarding the PTE.

c. The following requirements contained in this permit satisfy the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:

i. use of low NOx burners;

ii. compliance with the following limitations:

(a) 0.060 lb of NOx/mmBtu heat input and 7.9 tons NOx/yr

(b) 0.0152 lb of PM10/mmBtu heat input and 2.0 ton PM10/yr

(c) 0.011 lb of VOC/mmBtu heat input and 1.4 tons VOC/yr

(d) 2.6 tons SO2/yr

(e) fugitive VOC emissions of 4.6 tons/yr

(f) Visible PE shall not exceed 5% opacity as a six-minute average

iii. compliance with the following regulations:

(a) 40 CFR, Part 60, Subpart J

(b) 40 CFR, Part 61, Subpart V

(c) 40 CFR, Part 60, Subpart VV

(d) 40 CFR, Part 63, Subpart CC

(e) 40 CFR, Part 61, Subpart FF

(f) 40 CFR, Part 60, Subpart GGG

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/controls measures no longer apply.

d. OAC rule 3745-31-05(A)(3) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of NOx, SO2, VOC, and PM10 from this air contaminant source since the uncontrolled potential to emit for NOx,SO2, VOC, and PM10 are each less than 10 tons per year.

e. The permittee shall not burn any refinery fuel gas in this emissions unit that containshydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalentconcentration is 162 parts per million by volume). This H2S standard in 40 CFR60.104(a)(1) is also applicable if the permittee combines and combusts natural gasin any proportion with refinery fuel gas in this emissions unit, according to the fuelgas definition in 40 CFR 60.101(d).

f. This emission limitation established by this rule is less stringent than the PM10limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The PM10limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent particulate limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-11(B) shall go into effect. It should also be noted that all emissions of particulate matter from this emissions unit are PM10.

In addition, the Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size PM2.5are being implemented through the PM10Surrogate Policy issued by U.S. EPA in 1997. For the purposes of demonstrating that PM10is a reasonable surrogate for PM2.5, all emissions of PM10will be considered PM2.5.

g. The emission limitation established by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The visible emission limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent visible emission limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-07(A) shall go into effect.

h. This emissions unit is fuel burning equipment which combusts refinery fuel gas ornatural gas. When firing natural gas, the emissions unit is exempt from OAC rule3745-18-06 per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule3745-18-06(E) does not establish an emission limitation because the processweight rate is equal to zero. "Process weight" is defined in OAC rule 3745-18-01(B)(14).

i. The fugitive VOC emissions from the KHT unit are subject to the appropriateprovisions (including operational restrictions, monitoring and record keeping, reporting, andtesting) of OAC rule 3745-21-09(T) - Leaks from

petroleum refinery equipment; OAC rule3745-21-09(DD) - Leaks from process units that produce organic chemicals; 40 CFR,Part 60, SubpartVV (Standards of Performance for Equipment Leaks of VOC in the Synthetic OrganicChemicals Manufacturing Industry); 40 CFR, Part 60, Subpart GGG (Standards of Performance forEquipment Leaks of VOC in Petroleum Refineries; 40 CFR,Part 61, Subpart V (National Emission Standard for Equipment Leaks - Fugitive Emission Sources); and 40 CFR,Part 63, Subpart CC (Petroleum RefineryMACT Standards).

The permittee has submitted an alternative leak detection and repair (LDAR) monitoring planpursuant to OAC rule 3745-21-09(T)(4) and 40 CFR,Part 63, Subpart CC. The permittee shallinclude the fugitive VOC emission sources for the KHT into the alternativeLDAR plan, which has been incorporated into the facilities TV permit.

j. The permittee shall include the KHT in the current site benzene waste operations program. Theprogram shall comply with the appropriate provisions (includes operational restrictions,monitoring and record keeping, reporting, and testing) of 40 CFR,Part 61, Subpart FF.

k. These emissions unit are subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107028]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(6) The permittee shall comply with the applicable miscellaneous process vent provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.643(a) and (b)	Control requirements for HAPs

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107028]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas ornatural gas, the permittee shall maintain a record of the type and quantity of fuel burnedin this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162ppm) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)b. above), the permittee shall operate and maintain an instrument for continuouslymonitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas orcombined fuel stream before being burned in this emissions unit. The monitoring shallbe conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is a ppm equivalent of 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may bemonitored at only one location, if monitoring at this location accurately representsthe concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shalluse Performance Specification 7 of 40 CFR Part 60, Appendix B. The permitteeshall conduct an annual relative accuracy test audit (RATA) for the H2Scontinuous emission monitoring equipment. Method 11 of 40 CFR, Part 60,Appendix A, or other approved U.S. EPA methods shall be used for conductingthe annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(3) A statement of certification of the existing H2S continuous emission monitoring system(CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPAdetailing the results of an Agency review of the certification tests and a statement by theAgency that the system is considered certified in accordance with the requirements of40 CFR, Part 60, Appendix B, Performance Specification 7.

Proof of certification shallbe made available to representatives of the Ohio EPA Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(4) The permittee shall operate and maintain existing equipment to continuously monitorand record hydrogen sulfide from this emissions unit in units of the applicable standard.Such continuous monitoring and recording equipment shall comply with therequirements specified in 40 CFR Part 60.13.The permittee shall maintain records of all data obtained by the H2S CEMS including,but not limited to, parts per million of H2S on an instantaneous (1-minute) basis,emissions of H2S in units of the applicable standard as a rolling, 3-hour average, theresults of daily zero/span calibration checks, and the magnitudes of manual calibrationadjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(5) The permitteeshall maintain a quality assurance/quality control plan for the refinery fuel gasH2S continuous emission monitor designed to ensure continuous valid andrepresentative readings of H2S. The plan shall follow the requirements of 40 CFR, Part60, Appendix F. A logbook dedicated to the monitoring system must be kept on site andavailable for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(6) The permittee shall comply with the applicable monitoring and recording requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.644(a) through (e)	Monitoring provisions for miscellaneous process vents
40 CFR 63.654(i)*	Record keeping
40 CFR, Part 63, Appendix to Subpart CC, Table 10	Miscellaneous Process Vents - Monitoring, Recordkeeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

* except for section 63.654(i)(1) which is not applicable

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107028]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

(2) The permittee shall submit reports within thirty (30) days following the end of eachcalendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time,duration, and reason), along with any corrective action(s) taken. The permittee shallprovide the emissions unit operating time during the reporting period and the date, time,reason, and corrective action(s) taken for each time period of source and controlequipment malfunctions.

The total operating time of the emissions unit and the totaloperating time of the analyzer while the emissions unit was on line shall be included thequarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which theaverage concentration of H2S as measured by the H2S CEMS under 40 CFR60.105(a)(4) exceeded 230 mg/dscm (162 ppm). The rolling, 3-hour average shall bedetermined as the arithmetic average of three contiguous 1-hour averages. Thenotification shall include a copy of the record and shall be sent to the Director (theOhio EPA, Northwest District Office) by January 30, April 30, July30, and October 30 of each year and shall address the data obtained during previouscalendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(4) If there were no concentrations of H2S in the refinery fuel gas (or combined fuel stream,if applicable) that exceeded the value specified in section b)(2)b. during the calendarquarter, then the permittee shall submit a statement to that effect along with theemissions unit and monitor operating times. These quarterly reports shall be submittedby January 30, April 30, July 30, and October 30 of each year and shall address thedata obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(5) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.654(e) through 63.654(h)*	Reporting requirements
40 CFR,Part 63, Appendix to Subpart CC, Table 10	Miscellaneous Process Vents - Monitoring, Recordkeeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20

	Parts Per Million by Volume

* except for sections 63.654(f)(1)(i), 63.654(f)(1)(v), 63.654(f)(5), 63.654(g)(1) through 63.654(g)(5), 63.654(g)(8), 63.654(h)(2), 63.654(h)(3) and 63.654(h)(6)(ii), which are not applicable

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107028]

(6) Pursuant to New Source Performance Standards (NSPS), the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio EPA, Northwest District Office
Division of Air Pollution Control
347 N. Dunbridge Rd.
Bowling Green, Ohio 43402

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions ofthis permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.0152 lb of PM10/mmBtuheat input, 2.0 ton PM10/yr

<u>Applicable Compliance Method:</u>

This emission limitation represents the potential to emit, and is based on theworst case fuel flow rate of 0.060 mmcf/hr multiplied by the PM_{10} emission factor of 7.60 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton.

Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

b. Emission Limitation:

0.20 lb of PE/mmBtuheat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the worst case fuel flow rate of 0.060 mmcf/hr multiplied by the PM_{10} emission factor of 7.60 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

c. Emission Limitation:

2.6 tons SO2/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the emission factor of 0.0199 lb SO2/mmBtu by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. The SO2 emission factor was derived based on the limitations established in 40 CFR, Part 60, Subpart J [See b)(2)e].Therefore, compliance with the annual emission limitation will be shown as long as thepermittee maintains compliance with the limitation established in 40 CFR, Part 60, Subpart J.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

d. Emission Limitation:

0.060 lb of NOx/mmBtuheat input, 7.9 tons NOx/yr

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for the low NOx burners to be installed on this emissions unit.

If required, the permitteeshall demonstrate compliance with this emission limitation pursuant to Methods 1 through 4, and 7 of 40 CFR, Part60, Appendix A.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

e. Emission Limitation:

0.168 lb of CO/mmBtu heat input

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on theworst case fuel flow rate of 0.060 mmcf/hr multiplied by theCO emission factor of 84.0 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, thepermittee shall demonstrate compliance with the hourly emission limitation pursuant to Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

f. Emission Limitation:

0.011 lb of VOC/mmBtu heat input, 1.4 ton VOC/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on theworst case fuel flow rate of 0.060 mmcf/hr multiplied by theVOC emission factor of 5.50 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

g. Emission Limitation:

Fugitive VOC emissions shall not exceed 4.6 tons per year.

Applicable Compliance Method:

The rolling, 12-month emission limitation was developed by applying the new component count and U.S. EPA emission factors for leaking and non-leaking components. Emission factors used are from the U.S. EPA Protocol document for Equipment Leaks (EPA-453/R-95-017, November 1995). Emissions from vapor and light liquid components are based on conservative assumptions as to the percentage of these components that are leaking at any given time, based on Lima Refining Company leak detection and repair (LDAR) experience. The percent of components assumed to be leaking are conservatively assumed to be monitored as leaking at 10,000 ppmv, which is higher than the leak rate definition, and emissions are calculated based on the EPA correlation equations. Non-leakers are assumed to emit at the EPA default-zero leak rate.

Compressors and other components besides valves are estimated using the EPA Refinery Average Emission factor and any control method efficiency, where applicable. Leaks from un-seated PRVs are estimated using the refinery average emission factors. It shall be a rebuttable presumption that compliance with the annual emission limitation has been attained as long as compliance with the LDAR requirements contained in Facility-Wide Terms and Condition B.2 is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

h. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordancewith the continuous emission monitoring requirements specified in section d)(2) through d)(4).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

i. Emission Limitation:

Visible PE from shall not exceed 5% opacity, as a6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visibleparticulate emission limitation pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

j. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visibleparticulate emission limitation pursuant to therequirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.645(a) through (i)	Test methods and procedures for miscellaneous process vents

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0107028]

g) Miscellaneous Requirements

(1) None.

11. B034, PR 170021

Operations, Property and/or Equipment Description:

Refinery Fuel Gas/Natural Gas Fired Stabilizer Reboilerfor Catalytic Kerosene Hydrotreating (KHT) Unit, with Low Nitrogen Oxide Burners, 38.75 million Btu/hr maximum heat input

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI No. P0107028, issued 3/2/11)	0.060 lb of nitrogen oxides (NOx)/mmBtu heat input 0.168 lb of carbon monoxide (CO)/mmBtu heat input See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0107028, issued 3/2/11)	0.0152 lb of particulate matter 10 microns less than in size (PM_{10})/mmBtu heat input and 2.6 tons PM_{10}/yr Visible particulate emissions (PE) shall not exceed 5% opacity as a six-minute average. 0.011 lb of volatile organic compounds (VOC)/mmBtu heat input and 1.9 tons VOC/yr 3.38 tons sulfur dioxide (SO_2)/yr See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average, except as provided by rule.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)g.
e.	OAC rule 3745-17-10(B)(1)	0.20 lb of PM_{10}/mmBtu heat input [See b)(2)f.]
f.	OAC rule 3745-18-06(E)	See b)(2)h.
g.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-7575) [In accordance with 63.7575, this emissions unit is in the 'unit designed to fire Gas 1 fuels' subcategory existing process heater located at a major source of HAP emissions and subject to the applicable emissions limitations/ control requirements specified in this section.]	See b)(2)i., and c)(2) through c)(5) 63.7500(a) Table 3 requirements
h.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
i.	40 CFR, Part 60, Subpart J	See b)(2)e., d)(2) through d)(5), e)(3) e)(4), and f)(1)g.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be the emission limitations of 0.060 lb of NOx/mmBtu heat input and 0.168 lb of CO/mmBtu heat input

b. The mass emission rate limitations in b)(1)a. and b)(1)b. above represent the potentials to emit (PTE) (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)a. through f)(1)f. for details regarding the PTE.

c. The following requirements contained in this permit satisfy the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:

i. use of low NOx burners;

ii. compliance with the following limitations:

(a) 0.0152 lb of PM_{10}/mmBtu heat input and 3.4 tons PM_{10}/yr

(b) 0.011 lb of VOC/mmBtu heat input and 1.9 tons VOC/yr

(c) 3.4 tons SO_2/yr

(d) Visible PE shall not exceed 5% opacity as a six-minute average

iii. compliance with the following regulations:

(a) 40 CFR, Part 60, Subpart J

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/controls measures no longer apply.

d. OAC rule 3745-31-05(A)(3) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of SO_2, VOC, and PM_{10} from this air contaminant source since the uncontrolled potential to emit for SO_2, VOC, and PM_{10} are each less than 10 tons per year.

e. The permittee shall not burn any refinery fuel gas in this emissions unit that containshydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalentconcentration is 162 parts per million by volume). This H2S standard in 40 CFR60.104(a)(1) is also applicable if the permittee combines and combusts natural gasin any proportion with refinery fuel gas in this emissions unit, according to the fuelgas definition in 40 CFR 60.101(d).

f. This emission limitation established by this rule is less stringent than the PM_{10} limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The PM_{10} limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent particulate limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-11(B) shall go into effect. It should be noted that all emissions of particulate matter from this emissions unit are PM_{10}.

g. The emission limitation established by this rule is less stringent than the PM_{10} limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The visible emission limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent visible emission limitation established OAC rule 3745-31-05(A)(3), as effective

11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-07(A) shall go into effect.

h. This emissions unit is fuel burning equipment which combusts refinery fuel gas ornatural gas. When firing natural gas, the emissions unit is exempt from OAC rule3745-18-06 per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule3745-18-06(E) does not establish an emission limitation because the processweight rate is equal to zero. "Process weight" is defined in OAC rule 3745-18-01(B)(14).

i. These emissions unit are subject to the initial notification requirements of 40 CFR, Part 63, Subpart DDDDD (Boiler MACT) as outlined in 63.9(b) (i.e., these are not subject to the emission limits, performance testing, monitoring, or site-specific monitoring plan requirements of Subpart DDDDD or any other requirements in 40 CFR, Part 63, Subpart A).

c) Operational Restrictions

(1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107028]

(2) A process heater or boiler in the Gas 1 subcategory with heat input capacity of 10 million Btu per hour or greater shall conduct an annual tune-up of the boiler or process heater as specified in 40 CFR 63.7540(a)(10)(i) through 63.7540(a)(10)(vi). This tune-up frequency does not apply to limited-use boilers and process heaters, as defined in 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(3) A process heater or boiler in the Gas 1 subcategory that has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, shall conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(4) Pursuant to 40 CFR 63.7540(a)(13), if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

(5) The permittee shall have a one-time energy assessment performed by a qualified energy assessor, pursuant to work practice standards 4.a through 4.h in Table 3 of 40 CFR, Part 63, Subpart DDDDD. The subsequent report associated with this assessment shall be submitted no later than January 31, 2016.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas ornatural gas, the permittee shall maintain a record of the type and quantity of fuel burnedin this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

(2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162ppm) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)b. above), the permittee shall operate and maintain an instrument for continuouslymonitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas orcombined fuel stream before being burned in this emissions unit. The monitoring shallbe conducted in accordance with 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is a ppm equivalent of 425 mg/dscm of H2S.

b. Fuel gas combustion devices having a common source of fuel gas may bemonitored at only one location, if monitoring at this location accurately representsthe concentration of H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shalluse Performance Specification 7 of 40 CFR Part 60, Appendix B. The permitteeshall conduct an annual relative accuracy test audit (RATA) for the H2Scontinuous emission monitoring equipment. Method 11 of 40 CFR, Part 60,Appendix A, or other approved U.S. EPA methods shall be used for conductingthe annual RATAs.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(3) A statement of certification of the existing H2S continuous emission monitoring system(CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPAdetailing the results of an Agency review of the certification tests and a statement by theAgency that the system is considered certified in accordance with the requirements of40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shallbe made available to representatives of the Ohio EPA Northwest District Office upon request.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(4) The permittee shall operate and maintain existing equipment to continuously monitorand record hydrogen sulfide from this emissions unit in units of the applicable standard.Such continuous monitoring and recording equipment shall comply with therequirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including,but not limited to, parts per million of H2S on an instantaneous (1-minute) basis,emissions of

H2S in units of the applicable standard as a rolling, 3-hour average, theresults of daily zero/span calibration checks, and the magnitudes of manual calibrationadjustments.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(5) The permitteeshall maintain a quality assurance/quality control plan for the refinery fuel gasH2S continuous emission monitor designed to ensure continuous valid andrepresentative readings of H2S. The plan shall follow the requirements of 40 CFR, Part60, Appendix F. A logbook dedicated to the monitoring system must be kept on site andavailable for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

(2) The permittee shall submit reports within thirty (30) days following the end of eachcalendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time,duration, and reason), along with any corrective action(s) taken. The permittee shallprovide the emissions unit operating time during the reporting period and the date, time,reason, and corrective action(s) taken for each time period of source and controlequipment malfunctions. The total operating time of the emissions unit and the totaloperating time of the analyzer while the emissions unit was on line shall be included thequarterly report.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which theaverage concentration of H2S as measured by the H2S CEMS under 40 CFR60.105(a)(4) exceeded 230 mg/dscm (162 ppm). The rolling, 3-hour average shall bedetermined as the arithmetic average of three contiguous 1-hour averages. Thenotification shall include a copy of the record and shall be sent to the Director (theOhio EPA, Northwest District Office) by January 30, April 30, July30, and October 30 of each year and shall address the data obtained during previouscalendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

(4) If there were no concentrations of H2S in the refinery fuel gas (or combined fuel stream,if applicable) that exceeded the value specified in section b)(2)b. during the calendarquarter, then the permittee shall submit a statement to that effect along with theemissions unit and monitor operating times.

These quarterly reports shall be submittedby January 30, April 30, July 30, and October 30 of each year and shall address thedata obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions ofthis permit shall be determined in accordance with the following methods:

a. Emission Limitation:

0.0152 lb of PM_{10}/mmBtuheat input, 2.6 tonsPM_{10}/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on theworst case fuel flow rate of 0.0775 mmcf/hr multiplied by the PM_{10} emission factor of 7.60 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 201 or 201A of 40 CFR, Part 51, Appendix M.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

b. Emission Limitation:

0.20 lb of PM_{10}/mmBtuheat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by the PM_{10} emission factor of 7.60 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75 mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

c. Emission Limitation:

3.4 tons SO2/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the emission factor of 0.0199 lb SO2/mmBtu by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. The SO2 emission factor was derived based on the limitations established in 40 CFR, Part 60, Subpart J [See b)(2)e].Therefore compliance with the annual emission limitation will be shown as long as thepermittee maintains compliance with the limitation established in 40 CFR, Part 60, Subpart J.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

d. Emission Limitation:

0.060 lb NOx per million Btu heat input

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for the low NOx burners to be installed on this emissions unit.

If required, the permitteeshall demonstrate compliance with this emission limitation pursuant to Methods 1 through 4, and 7 of 40 CFR, Part60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

e. Emission Limitation:

0.168 lb of CO/mmBtu heat input

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based onthe worst case fuel flow rate of 0.0775 mmcf/hr multiplied by theCO emission factor of 84.0 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75 mmBtu/hr).

If required, thepermittee shall demonstrate compliance with the hourly emission limitation pursuant to Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

f. Emission Limitation:

0.011 lb of VOC/mmBtu heat input, 1.9 tons VOC/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by theVOC emission factor of 5.50 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordancewith the continuous emission monitoring requirements specified in section d)(2) through d)(4).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart J; and PTI No. P0107028]

h. Emission Limitation:

Visible PE from shall not exceed 5% opacity, as a6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visibleparticulate emission limitation pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

i. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visibleparticulate emission limitation pursuant to therequirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107028]

g) Miscellaneous Requirements

(1) None.

12. B035, B & W Boiler

Operations, Property and/or Equipment Description:

Natural Gas and refinery fuel gas fired B & W 800 psi. steam boiler, 249.9 million Btu/hr maximum heat input

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (PTI No. P0116164, modification issued 5/20/14)	<u>Emissions from combustion products:</u> 0.038 lb of nitrogen oxides (NOx)/million Btu of actual heat input and 41.59 tons NOx per year 0.0375 lb of carbon monoxide (CO)/million Btu of actual heat input and 41.05 tons CO per year 0.00745 lb of particulate matter less than 10 microns in size (PM_{10})/million Btu of actual heat input and 8.16 tons PM_{10} per year 0.0054 lb of volatile organic compounds (VOC)/million Btu of actual heat input and 5.91 tons VOC per year 7.70 lbs of sulfur dioxide (SO2) per hour and 12.46 tons SO2 per year 142,972 tons of carbon dioxide equivalent compounds (CO2e) per year See b)(2)a.
b.	ORC 3704.03(T)	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as	<u>Emissions from fugitive equipment leaks:</u>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	effective 11/30/01 (PTI No. P0116164, modification issued 5/20/14)	0.71 ton VOC per year from refinery fuel gas piping for this emissions unit
d.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)d.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average, except as provided by rule
f.	OAC rule 3745-17-10(B)(1)	See b)(2)e.
g.	OAC rule 3745-18-08(C)(1)	See b)(2)f.
h.	OAC rule 3745-110-03	See b)(2)g.
i.	OAC rule 3745-21-09(M)(3)	See b)(2)h. and d)(10)
j.	40 CFR, Part 60, Subpart Db	See b)(2)g.
k.	40 CFR, Part 60, Subpart Ja	See b)(2)i. and b)(2)j.
l.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
m.	40 CFR, Part 63, Subpart DDDDD [In accordance with 63.7575, this emissions unit is a new unit designed to burn gas 1 fuels located at a major source of HAP emissions and subject to the applicable emissions limitations/control requirements specified in this section.]	See b)(2)k.
n.	40 CFR 63.1 through 63.15	Table 10 to 40 CFR, Part 63, Subpart DDDDD – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. PTI No. P0116164 establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which requires limitation of the annual heat input:

i. 0.038 lb of NOx/million Btu of actual heat input and 41.59 tons NOx per year;

ii. 0.0375 lb of CO/million Btu of actual heat input and 41.05 tons CO per year;

iii. 0.00745 lb of PM_{10}/million Btu of actual heat input and 8.16 tons PM_{10} per year;

iv. 0.0054 lb of VOC/million Btu of actual heat input and 5.91 tons VOC per year;

v. 7.70 lbs of SO2 per hour and 12.46 tons SO2 per year; and

vi. 142,972 tons of carbon dioxide equivalent compounds (CO2e) per year.

b. The Best Available Technology (BAT) requirements have been determined to be compliance with the emission limitations of 0.00745 lb of PM_{10}/million Btu of actual heat input, and 0.0054 lb of VOC/million Btu of actual heat input, established pursuant to OAC rule 3745-31-05(D).

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

c. BAT requirements under ORC 3704.03(T) have been determined to be compliance with the emission limitations of 0.038 lb of NOx/million Btu of actual heat input, 0.0375 lb of CO/million Btu of actual heat input and 7.70 lbs of SO2 per hour, established pursuant to OAC rule 3745-31-05(D).

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of PM_{10} and VOC from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

e. The emission limitation established by this rule is less stringent than the PM_{10} limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. All emissions of particulate matter from this emissions unit are PM_{10}.

f. The emission limitation established by this rule is less stringent than the SO_2 emissions limitations established pursuant to 40 CFR, Part 60, Subpart Ja.

g. The requirements of this rule are less stringent than those required under ORC 3704.03(T).

h. Each permittee of a petroleum refinery shall control the emissions of VOC from process unit turnarounds no later than the date specified in paragraph (C)(14) of rule 3745-21-04 of the Administrative Code by combusting the vapors as fuel gas or by flaring the vapors until the pressure in the process vessel is 19.7 pounds per square inch absolute or less.

i. This emissions unit is an affected fuel gas combustion device, pursuant to the definition in 40 CFR 60.101a and is therefore subject to the emissions limitations in 40 CFR 60.102a. Pursuant to 40 CFR 60.102a(g)(1)(ii), the permittee has elected to comply with the SO_2 emissions limitations in this rule by monitoring the refinery fuel gas quality with a hydrogen sulfide (H_2S) continuous emission monitor.

   Therefore, the permittee shall not burn in this emissions unit any fuel gas that contains H_2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H_2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

j. Since this emissions unit has a rated capacity greater than 40 million Btu per hour, it is subject to the NOx emission limitation in 40 CFR 60.102a(g)(2). However, this emission limitation is less stringent than the limitation of 0.038 lb NOx/million Btu of actual heat input established pursuant to OAC rule 3745-31-05(D).

k. Emissions unit B035 is not subject to emission limits under 40 CFR, Part 63, Subpart DDDDD but shall meet the tune-up requirements identified in Table 3 of that subpart as applicable to the unit and outlined in condition 1.c)(2) or (3) below.

l. Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

   The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

m. Each continuous O_2 monitoring system shall be certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. At

least 45 days before commencing certification testing of the continuous O_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of O_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous O_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

n. The permittee shall maintain a written quality assurance/quality control plan for the continuous hydrogen sulfide monitoring system, designed to ensure continuous valid and representative readings of hydrogen sulfide emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

o. The NOx, O_2 and hydrogen sulfidecontinuous emission monitoring systems consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

p. The permittee is installing this new boiler, emissions unit B035, to serve as a replacement for two existing emissions units, B005 – Reformate Splitter Reboiler Furnace and B009 – Riley Boiler. The permit review for this new boiler took credit for a decrease in emissions from the shutdown of this old reboiler furnace and old boiler. As a replacement, startup of the new boiler can occur prior to the shutdown of the Reformate Splitter Reboiler Furnace and Riley Boiler. However, the Reformate Splitter Reboiler Furnace was permanently shut down on 8/31/2011 and Riley Boiler was permanently shut down on 12/29/2013. Both the Reformate Splitter Reboiler Furnace and the Riley Boiler must be shut down before the end of the shakedown period of the new boiler, not to exceed 180 days after its initial startup.

q. The original design maximum heat input for emissions unit B035 was 337 million Btu per hour. After further evaluation by the permittee, it was determined that a smaller burner capacity could accommodate the expected maximum steam requirement, and thus, this boiler will be constructed with a maximum burner capacity of 249.9 million Btu per hour.

c) Operational Restrictions

(1) The permittee shall only burn natural gas or refinery fuel gas in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116164]

(2) Boilers without a continuous oxygen trim system and with a heat input capacity greater than 10 mmBtu/hr must have a tune-up and inspection completed annually (no more than 13 months after the previous tune-up and inspection) as specified in 40 CFR 63.7540(a)(10) and Table 3 #3 of Subpart DDDDD. The inspection includes measuring the concentration of CO in the effluent gas stream in ppmv and oxygen in volume percent, at high fire or typical operating load and both before and after the tune-up; and maintaining a record/report of the results of the inspection and the fuel(s) burned in the boiler during the year if capable of burning more than one type of fuel. For a new boiler, an initial tune-up must be completed within the applicable annual, biennial, or 5-year schedule, as specified in Table 3 to the subpart, following initial startup of the unit.

[40 CFR 63.7540(a)(10) and (13); 40 CFR 63.7515(d); 40 CFR 63.7510(g); 40 CFR, Part 63, Subpart DDDDD, Table 3 #3; OAC rule 3745-77-07(A)(1) and PTI No. P0116164]

(3) Boilers with a continuous oxygen trim system that maintains an optimum air to fuel ratio must have a tune-up and inspection completed every 5 years (no more than 61 months after the previous tune-up and inspection) as specified in 40 CFR 63. 7540(a)(10) and Table 3 #1 of Subpart DDDDD. The inspection includes measuring the concentration of CO in the effluent gas stream in ppmv and oxygen in volume percent, at high fire or typical operating load and both before and after the tune-up; and maintaining a record/report of the results of the inspection and the fuel(s) burned in the boiler during the year if capable of burning more than one type of fuel. For a new boiler, an initial tune-up must be completed within the applicable annual, biennial, or 5-year schedule, as specified in Table 3 to the subpart, following initial startup of the unit.

[40 CFR 63.7540(a)(10) and (13); 40 CFR 63.7515(d); 40 CFR 63.7510(g); 40 CFR, Part 63, Subpart DDDDD, Table 3 #1;OAC rule 3745-77-07(A)(1) and PTI No. P0116164]

(4) The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[40 CFR 63.7500(a)(3); OAC rule 3745-77-07(A)(1) and PTI No. P0116164]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas or refinery fuel gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(2) Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR, Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2.Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Northwest District Office) upon request.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(3) The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in units of the applicable standard(s) over the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(4) Prior to the installation of the continuous O_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR, Part 60, Appendix B, Performance Specification 3. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous O_2 monitoring system meets the requirements of Performance Specification 3.Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(5) The permittee shall operate and maintain equipment to continuously monitor and record O_2 emitted from this emissions unit in percent O_2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O_2 monitoring system including, but not limited to:

a. percent $O_2$for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O_2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O_2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O_2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the percent O_2 over the appropriate averaging period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(6) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous hydrogen sulfide monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(7) The permittee shall operate and maintain equipment to continuously monitor and record hydrogen sulfide emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous hydrogen sulfide monitoring system including, but not limited to:

a. emissions of hydrogen sulfide in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

e. hours of operation of the emissions unit, continuous hydrogen sulfide monitoring system, and control equipment;

f. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous hydrogen sulfide monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous hydrogen sulfide monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(8) The permittee is subject to the monitoring requirements specified in 40 CFR Part 60.48b and the recordkeeping requirements specified in 40 CFR Part 60.49b.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0116164]

(9) Each permittee of a petroleum refinery shall maintain records for a minimum of two years for each process unit turnaround. Such records shall include:

a. The date the unit was shut down;

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

c. The approximate total quantity of VOC emitted to the ambient air.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(10) The permittee shall maintain records of the following information for the boiler in order to meet the record keeping requirements of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and (c), and to demonstrate compliance with the Subpart DDDDD:

a. a copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and all subsequent Notifications of Compliance Status and/or semiannual compliance reports; and

b. records of the calendar date, time, occurrence, and duration or each startup and shutdown; and the record of the type(s) and amount(s) of fuels burned during each startup and shutdown.

These records shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.7555; 40 CFR 63.7560;OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within

30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit; 40 CFR, Part 60; OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations.

The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of continuous O_2 monitoring system downtime and malfunction while the emissions unit was on line.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous O_2 and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the total operating time (hours) of the emissions unit;

v. the total operating time of the continuous O_2 monitoring system while the emissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits;

vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));

viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O_2 monitor out-of-control and the compliant results following any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous O_2 monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous O_2 monitoring system while the emissions unit was in operation; and

xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous hydrogen sulfide monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of hydrogen sulfide emissions in excess of any applicable limit specified in this permit, 40 CFR, Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous hydrogen sulfide and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous hydrogen sulfide monitoring system while the emissions unit was in operation;

vii. results and dates of quarterly cylinder gas audits;

viii. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

ix. unless previously submitted, the results of any relative accuracy test audit showing the continuous hydrogen sulfide monitor out-of-control and the compliant results following any corrective actions;

x. the date, time, and duration of any/each malfunction** of the continuous hydrogen sulfide monitoring system, emissions unit, and/or control equipment;

xi. the date, time, and duration of any downtime** of the continuous hydrogen sulfide monitoring system and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(5) The permittee is subject to the reporting requirements specified in 40 CFR Part 60.49b.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0116164]

(6) The permittee shall submit, to the Ohio EPA, Northwest District Office, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545, 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and (6), and 40 CFR 63.9(b) through (h):

a. an Initial Notification that the source is subject to Part 63, Subpart DDDDD shall be submitted no later than 15 days after the actual startup of the new or reconstructed boiler if startup is on or after 1/31/13;

b. semiannual, annual, or 5 year (as applicable) compliance reports containing the information identified in 40 CFR 63.7550; and

c. A Notification of Compliance Status must be submitted before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2).

[40 CFR 63.7545; 40 CFR 63.7530(e), (f), and (g); 40 CFR 63.9(b) through (h);OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(7) The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD. For boilers that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12) respectively, and not subject to emission limits or operating limits, only an annual, biennial, or 5-year compliance report is required.

The first compliance report must cover the period beginning on startup of the new boiler for new boilers installed after 1/31/13, and ending on June 30 or December 31, whichever date is the first date that occurs 180 days after the compliance date (or 1, 2, or 5 years, as applicable, if submitting an annual, biennial, or 5-year compliance report).

Unless otherwise approved, the first compliance report must be postmarked or submitted no later than July 31 or January 31, following the end of the first calendar half after the compliance date. The first annual, biennial, or 5-year compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule; and, except where only required to submit annual, biennial, or 5-year reports, must cover each semiannual reporting period from January 1st through June 30th and from July 1 through December 31 of each year.

[40 CFR 63.7550(a) through (e); 40 CFR 63.7535(d)];40 CFR 63.7540(b); 40 CFR 63.7515(f); 40 CFR, Part 63, Subpart DDDDD, Tables 8 and 9; OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

f) Testing Requirements

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the lb of CO/mmBtu emission limitation.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Ohio EPA, Northwest District Office. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

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

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(2) The permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR, Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Northwest District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Northwest District Office and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements

of 40 CFR, Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(3) The permittee shall conduct certification tests of the continuous O_2 monitoring system to demonstrate compliance with 40 CFR, Part 60, Appendix B, Performance Specification 3 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Northwest District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Northwest District Office and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous O_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR, Part 60, Appendix B, Performance Specifications 3 and ORC section 3704.03(I).

Ongoing compliance with the O_2 monitoring requirements contained in this permit, 40 CFR, Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet all of the testing and recertification requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(4) Ongoing compliance with the hydrogen sulfide emission limitation(s) contained in this permit, 40 CFR, Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

(5) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitations</u>:

0.038 lb of NOx/million Btu of actual heat input and 41.59 tons NOx per year

<u>Applicable Compliance Method</u>:

The lb of NOx/million Btu of actual heat input emission limitation represents the potential to emit of this unit and is based on manufacturer's data. Ongoing compliance with this limitation shall be based upon the monitoring and record keeping requirements specified in sections d)(3) and d)(5). If required, the

permittee shall demonstrate compliance with this emission limitation pursuant to Methods 3A and 7 of 40 CFR, Part 60, Appendix A.

The tons NOx per year limitation was established by multiplying the lb/million Btu limitation, times the rated boiler heat input and 8,760 hours per year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, compliance with the tons per year limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

b. Emissions Limitations:

0.0375 lb of CO/million Btu of actual heat input and 41.05 tons CO per year

Applicable Compliance Method:

The lb of CO/million Btu of actual heat input emission limitation represents the potential to emit of this unit and is based on manufacturer's data. Compliance with this limitation shall be based upon the emission testing requirements specified in section f)(1).

The tons CO per year limitation was established by multiplying the lb/million Btu limitation, times the rated boiler heat input and 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, compliance with the tons per year limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

c. Emissions Limitations:

0.00745 lb of PM_{10}/million Btu of actual heat input and 8.16 tons PM_{10} per year

Applicable Compliance Method:

The lb of PM_{10}/million Btu of actual heat input emission limitation represents the potential to emit (PTE) of this unit. The PTE is based on a ratio of heat content for refinery fuel gas to natural gas of 875 to 1,020 Btu/scf and a PM_{10} emission factor of 7.60 lbs/mmft3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The tons PM_{10} per year limitation was established by multiplying the lb/million Btu limitation, times the rated boiler heat input and 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, compliance with the tons per year limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

d. Emissions Limitations:

0.0054 lb of VOC/million Btu of actual heat input and 5.91 tons VOC per year

Applicable Compliance Method:

The lb of VOC/million Btu of actual heat input emission limitation represents the potential to emit (PTE) of this unit. The PTE is based on a ratio of heat content for refinery fuel gas to natural gas of 875 to 1,020 Btu/scf and a VOC emission factor of 5.5 lbs/mmft3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons VOC per year limitation was established by multiplying the lb/million Btu limitation, times the rated boiler heat input and 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, compliance with the tons per year limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

e. Emissions Limitations:

7.70 lbs of SO2 per hour and 12.46 tons SO2 per year

Applicable Compliance Method:

The short term limitation of 7.70 lbs of SO2 per hour was derived by multiplying the maximum short term boiler heat input of 249.9 million Btu per hour times an SO2 emission factor of 26.9 lbs per million standard cubic feet of refinery fuel gas fired (based on the maximum short term SO2 limit in 40 CFR, Part 60, Subpart Ja of 20 parts per million by volume); and then dividing by the refinery fuel gas heat content of 875 Btu per standard cubic foot.

Compliance with the hourly emission limitation shall be demonstrated by complying with the short term hydrogen sulfide content in the refinery fuel gas by monitoring and record keeping requirements in sections d)(7) and d)(8) for this emissions unit.

The annual limitation of 12.46 tons SO2 per year was derived by multiplying the rated boiler heat input of 249.9 million Btu per hour times an emission factor of 9.96 lbs per million standard cubic feet of refinery fuel gas fired (based on the maximum long term SO2 limit in 40 CFR, Part 60, Subpart Ja of 8 parts per million by volume); then dividing by the refinery fuel gas heat content of 875 Btu per standard cubic foot; multiplying by a maximum operating schedule of 8,760 hours per year; and dividing by 2,000 lbs per ton.

Compliance with the tons per year limitation shall be demonstrated by complying with the long term hydrogen sulfide content in the refinery fuel gas by monitoring and record keeping requirements in sections d)(7) and d)(8) for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

f. Emission Limitation:

142,972 tons of CO2e per year

Applicable Compliance Method:

The emission limitation was derived by multiplying the summation of emission factors (in kilograms per million Btu) for carbon dioxide, methane and nitrous oxides in Tables C-1 and C-2 of 40 CFR, Part 98 for fuel gas and petroleum times the total boiler heat input; and applying the appropriate global warming potential values from Table A-1 of 40 CFR, Part 98; to obtain the total emissions of carbon dioxide equivalent compounds.

Since the tons of $CO2_e$ per year emission limitation is based on the potential to emit, no monitoring or record keeping requirements are necessary to demonstrate compliance with the emission limitation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

g. Emission Limitation:

0.71 ton VOC/yr (fugitive) from refinery fuel gas piping

Applicable Compliance Method:

The emission limitation represents the potential to emit, based on the maximum expected number of new leak detection and repair (LDAR) components and calculations provided by the permittee using U.S. EPA Protocol Document for Equipment Leaks, EPA-453/R-95-017, November 1995. Compliance shall be demonstrated by following the facility's alternative LDAR program contained in the Title V permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

h. Emission Limitation:

Visible PE shall not exceed 20% opacity as a six-minute average except as provided by rule

Applicable Compliance Method:

If required, compliance with the visible emission limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

i. Emissions Limitations:

The permittee shall not burn in this emissions unit any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(7) and d)(8) for this emissions unit. If required, the permittee shall determine compliance with the H2S emissions limitations by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116164]

g) Miscellaneous Requirements

(1) None.

13. F001, Roadways

Operations, Property and/or Equipment Description:

Paved and Unpaved Roadways

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	None [See b)(2)a.]
b.	OAC rule 3745-17-08(B)	None [See b)(2)b.]

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

b. This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located outside of the Lima, Ohio city limits). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

14. J001, Loading Rack

Operations, Property and/or Equipment Description:

Propane and Propylene Railcar Loading/Unloading Facilities

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(E)	Exempt [See b)(2)a.]

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

15. J002, Propane and Propylene Railcar Loading/Unloading Facilities

Operations, Property and/or Equipment Description:

Propane and Propylene Railcar Loading/Unloading Facilities

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(E)	Exempt [See b)(2)a.]
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0117365, issued 8/12/14)	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06 (PTI No. P0117365, issued 8/12/14)	See b)(2)d.
d.	OAC rule 3745-21-09(T)(4)(a)	See b)(2)e. and b)(2)f.
e.	40 CFR, Part 60, Subpart GGGa	See b)(2)g.
f.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since the loading rack is considered a Group 1 process vent which is controlled by a flare]	See b)(2)h. and e)(1)
g.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01, have been determined to be equivalent to the requirements in 40 CFR, Part 63, Subpart CC for fugitive volatile organic compound (VOC) emissions from equipment leaks, and for loading rack miscellaneous process vent provisions.

c. The permittee has satisfied the BAT requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits and control measures no longer apply.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of VOC since the potential to emit is less than 10 tons per year.

e. It should be noted that the requirements of OAC rule 3745-21-09(T)(4)(a) contained in the facility's alternative leak detection and repair (LDAR) program [see b)(2)f. below] have not been incorporated into Ohio's State Implementation Plan (SIP).

f. The permittee has an approved [as indicated in OAC rule 3745-21-09(T)(4)(a)] alternative leak detection and repair (LDAR) monitoring, recordkeeping and reporting program entitled "Premcor Lima Refinery, LDAR Plan" dated November 19, 2002. The permittee's alternative LDAR monitoring plan includes regulations in 40 CFR, Part 60, Subparts VV and GGG; 40 CFR, Part 61, Subpart V; and 40 CFR, Part 63, Subpart CC.

Any components associated with this emissions unit that are applicable to state and federal LDAR requirements shall be included in the alternative LDAR monitoring, recordkeeping and reporting program.

g. Pursuant to 40 CFR 63.640(p)(2) [MACT, Subpart CC], equipment leaks that are also subject to the provisions of 40 CFR, Part 60, Subpart GGGa, are required to comply only with the provisions specified in 40 CFR, Part 60, Subpart GGGa.

h. MACT requirements in 40 CFR, Part 63, Subpart CC are applicable for each Group 1 process vent that is part of this emissions unit, and is routed to either emissions unit P006 and/or P007, the FCC/Coker flare or LIU flare, respectively.

The permittee shall comply with the applicable control requirements, emission limit and compliance demonstration methods under 40 CFR, Part 63, Subpart CC, including the following sections:

63.643(a)(1)	Required Use of Flare to Reduce Organic Hazardous Air Pollutants

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f)(1)(ii)	Notification of Compliance Status – Identification of Miscellaneous Process Vents
63.655(g)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents
63.655(g)(6)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents – Excess Emissions Reporting

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart CC and PTI No. P0117365]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

16. J004, Loading Rack

Operations, Property and/or Equipment Description:

Iso/Alky/Normal Butane Railcar Loading/Unloading Facilities, which includes: six butane loading/unloading railcar stations. Emissions are primarily controlled by use of a flare gas recovery system. Secondary control includes direct flaring.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(E)	Exempt [See b)(2)a.]
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0117365, issued 8/12/14)	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06 (PTI No. P0117365, issued 8/12/14)	See b)(2)d.
d.	OAC rule 3745-21-09(T)(4)(a)	See b)(2)e. and b)(2)f.
e.	40 CFR, Part 60, Subpart GGGa	See b)(2)g.
f.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since the loading rack is considered a Group 1 process vent which is controlled by a flare]	See b)(2)h. and e)(1)
g.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01, have been determined to be equivalent to the requirements in 40 CFR, Part 63, Subpart CC for fugitive volatile organic compound (VOC) emissions from equipment leaks, and for loading rack miscellaneous process vent provisions.

c. The permittee has satisfied the BAT requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits and control measures no longer apply.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of VOC since the potential to emit is less than 10 tons per year.

e. It should be noted that the requirements of OAC rule 3745-21-09(T)(4)(a) contained in the facility's alternative leak detection and repair (LDAR) program [see b)(2)f. below] have not been incorporated into Ohio's State Implementation Plan (SIP).

f. The permittee has an approved [as indicated in OAC rule 3745-21-09(T)(4)(a)] alternative leak detection and repair (LDAR) monitoring, recordkeeping and reporting program entitled "Premcor Lima Refinery, LDAR Plan" dated November 19, 2002. The permittee's alternative LDAR monitoring plan includes regulations in 40 CFR, Part 60, Subparts VV and GGG; 40 CFR, Part 61, Subpart V; and 40 CFR, Part 63, Subpart CC.

Any components associated with this emissions unit that are applicable to state and federal LDAR requirements shall be included in the alternative LDAR monitoring, recordkeeping and reporting program.

g. Pursuant to 40 CFR 63.640(p)(2) [MACT, Subpart CC],equipment leaks that are also subject to the provisions of 40 CFR, Part 60, Subpart GGGa, are required to comply only with the provisions specified in 40 CFR, Part 60, Subpart GGGa.

h. MACT requirements in 40 CFR, Part 63, Subpart CC are applicable for each Group 1 process vent that is part of this emissions unit, and is routed to either emissions unit P006 and/or P007, the FCC/Coker flare or LIU flare, respectively.

The permittee shall comply with the applicable control requirements, emission limit and compliance demonstration methods under 40 CFR, Part 63, Subpart CC, including the following sections:

63.643(a)(1)	Required Use of Flare to Reduce Organic Hazardous Air Pollutants

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f)(1)(ii)	Notification of Compliance Status – Identification of Miscellaneous Process Vents
63.655(g)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents
63.655(g)(6)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents – Excess Emissions Reporting

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. P0117365]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

17. J007, Decanted Oil Loading Rack

Operations, Property and/or Equipment Description:

Decanted oil loading rack

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicableemissions limitations and/or control measures. Emissions from each unit shall notexceed the listed limitations, and the listed control measures shall be specified innarrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0105198, issued 10/5/09)	20.74 tons volatile organic compounds (VOC)/yr [See b)(2)a. and b)(2)b.]
b.	OAC rule 3745-21-09(T)(4)(a)	See b)(2)c. and b)(2)d.
c.	40 CFR, Part 63, Subpart CC	See b)(2)d.
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. PTI No. P0105198 takes into account the following voluntary restriction as proposed by the permittee for the purpose of establishing practically and legallyenforceable limitations representing the potential to emit for VOC from thisemissions unit:

i. an operational restriction limiting the annual product throughput [See c)(1)].

The potential to emit for this emissions unit is 20.74 tons of VOC per year and is based on an annual throughput of 166,440,000 gallons of decanted oil and a loading loss emission factor of 0.2492 lb VOC per 1,000 gallons loaded. The emission factor was determined in accordance with equation (1) from AP-42 Section 5.2.2.11(6/08).

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC emissions from this air contaminant

sourcesince the potential to emit is less than 10 tons per year taking into considerationpractically and legally enforceable voluntary restrictions.

c. It should be noted that the requirements of OAC rule 3745-21-09(T)(4)(a) contained in the facility's alternative leak detection and repair (LDAR) program [see b)(2)d. below] has not been incorporated into Ohio's State Implementation Plan (SIP) as of the issuance date of PTI No. P0105198.

d. The permittee has an approved [as indicated in OAC rule 3745-21-09(T)(4)(a)] alternative leak detection and repair (LDAR) monitoring, recordkeeping and reporting program entitled "Premcor LimaRefinery, LDAR Plan" dated November 19, 2002. The permittee's alternative LDAR monitoring planincludes regulations in 40 CFR, Part 60, Subparts VV and GGG; 40 CFR, Part 61, Subpart V; and 40CFR, Part 63, Subpart CC.

Any components associated with the emission units contained in PTI No. P0105198 that are applicable to state and federal LDAR requirements shall be included in the alternative LDAR monitoring, recordkeeping and reporting program.

c) Operational Restrictions

(1) The maximum annual throughput of decanted oil loaded shall not exceed 166,440,000 gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. P0105198]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of product throughput (in gallons per month and total gallons, to date for the calendar year).

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submittedelectronically through Ohio EPA Air Services by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

f) Testing Requirements

(1) Compliance with the emission limitations specified in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following method:

a. Emission Limitation:

20.74 tons VOC/yr

Applicable Compliance Method:

The annual limitation represents the potential to emit [See b)(2)a.] based on an annual throughput restriction of 166,440,000 gallons of decanted oil and a loading loss emission factor of 0.2492 lb VOC per 1,000 gallons loaded.

The emission factor was determined in accordance equation (1) from AP-42 Section 5.2.2.11(6/08). Therefore provided compliance is shown with the annual throughput restriction, compliance with the annual emission limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

g) Miscellaneous Requirements

(1) None.

18. J010, Railcar Distillate Loading Rack

Operations, Property and/or Equipment Description:

Railcar distillate loading rack (6-arm)(Displaced vapors during loading will be collected with a vapor collection system and routed to a slop tank).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)e., d)(2), d)(3), d)(4), d)(5), and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI No. P0106825, modification issued 9/9/10)	Volatile organic compound (VOC) emissions shall not exceed 24.10 tons per rolling, 12-month period. Fugitive VOC emissions shall not exceed 7.0 tons per rolling, 12-month period. See b)(2)a.
b.	OAC rule 3745-21-09(T)(4)(a)	See Facility-Wide Term and Condition B.2.
c.	40 CFR Part 60, Subpart GGGa [40 CFR 60.640a-679a]	Pursuant to 40 CFR 63.640(p), equipmentleaks that are also subject to the provisionsof 40 CFR,Parts 60 and 61 are requiredto comply only with the provisionsspecified in 40 CFR, Part 63, Subpart CC.
d.	OAC rule 3745-21-09(Q)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to 40 CFR, Part 63, Subpart CC.
e.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(2) through d)(5) and e)(2).
f.	40 CFR Part 61 Subpart FF [40 CFR 61.340-359]	See c)(2), d(6) and e)(3).

(2) Additional Terms and Conditions

a. The emission limitation of 24.10 tons VOC per rolling, 12-month period represents VOC emissions displaced during loading operations which are collected with a vapor collection system and routed to a slop tank. The slop tank collects material from loading hoses during product changeover and loading hoses are hard piped to the slop tank.

The emission limitation of 7.0 tons fugitive VOC per rolling, 12-month period represents VOC emissions from equipment leaks associated with piping components, pumps, pressure relief valves, etc.

c) Operational Restrictions

(1) The maximum throughput of petroleum distillates shall not exceed 240,900,000 gallons per rolling 12-month period.

The operational restriction reflects the actual maximum operational capacity of all the loading arms. The 6 loading arms can fill a maximum of 22 railcars per day with a maximum capacity of 30,000 gallons per car.

[OAC rule 3745-77-07(A)(1) and PTI No. P0106825]

(2) See 40 CFR, Part 61, Subpart FF (40 CFR 61.340-359).

[OAC rule 3745-77-07(A)(1), 40 CFR, Part 61, Subpart FF and PTI No. P0106825]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following each month for this emissions unit:

a. the total amount of product throughput for all 6 loading arms, in gallons per month;

b. the rolling 12-month product throughput for all 6 loading arms, in gallons.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(2) The permit-to-install (PTI)application for this emissions unit, J010, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using SCREEN3. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: Hexane

   TLV (mg/m3): 176

   Maximum Hourly Emission Rate (lbs/hr): 0.78

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 413.39

   MAGLC (ug/m3): 4,195

The permittee, has demonstrated that emissions of hexane, from emissions unitJ010, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F),

initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(6) See 40 CFR, Part 61, Subpart FF (40 CFR 61.340-359).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month throughput restriction contained in c)(1).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northwest District Office).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(2) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

(3) See 40 CFR, Part 61, Subpart FF (40 CFR 61.340-359).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

f) Testing Requirements

(1) Compliance with the emission limitations specified in b)(1) of the terms and conditions of this permit shall be determined in accordance with the followingmethod(s):

a. Emission Limitation:

VOC emissions shall not exceed 24.10 tons per rolling, 12-month period.

Applicable Compliance Method:

The limitation above represents the potential to emit based on the actual maximum operational capacity of all the loading arms. The 6 loading arms can fill a maximum of 22 railcars per day with a maximum capacity of 30,000 gallons per car (240,900,000 gallons annually).

The actual maximum operational capacity of all the loading arms is reflected in an operational restriction contained in c)(1). The limitations above were established based on the maximum annual throughput of 240,900,000 gallons of distillate oil, a loading loss emission factor of 0.20 pound VOC per 1,000 gallons loaded and applying the conversion factor of 2,000 pounds per ton (The emission factor was determined in accordance equation (1) from AP-42 Section 5.2.2.11(6/08). Therefore, provided compliance is shown with the maximum annual throughput of distillate oil, compliance with the rolling, 12-month emissions limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

b. Emission Limitation:

Fugitive VOC emissions shall not exceed 7.0 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month emission limitation was developed by applying the new component count and U.S. EPA emission factors for leaking and non-leaking components. Emission factors used are from the U.S. EPA Protocol document for Equipment Leaks (EPA-453/R-95-017, November 1995). Emissions from vapor and light liquid components are based on conservative assumptions as to the percentage of these components that are leaking at any given time, based on Lima Refining Company leak detection and repair (LDAR) experience. The percent of components assumed to be leaking are conservatively assumed to be monitored as leaking at 10,000 ppmv, which is higher than the leak rate definition, and emissions are calculated based on the EPA correlation equations. Non-leakers are assumed to emit at the EPA default-zero leak rate. Compressors and other components besides valves are estimated using the EPA Refinery Average Emission factor and any control method efficiency, where applicable. Leaks from un-seated PRVs are estimated using the refinery average emission factors. Therefore, provided compliance is shown with the LDAR requirements

contained in Facility-Wide Term and Condition B.2, compliance with the rolling, 12-month emissions limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106825]

g) Miscellaneous Requirements

(1) None.

19. P005, Process

Operations, Property and/or Equipment Description:

Two Coker Drums (PR164237/164238) and Distillation Column (PR164903)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-18-06(E)(2)	1,143 lbs of sulfur dioxide (SO2)/hr [See b)(2)a.]
b.	OAC rule 3745-17-11(B)(1)	None [See b)(2)c.]
c.	OAC rule 3745-17-07(A)	None [See b)(2)d.]
d.	OAC rule 3745-21-07(G)	Exempt [See b)(2)e and f.]

(2) Additional Terms and Conditions

a. The allowable SO2 emission limitation is based on the equation in OAC rule 3745-18-06(E)(2) and a maximum process weight rate of 228.8 tons per hour.

b. All VOC emissions from the distillation column and coker drum blow down absorber shall be vented to the FCC flare, emissions unit P006. Monitoring, record keeping and reporting requirements for the FCC flare are listed in the terms and conditions for emissions unit P006.

c. The uncontrolled mass rate of PE* from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

* The burning of refinery fuel gas in the flare is the only source of PE from this emissions unit.

d. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

e. This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

f. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: none.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. <u>Emission Limitation:</u>

1,143 lbs of SO2/hr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance with this emission limitation based on the results of the most recent emission test. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

20. P006, Refinery Flare

Operations, Property and/or Equipment Description:

FCC/Coker Flare (PR 196128), steam-assisted

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) (PTI No. P0107883, modification issued 4/6/11)	10.00 tons of nitrogen oxides (NOx)/yr during periods of process unit start-up and shutdown [See b)(2)d] 90.00 tons of sulfur dioxide (SO2)/yr during periods of process unit start-up and shutdown [See b)(2)d]
b.	40 CFR, Part 63, Subpart CC	See b)(2)a.
c.	40 CFR Part 60.18	See b)(2)b.
d.	OAC rule 3745-21-07(J)(3)	See b)(2)c and b)(2)e.
e.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
f.	40 CFR, Part 60, Subpart A	See b)(2)f.
g.	40 CFR, Part 60, Subpart J	See b)(2)f.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR, Part 63, Subpart CC, the permittee shall employ a flareto control emissions of organic hazardous air pollutants resulting from malfunctionsand pressure relief episodes.

b. This emissions unit shall be designed for and operated with no visible emissionsexcept for periods not to exceed a total of five minutes during any two consecutive hours.

c. The requirements specified in OAC rule 3745-21-07(J)(3) are less stringent than therequirements specified in 40 CFR Part 60.18.

d. The permittee has requested to voluntarily limit allowable emissions of NOx andSO2 to the following:

i. 10.00 tons NOx/yr during periods of process unit start-up and shutdown

ii. 90.00 tons SO2/yr during periods of process unit start-up and shutdown

The emission limitations are being established to alleviate reporting requirementsassociated with reportable quantities (RQ) under the Superfund Amendments andReauthorization Act (SARA). The allowable limitations above do not apply toemissions associated with malfunctions and/or process upsets of the process unit.Any SO2 emissions associated with the start-up and shutdown of the sulfur recoveryunit at the facility (emissions unit P040) that are routed to this flare must still beapplied to the emissions limitation of 100 lbs SO2/1,000 lbs of sulfur processedcontained in OAC rule 3745-18-08(C)(3).

e. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision: none.

f. Pursuant to paragraph Nos. 231, 235.a. and 238.a. of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee shallaccept 40 CFR, Part 60, Subpart J applicability for this emissions source by December 31, 2010, by the operation and maintenance of a flare gas recovery system to control continuous and routine combustion for this flare.

The combustion of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunction is exempt from the requirement to comply with 40 CFR 60.104(a)(1), as per 40 CFR 60.104(a)(1).

The installation of a flare gas recovery system eliminates the need for continuous monitoring and recordkeeping for the hydrogen sulfide in the gas as otherwise required by 40 CFR 60.105(a)(4) and 40 CFR 60.7, as per paragraph 235.a. of the consent decree.

c) Operational Restrictions

(1) The flare shall be operated at all times when emissions are being vented to it.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(2) The flare shall be operated with a pilot flame present at all times.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(3) Only gases with a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater shall beburned in this emissions unit. Net heating value shall be calculated as specified in 40 CFRPart 60.18(f)(3).The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec) except asspecified in sections c)(4) and c)(5).

[OAC rule 3745-77-07(A)(1) and PTI No.P0107883]

(4) If the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000Btu/scf), the permittee may operate the flare at an exit velocity equal to or greater than 18.3m/sec (60 ft/sec), but less than122 m/sec (400 ft/sec).

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(5) Steam-assisted flares may be operated with an exit velocity less than the maximumpermitted velocity, but not greater than 122 m/sec (400 ft/sec). The maximum permittedvelocity shall be determined in accordance with 40 CFR Part 60.18(f)(5).

[OAC rule 3745-77-07(A)(1) and PTI No.P0107883]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information during periods of start-upand shut-down:

a. the flare flow rate, in scf per hour;

b. the high heating value, in Btu/scf, as determined from the flare gas molecularweight and source of the gas;

c. the concentration of hydrogen sulfide in the flare gas, in weight fraction;

d. an indication of which process is undergoing start-up/shut-down mode;

e. the number of hours the process operated in start-up/shut-down mode;

f. the calculated NOx emissions using the following equation:

$$E = (FR) \times (HV) \times (T) \times (EF)/1,000,000$$

where:

E = NOx emissions in tons for each individual start-up and shut-down event;

FR = flare flow rate in scf per hour;

HV = high heating value, in Btu/scf;

T = time duration for each start-up/shut down event, in hours; and

EF = NOx emission factor of 0.068 lb of NOx/mmBtu (AP-42 Section 13.5,Industrial Flares [9/91])

g. the annual NOx emission rate calculated as follows:

ET = E1 + E2 + E3 +... +En

Where:

ET =Annual NOx emissions, in tons, as summed for the calendar year from Januaryto December; and

En = NOx emissions, in tons, for each individual start-up/shut-down event during thecalendar year

h. the calculated SO2 emissions using the following equation:

E = {(FR) x (H2S)]/379.7} x (0.98) x (64) x (T)

where:

E = SO2 emissions in tons for each individual start-up and shut-down event;

FR = flare flow rate in scf per hour;

H2S = volume fraction of hydrogen sulfide in flare gas;

379.7 = the volume, in ft3, of one lb mole of gas at standardconditions (60 degrees F & 1 atm) from the ideal gas law;

0.98 = efficiency of the flare for converting a lb mole of H2S into a lb mole ofSO2;

64 = molecular weight of SO2 in lb/lb mole; and

T = time duration for each start-up/shut down event, in hours

i. the annual SO2 emission rate calculated as follows:

ET = E1 + E2 + E3 +... +En

Where:

ET =Annual SO2 emissions, in tons, as summed for the calendar year from Januaryto December; and

En = SO2 emissions, in tons, for each individual start-up/shut-down event during thecalendar year

[OAC rule 3745-77-07(C)(1) and PTI No.P0107883]

(2) The permittee shall operate and maintain a device to continuously monitor the pilot flamewhen the emissions unit is in operation. The monitoring device and any recorder shall becalibrated, operated, and maintained in accordance with the manufacturer'srecommendations, instructions, and operating manuals. The monitoring device must complete a minimum of one cycle of operation for each successive 15-minute period.

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 and monitoring equipment.

[OAC rule 3745-77-07(C)(1) and PTI No.P0107883]

(3) The permittee shall continuously monitor either visually and/or by camera whether or notthere are visible emissions from the flare. Whenever the permittee observes visibleemissions from the flare, the permittee shall record the start-time and end-time of visible emissions in an operations log.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(4) Once per shift, the permittee shall verify that the flare gas recovery system is in operation. The permittee shall keep records of any instance when the flare gas recovery system was not operating.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods duringwhich the flare pilot flame was not functioning properly. The reports shall include the date,time, and duration of each such period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(2) The permittee shall submit quarterly deviation reports that identify all periods during which the flare gas recovery system was not controlling continuous or routine combustion in the flare when process units are operating and generating hydrocarbon process gas. These reports shall include the date, time, and duration of each such period. The quarterly deviation reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(3) The permittee shall submit quarterly deviation reports that include the start-time and end-time of visible emissionsobserved from the flare that exceeda total time of five minutes during any consecutive two hour period.

The quarterly deviationreports shall be submitted by January 30, April 30, July 30, and October 30 of each yearand shall address the data obtained during the previous calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(4) The permittee shall submit annual reports that summarize the total annual actualemissions of NOx and SO2 during periods of process unit start-up and shutdown. The report shall be submitted by January 31 of each year and shall cover the previous calendaryear.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1)of these terms and conditions shall be determined in accordancewith the following methods:

a. Emission Limitation:

10.00 tons of NOx/yr during periods of process unit start-up and shutdown

Applicable Compliance Method:

Compliance with the annual NOx emission limitation shall be demonstrated through record keeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

b. Emission Limitation:

90.00 tons of SO2/yr during periods of process unit start-up andshutdown

Applicable Compliance Method:

Compliance with the annual SO2 emission limitation shall be demonstrated throughrecord keeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

c. Emission Limitation:

No visible emissions except for periods not to exceed a total of five minutes during any two consecutive hours

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specifiedin 40 CFR, Part 60, Appendix A, Method 22.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

g) Miscellaneous Requirements

(1) None.

21. P007, Refinery Flare

Operations, Property and/or Equipment Description:

LIU Flare (PR 196510), steam assisted

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) (PTI No. P0116562, modification issued 6/6/14)	10.00 tons of nitrogen oxides (NOx)/yr during periods of process unit start-up and shutdown [See b)(2)c.] 100.00 tons of sulfur dioxide (SO2)/yr during periods of process unit start-up and shutdown [See b)(2)c.]
b.	40 CFR, Part 63, Subpart CC (Refinery MACT)	See b)(2)a.
c.	40 CFR, Part 63, Subpart UUU [40 CFR 63.1560 – 63.1579] [In accordance with 40 CFR 63.1562, this emissions unit is an affected source due to its use for control of reformer depressurization and purging emissions for the catalytic reformer unit (emissions unit P030), subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)d., b)(2)e., d)(4) and f)(2)
d.	40 CFR Part 60.18	See b)(2)b.
e.	40 CFR, Part 60, Subpart Ja	See b)(2)f., b)(2)g. and b)(2)h.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 -

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		63.15 apply. Table 44 to 40 CFR, Part 63, Subpart UUU – Applicability of General Provisions to Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
g.	OAC rule 3745-31-05(D)	Less than or equal to 500 lbs of SO2 per day under normal operating conditions. See b)(2)i.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR, Part 63, Subpart CC, the permittee shall employ a flare to control emissions of organic hazardous air pollutants resulting from malfunctions and pressure relief episodes. In addition, all vapors from the new non-condensable process vent from the ISO recycle splitter tower shall be routed to this flare (or to emissions unit P006, FCC/Coker flare).

b. This emissions unit shall be designed for and operated with no visible emissionsexcept for periods not to exceed a total of five minutes during any two consecutive hours.

c. The permittee has requested to voluntarily limit allowable emissions of NOx andSO2 to the following:

i. 10.00 tons of NOx/yr during periods of process unit start-up and shutdown

ii. 100.00 tons of SO2/yr during periods of process unit start-up and shutdown

The emission limitations are being established to alleviate reporting requirementsassociated with reportable quantities (RQ) under the Superfund Amendments andReauthorization Act (SARA). The allowable limitations above do not apply toemissions associated with malfunctions and/or process upsets of the process unit.Any SO2 emissions associated with the start-up and shutdown of the sulfur recoveryunit at the facility (emissions unit P040) that are routed to this flare must still beapplied to the emissions limitation of 100 lbs SO2/1,000 lbs of sulfur processedcontained in OAC rule 3745-18-08(C)(3).

d. Requirements in 40 CFR, Part 63, Subpart UUU are applicable due to using this flare for control of reformer depressurization and purging of emissions.

e. The permittee shall comply with the applicable control requirements and operating limits under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1566(a)(1) and Table 15	Vent TOC to a Flare that meets Subpart A Requirements
63.1566(a)(2) and Table 16	Maintain Flare Pilot during Depressuring and Purging
63.1566(a)(5)	Operate according to OMMP
63.1566(b)(3), Table 16 and Table 18	Flare Operating Limits
63.1566(b)(6) and Table 19	Initial Compliance Demonstration for Flare – Visible Emissions

f. On September 26, 2008, U.S. EPA decided to stay the flare New Source Performance Standard (40 CFR, Part 60, Subpart Ja). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR, Part 60, Subpart Ja.

g. As required by paragraph 235 of the Federal Consent Decree Addendum, Civil Action No. SA07CA0683RF, dated November 20, 2007, Lima Refining Company accepts that emissions unit P007 is subject to New Source Performance Standards (NSPS) in 40 CFR, Part 60, Subpart J.

h. PTI No. P0108318 was an initial installation of the Kero-hydrotreater boiler and reboiler (KHT)(emissions units B033 and B034). The KHT project modified the LIU flare header. When the KHT commenced operation on April 16, 2013, Lima Refining Company accepted NSPS, Subpart Ja applicability because of the modified flare header.

i. PTI No. P0116562 establishes the following federally enforceable emission limitation for the purpose of limiting potential to emit (PTE). Pursuant to Section XII. Program Enhancements in the Federal Consent Decree Addendum, Civil Action No. SA07CA0683RF, dated November 20, 2007, the permittee shall:

i. limit the SO2 emissions to less than or equal to 500 lbs per day under normal operating conditions.

c) Operational Restrictions

(1) The flare shall be operated at all times when emissions are being vented to it.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116562]

(2) The flare shall be operated with a pilot flame present at all times.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116562]

(3) Only gases with a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater shall beburned in this emissions unit. Net heating value shall be calculated as specified in 40 CFRPart 60.18(f)(3).

The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec) except asspecified in sections c)(4) and c)(5).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116562]

(4) If the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000Btu/scf), the permittee may operate the flare at an exit velocity equal to or greater than 18.3m/sec (60 ft/sec), but less than122 m/sec (400 ft/sec).

[OAC rule 3745-77-07(A)(1) and PTI No.P0116562]

(5) Steam-assisted flares may be operated with an exit velocity less than the maximumpermitted velocity, but not greater than 122 m/sec (400 ft/sec). The maximum permittedvelocity shall be determined in accordance with 40 CFR Part 60.18(f)(5).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116562]

(6) The permittee shall not burn any continuous or intermittent, routinely-generated hydrocarbons in this flaring device that contain H2S in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

[OAC rule 3745-77-07(A)(1), PTI No. P0116562 and Federal Consent Decree Addendum, Civil Action No. SA07CA0683RF]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information during periods of start-upand shut-down:

a. the flare flow rate, in scf per hour;

b. the high heating value, in Btu/scf, as determined from the flare gas molecularweight and source of the gas;

c. the concentration of hydrogen sulfide in the flare gas, in weight fraction;

d. an indication of which process is undergoing start-up/shut-down mode;

e. the number of hours the process operated in start-up/shut-down mode;

f. the calculated NOx emissions using the following equation:

$$E = (FR) \times (HV) \times (T) \times (EF)/1{,}000{,}000$$

where:

E = NOx emissions in tons for each individual start-up and shut-down event;

FR = flare flow rate in scf per hour;

HV = high heating value, in Btu/scf;

T = time duration for each start-up/shut down event, in hours; and

EF = NOx emission factor of 0.068 lb of NOx/mmBtu (AP-42 Section 13.5,Industrial Flares [9/91])

g. the annual NOx emission rate calculated as follows:

$E_T = E_1 + E_2 + E_3 +... +E_n$

where:

E_T =Annual NOx emissions, in tons, as summed for the calendar year from Januaryto December; and

E_n = NOx emissions, in tons, for each individual start-up/shut-down event during thecalendar year

h. the calculated SO2 emissions using the following equation:

E = {(FR) x (H2S)]/379.7} x (0.98) x (64) x (T)

where:

E = SO2 emissions in tons for each individual start-up and shut-down event;

FR = flare flow rate in scf per hour;

H2S = volume fraction of hydrogen sulfide in flare gas;

379.7 = the volume, in ft3, of one lb mole of gas at standardconditions (60 degrees F & 1 atm) from the ideal gas law;

0.98 = efficiency of the flare for converting a lb mole of H2S into a lb mole ofSO2;

64 = molecular weight of SO2 in lb/lb mole; and

T = time duration for each start-up/shut down event, in hours

i. the annual SO2 emission rate calculated as follows:

$E_T = E_1 + E_2 + E_3 +... +E_n$

where:

E_T =Annual SO2 emissions, in tons, as summed for the calendar year from Januaryto December; and

E_n = SO2 emissions, in tons, for each individual start-up/shut-down event during thecalendar year

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(2) The permittee shall operate and maintain a device to continuously monitor the pilot flamewhen the emissions unit is in operation. The monitoring device and any recorder shall becalibrated, operated, and maintained in accordance with the manufacturer'srecommendations, instructions, and operating manuals. The monitoring device must complete a minimum of one cycle of operation for each successive 15-minute period.

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 and monitoring equipment.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(3) The permittee shall continuously monitor either visually and/or by camera whether or notthere are visible emissions from the flare. Whenever the permittee observes visibleemissions from the flare, the permittee shall record the start-time and end-time of visible emissions in an operations log.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(4) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1566(b)(1) and Table 17	Initial Compliance Demonstration for Flare – Install Flame Monitor
63.1566(c)(1), Table 15, Table 16, Table 20 and Table 21	Continuous Compliance Demonstration for Flare – Visible Emissions and Pilot Monitoring
63.1576(d), Table 20 and Table 21	Flare Recordkeeping Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

(5) Under normal conditions in order to demonstrate compliance with the emission limitation of 500 lbs of SO2 per day, the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the flare

gas stream before being combusted. The monitoring shall be conducted in accordancewith 40 CFR 60.105(a)(4), as follows:

a. The span value for this instrument is 0 to 300 ppm.

b. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shalluse Performance Specification 7 of 40 CFR, Part 60, Appendix B. The permitteeshall conduct a relative accuracy test audit (RATA) for the H2S continuousemission monitoring equipment at a minimum frequency of once every threeyears. Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPAmethods shall be used for conducting the RATAs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(6) A statement of certification of the existing H2S continuous emission monitoring system(CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPAdetailing the results of an Agency review of the certification tests and a statement by theAgency that the system is considered certified in accordance with the requirements of 40CFR, Part 60, Appendix B, Performance Specification 7.

Proof of certification shall bemade available to representatives of the Ohio EPA, Northwest District Office uponrequest.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(7) The permittee shall operate and maintain existing equipment to continuously monitorand record H2S from this emissions unit in units of the applicable standard. Suchcontinuous monitoring and recording equipment shall comply with the requirementsspecified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the H2S CEMS including,but not limited to, parts per million of H2S for each cycle time of the analyzer, with noresolution less than one data point per minute required, emissions of H2S in units of theapplicable standard (grain/dscf and parts per million by volume) as a rolling, 3-houraverage, the results of daily zero/span calibration checks, and the magnitudes of manualcalibration adjustments.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(8) The permittee shall maintain a written quality assurance/quality control plan for theCEMS designed to ensure continuous valid and representative readings of H2S. Theplan shall follow the requirements of 40 CFR, Part 60, Appendix F.

A logbook dedicated to the monitoring systems must be kept on site and available forinspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relativeaccuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy testaudits in units of the standard(s), in accordance with and at the frequencies required per40 CFR, Part 60, except as noted below.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods duringwhich the flare pilot flame was not functioning properly. The reports shall include the date,time, and duration of each such period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(2) The permittee shall submit quarterly deviation reports that include the start-time and end-time of visible emissionsobserved from the flare that exceeda total time of five minutes during any consecutive two hour period. The quarterly deviationreports shall be submitted by January 30, April 30, July 30, and October 30 of each yearand shall address the data obtained during the previous calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116562]

(3) The permittee shall submit annual reports that summarize the total annual actualemissions of NOx and SO2 during periods of process unit start-up and shutdown. The report shall be submitted by January 31 of each year and shall cover the previous calendaryear.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(4) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on aquarterly basis, in writing, of all rolling, 3-hour periods during which the averageconcentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4)exceeds 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts permillion by volume). The rolling, 3-hour average shall be determined as the arithmeticaverage of three contiguous 1-hour averages.

a. The notification shall include a copy of the record and shall be sent to theDirector (the Ohio EPA, Northwest District Office) by January 30, April 30, July30, and October 30 of each year and shall address the data obtained duringprevious calendar quarters.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

(5) If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, ifapplicable) greater than 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is162 parts per million by volume) during the calendar quarter, then the permittee shallsubmit a statement to that effect along with the emissions unit and monitor operatingtimes.

These quarterly reports shall be submitted by January 30, April 30, July 30, and October30 of each year and shall address the data obtained during previous calendar quarters.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1)of these terms and conditions shall be determined in accordancewith the following methods:

a. Emission Limitation:

10.00 tons of NOx/yr during periods of process unit start-up and shutdown

Applicable Compliance Method:

Compliance with the annual NOx emission limitation shall be demonstrated through record keeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116562]

b. Emission Limitation:

100.00 tons of SO2/yr during periods of process unit start-up andshutdown

Applicable Compliance Method:

Compliance with the annual SO2 emission limitation shall be demonstrated throughrecord keeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No.P0116562]

c. Emission Limitation:

No visible emissions except for periods not to exceed a total of five minutes during any two consecutive hours

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specifiedin 40 CFR, Part 60, Appendix A, Method 22.

[OAC rule 3745-77-07(C)(1) and PTI No.P0116562]

d. Emission Limitation:

Less than or equal to 500 lbs of SO2 per day under normal operating conditions

Applicable Compliance Method:

Compliance with the daily SO2 emission limitation shall be demonstrated through record keeping requirements in section d)(5) through d)(8).

[OAC rule 3745-77-07(C)(1) and PTI No.P0116562]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart UUU, including the following section:

63.1566(b)(2), Table 18, Option 1	Flare Performance Test Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

g) Miscellaneous Requirements

(1) None.

22. P010, Process

Operations, Property and/or Equipment Description:

Fluid Catalytic Cracker (FCC) with an electrostatic precipitator (ESP)(PR 195995)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(17) through d)(19)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0116563, modification issued 6/6/14)	14.0 lbs ammonia (NH3)/hr and 61.32 tons NH3/yr See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI No. P0116563, modification issued 6/6/14)	70 parts per million by volume (dry basis) of nitrogen oxides (NOx) at 0% excess air as a 365 day rolling block average 140 parts per million by volume (dry basis) of NOx at 0% excess air as a 7 day rolling block average 1 lb of particulate emissions (PE) per 1,000 lbs of coke burned, as a 1-hour block average 25 parts per million by volume (dry basis) of sulfur dioxide (SO2) at 0% excess air as a 365 day rolling block average 50 parts per million by volume (dry basis) of SO2 at 0% excess air as a 7 day rolling block average See b)(2)i.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)j.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-18-08(C)(5)	0.92 lb SO2/1,000 lbs of fresh feed See b)(2)e.
f.	40 CFR 63.1 through 63.15	Table 44 to 40 CFR Part 63, Subpart UUU – Applicability of General Provisions to Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply
g.	40 CFR, Part 63, Subpart UUU [40 CFR 63.1560 – 63.1579] [In accordance with 40 CFR 63.1562, this emissions unit is an affected source consisting of process vents, including bypass line(s) on the fluidized catalytic cracking unit that are associated with the regeneration of the catalyst used in the unit (i.e., the catalyst regeneration vent), subject to the emission limitations/control measures specified in this section.]	500 parts per million carbon monoxide (CO) by volume, dry basis (ppmvd) at 0% oxygen, as a one-hour block average See b)(2)f. through b)(2)h., d)(20), e)(8), f)(1)e. and f)(2)

(2) Additional Terms and Conditions

a. The following term is shown for informational purposes for a previously issued PTI for this emissions unit: PTI No. P0107734 (administrative modification issued 3/14/11) involved incorporation of NOx and SO2 emissions limitations from the federal consent decree addendum civil action No. SA07CA0683RF, dated 11/20/07, and deletion of all terms and conditions previously established for the carbon monoxide boiler, since this boiler has been permanently shut down.

b. The following term is shown for informational purposes for previously issued PTIs for this emissions unit: PTI No. P0106611 (administrative modification of PTI No. 03-17408 issued 8/2/10) involved revisions to relative accuracy test audit permit terms for the NOx and SO2 continuous emissions monitors (CEMS) to the frequency defined (once every three years) in the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07, and to remove permit terms that previously required a SO2 CEM on the ESP stack.

c. The following term is shown for informational purposes for previously issued PTIs for this emissions unit: PTI No. 03-17408 (administrative modification issued 6/23/10) involved the installation of a new continuous emission monitor(CEM) for CO on the FCC regeneratorflue gas exhaust, as listed in paragraph Nos. 94,101,

102 and 292 of the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07.

The CEM was installed on 12/1/06 and certified, and a certification letter was issued to the permitteeon 9/26/07, stating that the CEM is considered as certified on the date ofconsent decree addendum signature. Thus, CEM certification becameeffective on 11/20/07.

The CEM is used for compliance demonstration and reporting purposes for the CO emission limitation of 500 ppmvd, as established in the federal consent decree addendum.

PTI No. 03-17408 (administrative modification issued 1/31/08) involved installation of new CEMS for SO2, NOx and oxygen on the FCC regeneratorflue gas exhaust of this emissionsunit; as listed in paragraph Nos. 61, 89 and 291 of the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07.

The CEMS havebeen installed and certified, and a certification letter was issued to the permitteeon 9/26/07, stating that the CEMS are considered as certified on the date ofconsent decree addendum signature. Thus, CEMS certification becameeffective on 11/20/07. The CEMS were used as part of optimization studies todetermine final emission limitations for sulfur dioxide and nitrogen oxides, and are currently being used for compliance demonstration and reporting purposes for the emissions limitations established pursuant to terms of the consent decreeaddendum.

d. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with the terms and conditions of this permit.

e. The SO2 emissions limitation established in OAC 3745-18-08(C)(5) is less stringent than the regenerator flue gas exhaust requirements for SO2 in the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, as established pursuant to OAC rule 3745-31-05(D).

f. Pursuant to paragraph No. 94 in the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07, and Table 8 in 40 CFR, Part 63, Subpart UUU, the permittee shall meet an emission limitation of 500 parts per million CO by volume, dry basis (ppmvd) at 0% oxygen, as a one-hour block average.

g. Pursuant to paragraph No. 102 in the federal consent decreeaddendum, civil action No. SA07CA0683RF, dated 11/20/07, the CO emission limitation is not applicable during periods of startup, shutdown or malfunction of this emissions unit, provided that during the startup, shutdown or malfunction, the permittee shall, to the extent practicable, maintain and operate the relevant affected facility, including associated air pollution control equipment, in a matter consistent with good air pollution control practices for minimizing emissions.

h. This emissions unit is subject to Maximum Achievable Control Technology(MACT) standards in 40 CFR, Part 63, Subpart UUU. The permittee shall comply with the applicable control requirements, operating limits and emission limits under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1564(a)(1), Table 1	Meet the applicable emission limitation in Table 1 of subpart UUU that applies
63.1564(a)(2), Table 2	Comply with the applicable operating limit in Table 2 of this subpart
63.1564(a)(3)	Prepare an operation, maintenance, and monitoring plan according to the requirements in 63.1574(f) and operate at all times according to the procedures in the plan
63.1564(a)(4)	Emission Limits for metal HAP are not applicable during preapproved planned maintenance
63.1564(b)(3), Table 2 and Table 4	Establish each site-specific operating limit in Table 2 of this subpart that applies to this EU according to the procedures in Table 4
63.1564(b)(4)	Use the procedures specified to determine initial compliance with the emission limitations
63.1565(a)(1), Table 8	Emission Limit - Carbon Monoxide
63.1565(a)(3)	Prepare an Operation, Maintenance and Monitoring Plan
63.1565(a)(4)	Emission Limits for organic HAP are not applicable during preapproved planned maintenance
63.1570(a)	Compliance with Non-opacity Standards
63.1570(g)	Deviations during Startup, Shutdown or Malfunction
63.1574(f)(2)(i) through 63.1574(f)(2)(iv), and 63.1574(f)(2)((viii) through	Operation, Maintenance and Monitoring Plan Requirements

63.1574(f)(2)(x)	

i. This permit establishes the following federally enforceable emission limitation for the purpose of limiting potential to emit (PTE): Pursuant to paragraph Nos. 60, 95, 98, 292 of the Federal Consent Decree, Civil Action No. SA07CA0683RF, dated November 20, 2007 and the Stock Purchase Agreement Addendum to the Consent Decree between The Premcor Refining Group, Inc. and Lima Refining Company dated May 2, 2007, the permittee shall:

i. limit the emissions of NOx from the FCC regenerator to concentrations of 70 ppmvd at 0% oxygen as a 365 day rolling average and 140 ppmvd at 0% oxygen as a 7 day rolling average, in accordance with consent decree paragraph 95, 98 and paragraph C.8.b. of the Stock Purchase Agreement Addendum between The Premcor Refining Group, Inc. and Lima Refining Company, by December 31, 2013; and

ii. limit the emissions of SO2 from the FCC regenerator to concentrations of 25 ppmvd measured as a 365 day rolling average and 50 ppmvd measured as a 7 day rolling average, each at 0% oxygen, in accordance with consent decree paragraph 86 and Appendix E.4.c. on December 7, 2010.

j. The emissions limitation of 1 lb of PE per 1,000 lbs of coke burned, as a 1-hour block average, is more stringent than the emissions limitation that had been previously established under OAC rule 3745-17-11(B)(1).

c) Operational Restrictions

(1) The permittee shall operate the electrostatic precipitator (ESP) whenever the fluid catalytic cracker unit is in operation, except during periods of startup and shutdown that are exempted pursuant to OAC rule 3745-17-07(A)(3)(a)(i) and 3745-17-07(A)(3)(b)(i), or during malfunctions that are exempted pursuant to OAC rule 3745-17-07(A)(3)(c).

[OAC rule 3745-77-07(A)(1) and PTI No. P0116563]

(2) The ammonia injection feed rate into the ESP shall not exceed 14.0 lbs/hr.

[OAC rule 3745-77-07(A)(1) and PTI No. P0116563]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain the continuous opacity monitoring system tocontinuously monitor and record the opacity of the particulate emissions from thisemissions unit. The continuous monitoring and recording equipment shall comply withthe requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous opacitymonitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block averagebasis;

b. results of daily zero/span calibration checks and the magnitude of manualcalibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system,and control equipment;

d. the date, time, and hours of operation of the emissions unit without the controlequipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during anymalfunction of the control equipment and/or the continuous opacity monitoringsystem; as well as,

f. the reason (if known) and the corrective actions taken (if any) for each suchevent in d)(1)d. and d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(2) The permittee shall maintain on-site, the document of certification received from theU.S. EPA or the Ohio EPA's Central Office verifying that the continuous opacitymonitoring system has been certified to meet the requirements of 40 CFR, Part 60,Appendix B, Performance Specification 1. The letter/document of certification shall bemade available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire andrecord data in units of all applicable standard(s), and includes the sample extractionand transport hardware, sample conditioning hardware, analyzers, and data processinghardware and software.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(3) The permittee shall maintain a written quality assurance/quality control plan for thecontinuous opacity monitoring system, designed to ensure continuous valid andrepresentative readings of opacity and compliance with 40 CFR, Part 60, Appendix B,Performance Specification 1. The plan shall include, at a minimum, procedures forconducting and recording daily automatic zero/span checks, and a description ofpreventive maintenance activities. The plan shall describe step by step procedures forensuring accurate operation of the continuous opacity monitoring system on acontinuous basis. The quality assurance/quality control plan and a logbook dedicatedto the continuous opacity monitoring system must be kept on site and available forinspection during regular office hours.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(4) The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions for this emissions unit, in units of parts per million by volume, on a

dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40CFR Part 60.13.

The permittee shall maintain records of data obtained by the continuous NOx monitoringsystem including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in all units of the applicable standard(s) in the appropriate averagingperiod;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibrationadjustments;

e. results of required relative accuracy test audit(s), including results in units of theapplicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, andcontrol equipment;

g. the date, time, and hours of operation of the emissions unit without the controlequipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction ofthe control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(4)gand d)(4)(h).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(5) The permittee shall maintain on-site, the document of certification received from the U.S. EPAor the Ohio EPA's Central Office documenting that the continuous NOx monitoring system forthe FCC regenerator flue gas has been certified to meet the requirements of 40 CFR, Part 60,Appendix B, Performance Specification 2. The letter/document of certification shall be madeavailable to the Director (the Ohio EPA, Northwest District Office) uponrequest.

Each continuous monitoring system consists of all the equipment used to acquire and recorddata in units of all applicable standard(s), and includes the sample extraction and transporthardware, sample conditioning hardware, analyzers, and data processing hardware andsoftware.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(6) The permittee shall maintain a written quality assurance/quality control plan for the continuousNOx monitoring system for the FCC regenerator flue gas, designed to ensure

continuousvalid and representative readings of NOx emissions in units of the applicable standard(s).The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The qualityassurance/quality control plan and a logbook dedicated to the continuous NOx monitoringsystem must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relativeaccuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits inunits of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part60, except as noted below.

Pursuant to paragraph No. 62 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative test audit of the NOx CEM at a minimum frequency of once every three years; and

b. Conduct cylinder gas audits on the NOx CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(7) The permittee shall install, operate, and maintain equipment to continuously monitor andrecord SO2 emissions from this emissions unit, in units of parts per million by volume, on a dry basis. The continuousmonitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous SO2 monitoringsystem including, but not limited to:

a. emissions of SO2 in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of SO2 in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO2 monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(7)g. and d)(7)h.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(8) The permittee shall maintain on-site, the document of certification received from the U.S. EPAor the Ohio EPA's Central Office documenting that the continuous SO2 monitoring system forthe FCC regenerator flue gas has been certified to meet the requirements of 40 CFR, Part 60,Appendix B, Performance Specification 2.

The letter/document of certification shall be madeavailable to the Director (the Ohio EPA, Northwest District Office) uponrequest.

Each continuous monitoring system consists of all the equipment used to acquire and recorddata in units of all applicable standard(s), and includes the sample extraction and transporthardware, sample conditioning hardware, analyzers, and data processing hardware andsoftware.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(9) The permittee shall maintain a written quality assurance/quality control plan for the continuousSO2 monitoring system for the FCC regenerator flue gas, designed to ensure continuous validand representative readings of SO2 emissions in units of the applicable standard(s). The planshall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/qualitycontrol plan and a logbook dedicated to the continuous SO2 monitoring system must be kepton site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relativeaccuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits inunits of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part60, except as noted below.

Pursuant to paragraph No. 90 of the federal consent decree addendum, civil action No. SA07CA0683RF, dated 11/20/07, the permittee is required to:

a. Conduct a relative accuracy test audit of the SO2 CEM at a minimum frequency of once every three years, and

b. Conduct cylinder gas audits on the SO2 CEM during each quarter when a relative accuracy test audit is not conducted.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(10) The permittee shall install, operate and maintain equipment to continuously monitor andrecord oxygen (O2) emitted from this emissions unit, in units of percent O2. The

continuous monitoring andrecording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O2 monitoring systemincluding, but not limited to:

a. percent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in d)(10)f. and d)(10)g.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(11) The permittee shall maintain on-site, the document of certification received from the U.S. EPAor the Ohio EPA's Central Office documenting that the continuous O2 monitoring system forthe FCC regenerator flue gas has been certified to meet the requirements of 40 CFR, Part 60,Appendix B, Performance Specification 3. The letter/document of certification shall be madeavailable to the Director (the Ohio EPA, Northwest District Office) uponrequest.

Each continuous monitoring system consists of all the equipment used to acquire and recorddata in units of all applicable standard(s), and includes the sample extraction and transporthardware, sample conditioning hardware, analyzers, and data processing hardware andsoftware.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(12) The permittee shall maintain a written quality assurance/quality control plan for the continuousO2 monitoring system for the FCC regenerator flue gas, designed to ensure continuous validand representative readings of O2 emissions in units of the applicable standard(s).

The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/qualitycontrol plan and a logbook dedicated to the continuous SO2 monitoring system must be kepton site and available for inspection during regular office hours.

a. The plan shall include the requirement to conduct quarterly cylinder gas audits or relativeaccuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits inunits of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(13) The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit,in units of parts per million by volume, on a dry basis. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of CO in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(13)g. and d)(13)h.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; PTI No. P0116563; and federal consent decree #SA07CA0683RF, dated 11/20/07]

(14) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous CO monitoring system forthe FCC regenerator flue gas has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 4 or 4a, as appropriate. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; PTI No. P0116563; and federal consent decree #SA07CA0683RF, dated 11/20/07]

(15) The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring systemfor the FCC regenerator flue gas, designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; PTI No. P0116563; and federal consent decree #SA07CA0683RF, dated 11/20/07]

(16) The permittee shall properly install, operate, and maintain equipment to continuously monitorand record the ammonia injection feed rate into the ESP. The monitoring equipment shall beinstalled, calibrated, operated, and maintained in accordance with the manufacturer'srecommendations, instructions, and operating manual(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(17) The permit to install for this emissions unit P010 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit'sexhaust system, as specified by the permittee in the permit to install application. The OhioEPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was appliedfor each pollutant emitted by this emissions unit using data from the permit to installapplication and the ISC-PRIME (or other Ohio EPA approved model). The predicted 1-hourmaximum ground-level concentration from the use of the ISC-PRIME model was compared tothe Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizesthe results of the modeling for the "worst case" pollutant(s):

Pollutant: ammonia

TLV (mg/m3): 54.7

Maximum Hourly Emission Rate (lbs/hr): 14.0 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (mg/m3): 2.027

MAGLC (mg/m3): 1,302

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(18) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the"Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact suchparameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy"will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy"will not be satisfied, the permittee will not make the change. Changes that can affect theparameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanupmaterials), or the use of new materials, that would result in the emission of a compoundwith a lower Threshold Limit Value (TLV), as indicated in the most recent version of thehandbook entitled "American Conference of Governmental Industrial Hygienists(ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would resultin an increase in emissions of any pollutant with a listed TLV that was proposed in theapplication and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(19) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes,the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule3745-31-01 solely due to the emissions of any type of toxic air contaminant not previouslyemitted, and a modification of the existing permit to install will not be required, even if the toxicair contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. Ifthe change(s) is (are) defined as a modification under other provisions of the modificationdefinition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conductsevaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutantsemitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit stillsatisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runsthat show the results of the application of the "Air Toxic Policy" for the change.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(20) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1564(b)(1); and Table 3	Install, operate, and maintain a continuous monitoring system(s) according to the requirements in 63.1572 and Table 3.
63.1564(b)(1); and Table 3	Install, operate, and maintain a continuous monitoring system(s) according to the requirements in 63.1572 and Table 3.
63.1564(c)(1); Table 1; Table 2; Table 6 and Table 7	Demonstrate continuous compliance with each emission limitation in Tables 8 and 9 of this subpart that applies to this unit according to the methods specified in Tables 6 and 7.
63.1564(c)(2)	Document Conformance with Operations, Maintenance and Monitoring Plan
63.1564(c)(3)	Continuous Compliance - Nickel Operating Limit Calculations
63.1565(b)(1)	Install and Operate Carbon Monoxide Continuous Emission Monitoring System
63.1565(c)(1), Table 8, Table 9, Table 13 and Table 14	Continuous Compliance - Carbon Monoxide Monitoring
63.1565(c)(2)	Comply with Operations, Maintenance and Monitoring Plan
63.1569(a)(1)(i) and Table 36, Option 1	Bypass Line Monitor
63.1569(a)(2)	Bypass Line Monitor - U.S. EPA may grant alternative
63.1569(a)(3)	Comply with Operations, Maintenance and Monitoring Plan
63.1569(c)(1), Table 36 and Table 39	Continuous Compliance - Bypass Lines
63.1569(c)(2)	Comply with Operations, Maintenance and Monitoring Plan
63.1570(c)	General Duty - Log Prior to Continuous Monitoring System Validation
63.1570(d)	Develop Startup, Shutdown and Malfunction Plan

63.1572(a)(1) through 63.1572(a)(4), 63.1572(b)(1), 63.1572(c)(1) through 63.1572(c)(5), 63.1572(d)(1) through 63.1572(d)(2) and Table 40	Continuous Emission Monitoring System, Continuous Opacity Monitoring System, and Continuous Parameter Monitoring System Requirements as Applicable
63.1576(a)(1) through 63.1576(a)(3), 63.1576(b)(1) through 63.1576(b)(5), 63.1576(d) through 63.1576(i), Table 6, Table 7, Table 13, Table 14 and Table 39	Recordkeeping Requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; and PTI No. P0116563]

e) Reporting Requirements

(1) The permittee shall comply with the following quarterly reporting requirements for theemissions unit and its continuous opacity monitoring system (COMS):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuousmonitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirementsestablished in this permit, the permittee shall submit reports within 30 days followingthe end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of opacity values in excess of any limitationspecified in this permit, 40 CFR, Part 60; OAC rule 3745-17-07, and any otherapplicable rules or regulations.

The report shall document the date, commencement and completion times, duration,and magnitude (percent opacity) of each 6-minute block average exceeding theapplicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during thecalendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. a description of any change in the equipment that comprises the COMS, including any change to the hardware,changes to the software that may affect COMS readings, and/or changes in thelocation of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exceedancesduring the calendar quarter, as specified above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the COMS while theemissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the COMS, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the COMS and/or control equipment while the emissions unit was inoperation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in e)(1)b.vii. and e)(1)b.viii.

Each report shall address the operations conducted and data obtained during theprevious calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is anexceedance of the opacity limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(2) The permittee shall comply with the following quarterly reporting requirements for theemissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuousmonitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirementsestablished in this permit, the permittee shall submit reports within 30 days followingthe end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of NOx emissions in excess of any applicable limitspecified in this permit, 40 CFR, Part 60; OAC Chapters 3745-14 and 3745-23, and anyother applicable rules or regulations.

The report shall document the date, commencement and completion times, duration,and magnitude of each exceedance, as well as the reason (if known) and the correctiveactions taken (if any) for each exceedance. Excess emissions shall be reported inunits of the applicable standard(s).If there are no excess emissions during thecalendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and otherassociated monitors;

iii. a description of any change in the equipment that comprises the continuousemission monitoring system (CEMS), including any change to

the hardware,changes to the software that may affect CEMS readings, and/or changes in thelocation of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exceedances duringthe calendar quarter, as specified above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous NOx monitoring system while theemissions unit was in operation;

vii. results and dates of quarterly cylinder gas audits;

viii. unless previously submitted, results and dates of the relative accuracy testaudit(s), including results in units of the applicable standard(s), (duringappropriate quarter(s));

ix. unless previously submitted, the results of any relative accuracy test auditshowing the continuous NOx monitor out-of-control and the compliant resultsfollowing any corrective actions;

x. the date, time, and duration of any/each malfunction* of the continuous NOxmonitoring system, emissions unit, and/or control equipment;

xi. the date, time, and duration of any downtime* of the continuous NOx monitoringsystem and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in e)(2)b.x. and e)(2)b.xi.

Each report shall address the operations conducted and data obtained during theprevious calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is anexceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(3) The permittee shall comply with the following quarterly reporting requirements for theemissions unit and its continuous SO2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuousmonitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirementsestablished in this permit, the permittee shall submit reports within 30 days followingthe end of each calendar quarter to the Ohio EPA, NorthwestDistrict Office, documenting all instances of SO2 emissions in excess of any applicable limitspecified in this permit, 40 CFR, Part 60; OAC Chapter 3745-18, and any otherapplicable rules or regulations.

The report shall document the date, commencementand completion times, duration, and magnitude of each exceedance, as well as thereason (if known) and the corrective actions taken (if any) for each exceedance.Excess emissions shall be reported in units of the applicable standard(s). If there areno excess emissions during the calendar quarter, the permittee shall submit astatement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO2 and other associatedmonitors;

iii. a description of any change in the equipment that comprises the continuousemission monitoring system (CEMS), including any change to the hardware,changes to the software that may affect CEMS readings, and/or changes in thelocation of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exceedances duringthe calendar quarter, as specified above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous SO2 monitoring system while theemissions unit was in operation;

vii. results and dates of quarterly cylinder gas audits;

viii. unless previously submitted, results and dates of the relative accuracy testaudit(s), including results in units of the applicable standard(s), (duringappropriate quarter(s));

ix. unless previously submitted, the results of any relative accuracy test auditshowing the continuous SO2 monitor out-of-control and the compliant resultsfollowing any corrective actions;

x. the date, time, and duration of any/each malfunction* of the continuous SO2monitoring system, emissions unit, and/or control equipment;

xi. the date, time, and duration of any downtime* of the continuous SO2 monitoringsystem and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in e)(3)b.x. and e)(3)b.xi.

Each report shall address the operations conducted and data obtained during the previouscalendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(4) The permittee shall comply with the following quarterly reporting requirements for theemissions unit and its continuous O2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuousmonitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirementsestablished in this permit, the permittee shall submit reports within 30 days followingthe end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of continuous O2 monitoring system downtime andmalfunction while the emissions unit was on line.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous O2 and other associatedmonitors;

iii. a description of any change in the equipment that comprises the continuousemission monitoring system (CEMS), including any change to the hardware,changes to the software that may affect CEMS readings, and/or changes in thelocation of the CEMS sample probe;

iv. the total operating time (hours) of the emissions unit;

v. the total operating time of the continuous O2 monitoring system while theemissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits;

vii. unless previously submitted, results and dates of the relative accuracy testaudit(s) (during appropriate quarter(s));

viii. unless previously submitted, the results of any relative accuracy test auditshowing the continuous O2 monitor out-of-control and the compliant resultsfollowing any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous O2monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous O2 monitoringsystem while the emissions unit was in operation; and

xi. the reason (if known) and the corrective actions taken (if any) for each event in e)(4)b.ix. and e)(4)b.x.

Each report shall address the operations conducted and data obtained during theprevious calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is anexceedance of any applicable limit

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR, Part 60; OAC Chapter 3745-21, and any other applicable rules or regulations.

The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in e)(5)b.xi. and e)(5)b.xii.

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; PTI No. P0116563; and federal consent decree #SA07CA0683RF, dated 11/20/07]

(6) The permittee shall submit deviation (excursion) reports that identify all periods of time duringstartup and shutdown of the emissions unit when the ESP was not in operation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(7) The permittee shall submit deviation (excursion) reports that identify all periods of time whenthe ammonia injection feed rate to the ESP exceeded 14.0 lbs/hr. Each report shall besubmitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

(8) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 63, Subpart UUU, including the following sections:

63.1563(e)	Notification Requirements
63.1564(b)(6) and 63.1564(b)(7)	Submit Notification of Compliance Status, including Operations Maintenance and Monitoring Plan
63.1565(b)(5) and 63.1565(b)(6)	Submit Notification of Compliance Status, including Operations Maintenance and Monitoring Plan

63.1569(b)(3) and 63.1569(b)(4)	Submit Notification of Compliance Status, including Operations Maintenance and Monitoring Plan
63.1570(f)	Report Deviations
63.1574(a)	Notification Requirements
63.1574(a)(2)	Performance Test Notification
63.1574(a)(3), 63.1574(d) and Table 42.1, Table 42.2 and Table 42.3	Notification of Compliance Status - Identify Affected Sources, Emission Limits and Monitoring Operations
63.1574(f)(1)	Submit Notification of Compliance Status, including Operations Maintenance and Monitoring Plan
63.1575(a), 63.1575(b)(1) through 63.1575(b)(5), 63.1575(c), 63.1575(e)(1) through 63.1575(e)(13), 63.1575(f)(1) through 63.1575(f)(2), 63.1575(g) and Table 43	Compliance Report Requirements
63.1575(h)(1) through 63.1575(h)(2)	Startup, Shutdown and Malfunction Reporting Requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; and PTI No. P0116563]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall bedetermined in accordance with the following methods:

a. Emission Limitations:

14.0 lbs NH3/hr and 61.32 tons NH3/yr

Applicable Compliance Method:

The lb/hr emission limitation was established on the basis that 100% of the NH3injected into the ESP could exit as unreacted NH3. Therefore provided compliance isshown with the operational restriction not to exceed an NH3 injection feed rate into theESP of 14.0 lbs/hr, compliance with the NH3 lb/hr emission limitation shall be assumed.

If required, compliance with the NH3 emission limitation shall be determined inaccordance with the test methods and procedures specified in 40 CFR, Part 60,Appendix A - Methods 1 through 4 and 206.

As long as compliance with the hourly emission limitation is maintained, compliance withthe annual emission limitation shall be assumed (the annual

emission limitation wasdetermined by multiplying the hourly emission limitation by 8,760 hrs/yr, and thendividing by 2,000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

b. Emission Limitation:

70 parts per million by volume (dry basis) of NOx at 0% excess air as a 365 day rolling block average, and 140 parts per million by volume (dry basis) of NOx at 0% excess air as a 7 day rolling block average

Applicable Compliance Method:

Ongoing compliance with the NOx emission limitations contained in this permit and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

c. Emission Limitation:

1 lb of PE per 1,000 lbs of coke burned, as a 1-hour block average

Applicable Compliance Method:

Compliance with this requirement has been demonstrated by a stack test that was conducted on July 24, 2012. The results of the stack test were submitted to Ohio EPA, Northwest District Office on August 21, 2012.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

d. Emission Limitation:

25 parts per million by volume (dry basis) of SO2 at 0% excess air as a 365 day rolling block average, and 50 parts per million by volume (dry basis) of SO2 at 0% excess air as a 7 day rolling block average

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record Keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

e. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided bythe rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR, Part60, and any other applicable standard(s) shall be demonstrated through the datacollected as required in the Monitoring and Record keeping Section of this permit; andthrough demonstration of compliance with the quality assurance/quality control plan,which shall meet the testing and recertification requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

f. Emission Limitation:

0.92 lb of SO2/1,000 lbs of fresh feed

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above basedupon the results of emission testing conducted in accordance with Methods 1 - 4 and 6of 40 CFR, Part 60, Appendix A (as required in the terms and conditions for thisemissions unit in the final Title V permit minor modification issued on 11/28/05.

Ongoing compliance with the SO2 emission limitations contained in this permit, 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the datacollected as required in the Monitoring and Record keeping Section of this permit; andthrough demonstration of compliance with the quality assurance/quality control plan,which shall meet the testing and recertification requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1) and PTI No. P0116563]

g. Emission Limitation:

500 parts per million CO by volume, dry basis (ppmvd) at 0% oxygen, as a one-hour block average

Applicable Compliance Method:

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR, Part 63, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR, Part 60.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; and PTI No. P0116563]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1564(b)(2) and Table 4	Conduct a performance test for each catalytic cracking unit not subject to the NSPS for PM according to the requirements in 63.1571 and under the conditions specified in Table 4
63.1564(b)(5) and Table 5	Demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 5
63.1565(b)(4) and Table 12	Initial Compliance Demonstration for Carbon Monoxide
63.1569(b)(1), 63.1569(b)(2), Table 36, Table 37 and Table 38	Initial Compliance Demonstration - Bypass Monitoring
63.1571(a)	Performance Test Dates
63.1571(b)(1) through 63.1571(b)(5)	Performance Test General Requirements
63.1571(d)(1) and 63.1571(d)(3)	Establish Site-Specific Operating Limit and Laboratory Procedures as Applicable
63.1571(e)(3)	Procedure for Changing Operating Limit as Applicable

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart UUU; and PTI No. P0116563]

g) Miscellaneous Requirements

(1) None.

23. P012, Process

Operations, Property and/or Equipment Description:

API oil/water separator with covers

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(M)(2)	See b)(2)a.

(2) Additional Terms and Conditions

a. Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall control the emissions of volatile organic compounds from any wastewater separator no later than the date specified in paragraph (C)(13) of OAC rule 3745-21-04 by equipping all forebay sections and other separator sections with covers and seals which minimize the amount of oily water exposed to the ambient air. In addition, all covers and forebay and separator sections shall be equipped with lids and seals which are kept in a closed position at all times except when in actual use.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

24. P014, Process

Operations, Property and/or Equipment Description:

Vacuum II Distillation Tower (PR 164058)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-18-06(E)(2)	1,620 lbs of sulfur dioxide (SO2)/hr [See b)(2)a.]
b.	OAC rule 3745-21-09(M)(1)	See b)(2)b.
c.	40 CFR Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since the vacuum II distillation tower is considered a Group 1 process vent which is controlled by compressing the vapors to the refinery fuel system or use of the LIU flare - emissions unit P007]	See b)(2)c., b)(2)d. and e)(1)
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The allowable SO2 emission limitation is based on the equation in OAC rule 3745-18-06(E)(2) and a maximum process weight rate of 385.25 tons per hour.

b. The permittee shall control the emissions of volatile organic compounds from any vacuum producing system by compressing the vapors and adding them to the refinery fuel gas system.

c. The permittee has identified the refinery fuel gas system as the primary control device, and the LIU flare (emissions unit P007) as the secondary control device for this emissions unit. Terms and conditions for this flare are contained in the terms and conditions for emissions unit P007.

d. MACT requirements in 40 CFR, Part 63, Subpart CC are applicable for each Group 1 process vent that is part of this emissions unit, and is routed to either emissions unit P006 and/or P007, the FCC/Coker flare or LIU flare, respectively.

The permittee shall comply with the applicable control requirements, emission limit and compliance demonstration methods under 40 CFR, Part 63, Subpart CC, including the following sections:

63.643(a)(1)	Required Use of Flare to Reduce Organic Hazardous Air Pollutants

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f)(1)(ii)	Notification of Compliance Status – Identification of Miscellaneous Process Vents
63.655(g)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents
63.655(g)(6)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents – Excess Emissions Reporting

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

1,620 lbs of SO2/hr

Applicable Compliance Method:

Compliance shall be based upon the emission testing conducted on December 9, 2004. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

25. P017, Process

Operations, Property and/or Equipment Description:

Aromatics process: Extraction column (PR 164477), Thermal Hydroalkylation Reactor (PR 164565), Stripper Column (PR 164478), Benzene Recovery Column (PR164480), Cold Box (No PR)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR, Part 61, Subpart J	See b)(2)a. and d)(1)
b.	40 CFR, Part 61, Subpart V	See b)(2)a. and d)(1)
c.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
d.	OAC rule 3745-21-09(T)	See b)(2)a. and d)(1)
e.	40 CFR, Part 63, Subpart EEEE [40 CFR 63.2330 – 63.2406] [In accordance with 40 CFR 63.2334, this emissions unit is an affected source consisting of an organic liquids distribution (OLD) operation,subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b., d)(2), e)(1) andf)(1)
f.	40 CFR 63.1 through 63.15	Table 12 to 40 CFR, Part 63, Subpart EEEE – Applicability of General Provisions to Subpart EEEE shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The requirements of this rule are equivalent to or less stringent than the alternative leak detection and repair (LDAR) plan submitted by the permittee. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

b. The control device for this emissions unit is the benzene vent scrubber which also is used as the control device for emissions unit P023. Thus, portions of 40 CFR, Part 63, Subpart EEEE for use of a scrubber are applicable to this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall include the aromatics process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2366(a)	Install Continuous Monitoring System (CMS) on Control Device
63.2374(a) through 63.2374(c)	Monitoring per 40 CFR, Part 63, Subpart SS; Monitor continuously when in OLD operation except for CMS malfunction, repair and quality assurance; Excluded CMS data
63.2394(a) through 63.2394(c)	Records Format, Retention Time and Location

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

e) Reporting Requirements

(1) The permittee shall comply with the applicable compliance deadline and reporting requirements under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2342(b)(1)	Compliance Deadlines
63.2342(d)	Notification Deadlines
63.2370(c)	Notice of Compliance Status – Initial Compliance Determination

63.2382(a), 63.2382(b), 63.2382(d)	Required Notification and Notification of Compliance Status
63.2386(a) through 63.2386(e), and Table 11	Compliance Reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart EEEE, including the following section:

63.2362(a)	Subsequent Performance Tests

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

g) Miscellaneous Requirements

(1) None.

26. P018, Process

Operations, Property and/or Equipment Description:

Isomerization process: Stabilizer tower (PR 164491), Isomerization Reactor (PR 164976-head)(PR 164977-tail), Fuel Gas Scrubber (PR 164489)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(T)	See b)(2)a. and d)(1)
b.	40 CFR, Part 60, Subpart GGG and Subpart VV	See b)(2)a. and d)(1)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19

(2) Additional Terms and Conditions

a. The requirements of this rule are equivalent to or less stringent than the alternative leak detection and repair (LDAR) plan submitted by the permittee. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall include the Isomerization process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

27. P023, Loading Rack

Operations, Property and/or Equipment Description:

Benzene Single RR Car and TK Truck Loading Rack

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107934, modification issued 4/20/11)	5.16 lbs of benzene/hr
b.	40 CFR, Part 61, Subpart J	See b)(2)a.
c.	40 CFR, Part 61, Subpart V	See b)(2)a.
d.	40 CFR, Part 61, Subpart BB	See b)(2)b. through b)(2)m., d)(4) through d)(9), e)(1), and f)(2) through f)(7)
e.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
f.	40 CFR, Part 63, Subpart EEEE [40 CFR 63.2330 – 63.2406] [In accordance with 40 CFR 63.2334, this emissions unit is an affected source consisting of an organic liquids distribution (OLD) operation,subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b. through b)(2)o., d)(10), e)(2) andf)(8)
g.	40 CFR, Part 63, Subpart SS [40 CFR 63.980 – 63.999] [In accordance with 40 CFR 63.980, the provisions of Subpart SS include requirements for closed vent systems, control devices and routing of air emissions to a fuel gas system or process. These provisions apply since 40 CFR, Part 63,	See b)(2)p., d)(11), e)(3) and f)(9) These air emission standards are placed here for administrative convenience and only apply to those permittees of facilities subject to a referencing subpart. The provisions of 40 CFR, Part 63, Subpart A (General Provisions) do not apply to this subpart except as specified in a referencing subpart.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	SubpartEEEE references the use of this Subpart for such air emission control.]	
h.	40 CFR 63.1 through 63.15	Table 12 to 40 CFR, Part 63, Subpart EEEE – Applicability of General Provisions to Subpart EEEE shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
i.	OAC rule 3745-21-07(E)	See b)(2)n and b)(2)q.

(2) Additional Terms and Conditions

a. The requirements of this rule are equivalent to or less stringent than the alternative leak detection and repair (LDAR) plan submitted by the permittee. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

b. When using the flare (LIU flare, emissions unit P007) as a control device for P023, the permittee shall meet the requirements in 63.983 for closed vent systems; 63.987 for flares; 63.997(a), (b) and (c) for provisions regarding flare compliance assessments; the monitoring, recordkeeping, and reporting requirements referenced therein; and the applicable recordkeeping and reporting requirements of 63.998 and 63.999.

[40 CFR 63.2346(b)(1) and 40 CFR 63.982(3)(ii)]

c. Pursuant to the Ohio EPA approval letter dated March 21, 2007, when operating the scrubber as the control device for P023, the permittee shall comply with the U.S. EPA approved Alternative Monitoring Plan (AMP) to comply with the requirements of 40 CFR, Part 61, Subpart BB and 40 CFR, Part 63, Subpart EEEE, which, as stated in the approved AMP, is consistent with existing terms and conditions.

d. The permittee shall equip each loading rack with a vapor collection system that is:

i. Designed to collect all benzene vapors displaced from tank trucks and railcars during loading, and

ii. Designed to prevent any benzene vapors collected at one loading rack from passing through another loading rack to the atmosphere.

[40 CFR 61.302(a)]

e. The permittee shall install a control device and reduce benzene emissions routed to the atmosphere through the control device by 98 weight percent.

[40 CFR 61.302(b)]

f. The permittee shall operate any flare used to comply with 40 CFR 61.302(b) in accordance with the requirements of 40 CFR 60.18(b) through (f), and comply with 63.987 as specified in 40 CFR,Part 63, Subpart EEEE, Table 3, option 7.

g. The permittee shall limit the loading of benzene into vapor-tight tank trucks and vapor-tight railcars using the following alternative method for each car every time the car is loaded:

i. Connect the loading arms, vent connections, grounding cable, etc. per the loading procedures.

ii. Pressurize each car with nitrogen to 30psig. For new cars, or cars returning from the maintenance shop, the nitrogen pressure must be taken to 35 psig.

iii. When the nitrogen pressure reaches 30 psig (or 35 psig for new or repairedcars)at the vent end pressure gaugeof each car, close the nitrogen valve to each car.

iv. Using liquid soap, spray each of the following: every flange, isolation valves, safety valves, bleed valves, manways (top and bottom), and level probe connections.

v. Report any and all leaks to the Operating Supervisor and repair as needed.

vi. If a major repair is needed, such as changing out a safety valve or replacing a valve or hose gasket; after the repair, re-pressure that particular car and re-soap for leaks.

vii. When all leaks are repaired or if there were no leaks, slowly release the pressure from each car to 10 psig or less to the benzene vent scrubber.

viii. Continue with the normal loading procedure.

[40 CFR 61.302(d)]

h. The permittee shall limit loading of benzene to tank trucks and railcars equipped with vapor collection equipment that is compatible with the affected facility's vapor collection system.

[40 CFR 61.302(f)]

i. The permittee shall limit loading of tank trucks and railcars to tank trucks and railcars whose collection systems are connected to the affected facility's vapor collection systems.

[40 CFR 61.302(g)]

j. The permittee shall ensure that the vapor collection and benzene loading equipment of tank trucks and railcars shall be designed and operated to prevent gauge pressure in the tank truck or railcar tank from exceeding, during loading, the initial pressure the tank was pressured up to and shown to be vapor tight at during the most recent vapor-tightness test using Method 27 of Appendix A to 40 CFR, Part 60. As an alternative to Method 27, the permittee may use the procedures listed in term and condition b)(2)g.i. through b)(2)g.viii. of this emissions unit, as allowed by 40 CFR 61.302(d)(3) to conduct the vapor-tightness test. This vapor-tightness test pressure is not to be exceeded when measured by the procedures specified in 40 CFR 61.304(c).

[40 CFR 61.302(h)]

k. The permittee shall ensure that no pressure-vacuum vent in the affected facility's vapor collection system for tank trucks and railcars shall begin to open at a system pressure less than the maximum pressure at which the tank truck or railcar is operated.

[40 CFR 61.302(i)]

l. The permittee shall inspect the vapor collection system and the control device for detectable emissions, and shall repair any leaks detected, in accordance with 40 CFR 61.242-11 (e) and (f). This inspection of the vapor collection system and control device shall be done during the loading of tank trucks or railcars.

[40 CFR 61.302(k)]

m. Vent systems that contain valves that could divert a vent stream from a control device shall have car-sealed opened all valves in the vent system from the emission source to the control device, and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device.

[40 CFR 61.302(l)]

n. The requirements of this rule are less stringent than the requirements of 40 CFR, Part 61, Subpart BB.

o. The permittee shall comply with the applicable control requirements, operating limits and emission limits under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2346(b)	Transfer Racks Control Requirements
63.2346(b)(1) and Table 2	Transfer Racks Emission Limits
63.2346(d)	Transport Vehicle Control Requirements
63.2346(e) and Table 3	Transfer Rack Operating Limits

63.2346(g)	Procedures for Requesting Alternative Standards
63.2346(i)	Safety Device
63.2354(a)(2)	Design Evaluation Procedures
63.2354(c)	HAP Content Determination Procedures
63.2358(b)(1) and 63.2358(c)(2)	Initial Compliance Demonstration Date – Emission Limits and Work Practices
63.2370(a), 63.2370(b), and Tables 5 through 7	Initial Compliance Demonstration for Loading Rack Design Evaluation, Transport Vehicles
63.2378(c)	Limits on Planned Routine Maintenance
63.2396(b)	Regulatory Overlap with 40 CFR, Part 61, Subpart BB

p. The permittee shall comply with the applicable control and operating requirements under 40 CFR, Part 63, Subpart SS, including the following sections:

63.985(b)(1)(i)(A)	Design Evaluation
63.990(a)(1)	Equipment and Operating Requirements
63.990(a)(2)	Operate Control Device At All Times Emissions Are Vented To It.

q. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this dateis no longer part of the State regulations.

On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms

shall become federally enforceable after U.S. EPA approves the rule revision: none.

c) Operational Restrictions

(1) The permittee shall use submerged fill whenever this emissions unit is in operation.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107934]

(2) Pursuant to the U.S. EPA approval letter dated November 12, 1998 for alternate monitoring parameters in accordance with 40 CFR 63.151(g), the following operating parameters shall be met by the permittee when operating the benzene vent scrubber as the control device:

a. benzene vent scrubber:

i. maintain the lean solvent temperature less than 120 degrees Fahrenheit.

ii. maintain the rich solvent pH greater than 6.5.

iii. maintain the rich solvent percent hydrocarbon less than 10 percent.

b. tetra stripper solvent regenerator:

i. maintain the bottoms temperature greater than 275 degrees Fahrenheit.

[OAC rule 3745-77-07(A)(1), 40 CFR 63.151(g) and PTI No. P0107934]

(3) The permittee shall operate the benzene vent scrubber or the LIU flare as the control device for this emissions unit whenever clean tank trucks and/or railcars are being loaded.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107934]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall include the benzene single railroad car and tank truck loading rack fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)and PTI No. P0107934]

(2) The permittee shall calibrate, maintain, and operate according to manufacturer's specifications, device(s) to continuously monitor the temperature of the scrubber absorbing fluid. The device(s) shall be operated such that the benzene vent scrubber lean solvent temperature and tetra stripper solvent regeneration bottoms temperature can be determined.

[OAC rule 3745-77-07(C)(1)and PTI No. P0107934]

(3) The permittee shall obtain daily samples of the scrubber absorbing fluid and conduct an analysis of the fluid for rich solvent pH and rich solvent percent hydrocarbon.

[OAC rule 3745-77-07(C)(1)and PTI No. P0107934]

(4) The permittee of an affected facility who wishes to demonstrate compliance with the standards specified under 40 CFR 61.302(b) using control devices other than an incinerator, steam generating unit, process heater, carbon adsorber, or flare shall provide the Administrator with information describing the operation of the control device and the process parameter(s) that would indicate proper operation and maintenance of the device.

The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

[OAC rule 3745-77-07(C)(1), 40 CFR 61.303(e)and PTI No. P0107934]

(5) Each permittee of an affected facility complying with 40 CFR 61.302(e)(1) shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in 40 CFR 61.302(e)(1) is not attained. The permittee shall place the alarm system so that it can be seen and heard where cargo transfer is controlled and on the open deck.

[OAC rule 3745-77-07(C)(1), 40 CFR 61.303(f)and PTI No. P0107934]

(6) Permittees using a vent system that contains valves that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do one or a combination of the following:

a. Install a flow indicator immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The flow indicator shall be capable of recording flow at least once every 15 minutes.

b. Monitor the valves once a month, checking the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed (i.e., from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be vented directly or indirectly to the atmosphere).

[OAC rule 3745-77-07(C)(1),40 CFR 61.303(g)and PTI No. P0107934]

(7) If a vent system containing valves that could divert the emission stream away from the control device is used, each permittee subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

a. All periods when flow is indicated if flow indicators are installed under 40 CFR 61.303(g)(1).

b. All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device) if valves are monitored under 40 CFR 60.303(g)(2).

[OAC rule 3745-77-07(C)(1), 40 CFR 61.305(c)and PTI No. P0107934]

(8) The permittee of an affected facility shall keep the vapor-tightness documentation required under 40 CFR 61.302(d) on file at the affected facility in a permanent form available for inspection.

[OAC rule 3745-77-07(C)(1), 40 CFR 61.305(g)and PTI No. P0107934]

(9) The permittee of an affected facility shall update the documentation file required under 40 CFR 61.302(d) for each tank truck or railcar at least once per year to reflect current test results as determined by the appropriate method. The permittee shall include, as a minimum, the following information in this documentation:

a. test title;

b. tank truck or railcar owner and address;

c. tank truck or railcar identification number;

d. testing location;

e. date of test;

f. tester name and signature;

g. witnessing inspector: name, signature, and affiliation;

h. test results, including, for railcars and tank trucks, the initial pressure up to which the tank was pressured at the start of the test, and any repairs that were necessary to ensure vapor tightness; and

i. a checklist indicating that each of the procedures outlined in the alternative method has been followed.

[OAC rule 3745-77-07(C)(1), 40 CFR 61.305(h)and PTI No. P0107934]

(10) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2366(a)	Install Continuous Monitoring System (CMS) on Control Device
63.2374(a) through 63.2374(c)	Monitoring per 40 CFR, Part 63, Subpart SS; Monitor continuously when in OLD operation except for CMS malfunction,

	repair and quality assurance; Excluded CMS data
63.2378(a), and Tables 8 through 10	Continuous Compliance Demonstration for Loading Rack and Transport Vehicles
63.2390(b)(2), and Tables 8 through 10	Compliance Records – Loading Rack and Transport Vehicles
63.2390(c)(1)	Transport Vehicle Tightness Records
63.2390(d)	Record of Total Actual Annual Facility-level Organic Liquid Loading Volume
63.2394(a) through 63.2394(c)	Records Format, Retention Time and Location
63.2396(e)	Monitoring and Recordkeeping Regulatory Overlap

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart EEEEand PTI No. P0107934]

(11) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart SS, including the following sections:

63.990(c) and 63.990(c)(1)	Absorber Monitoring Requirements
63.996(a)(1)	Monitoring Requirements - Applicability
63.996(b)(1)	Conduct of Monitoring
63.996(b)(2)	Backup Continuous Parameter Monitoring Systems
63.996(c)(1), 63.996(c)(2)(i), 63.996(c)(2)(ii), 63.996(c)(2)(iii), and 63.996(c)(3) through 63.996(c)(6)	Continuous Parameter Monitoring Systems: Installation and Calibration, Operation and Maintenance, Malfunction, Continuous Operation, Establish Range of Monitored Parameters, and Monitoring Alternatives
63.996(d)(1) and 63.996(d)(2)	Monitoring Alternatives
63.998(b)(1)(i) through 63.998(b)(1)(iv)	Continuous Records and Monitoring System Data Handling, and Approved Alternatives
63.998(b)(2)	Excluded Monitoring Data

63.998(b)(3)	Records of Daily Averages
63.998(b)(5)(i)(A) through 63.998(b)(5)(i)(F), 63.998(b)(5)(ii), 63.998(b)(5)(ii)(B) and 63.998(b)(5)(ii)(C)	Alternative Recordkeeping: Detect Unreasonable Data, Generates Running Average, Detect Unchanging Data, Alarm, Verify Proper Functioning, Records, Reduced Frequency Excursion and Reduced Frequency Records
63.998(b)(6)(i) and 63.998(b)(6)(ii)	Excursion Definition and Excused Excursion
63.998(c)(1) and 63.998(c)(3)	Monitoring System Records - Continuous Parameter Monitoring Systems and Absorbers

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart SSand PTI No. P0107934]

e) Reporting Requirements

(1) Each permittee of an affected facility subject to the requirements of 40 CFR 61.302 shall submit to the Administrator quarterly reports of the following information. The permittee shall submit the initial report within 90 days after the effective date of this subpart or 90 days after startup for a source that has an initial startup date after the effective date. Subsequent quarterly reports shall be submitted on January 30, April 30, July 30 and October 30 each year.

a. all periods recorded under 40 CFR 61.305(c)(1) when the vent stream is diverted from the control device;

b. all times recorded under 40 CFR 61.305(c)(2) when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed; and

c. all deviations from the operational restrictions in sections c)(2)a. and c)(2)b. of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR 61.305(f)and PTI No. P0107934]

(2) The permittee shall comply with the applicable compliance deadline and reporting requirements under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2342(b)(1)	Compliance Deadlines
63.2342(d)	Notification Deadlines
63.2370(c)	Notice of Compliance Status – Initial Compliance Determination

63.2382(a), 63.2382(b), 63.2382(d)	Required Notification and Notification of Compliance Status
63.2386(a) through 63.2386(e), and Table 11	Compliance Reports
63.2396(e)	Reporting Regulatory Overlap

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart EEEEand PTI No. P0107934]

(3) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart SS, including the following sections:

63.998(b)(5)(ii)(A)	Reduced Frequency Notification for Alternative Recordkeeping
63.999(b)(3)(i) through 63.999(b)(3)(iii), 63.999(b)(5) and 63.999(c)(6)(iv)	Notification of Compliance Status: Operating Range for Monitored Parameters, Rationale for Operating Range for Monitored Parameters, Definition of Operating Day, and Alternative Recordkeeping
63.999(c)(1) and 63.999(c)(6)(i)	Periodic Reports – Included Information for Transfer Racks
63.999(d)(1) and 63.999(d)(2)	Requests for Approval of Monitoring Alternatives, including Different Parameter

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart SSand PTI No. P0107934]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

5.16 lbs of benzene/hr

<u>Applicable Compliance Method:</u>

Compliance with the hourly emission limitation shall be based upon the record keeping requirements specified in sections d)(2) through d)(9) for this emissions unit. If required, the permittee shall demonstrate compliance with the hourly allowable benzene emission limitation by conducting emission testing in

accordance with Methods 1 through 4, and 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1)and PTI No. P0107934]

(2) The procedures for determining compliance with 40 CFR 61.302(b) for all control devices other than flares is as follows:

a. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

i. The time period for a performance test shall be not less than 6 hours, during which at least 300,000 liters of benzene are loaded. If the throughput criterion is not met during the initial 6 hours, the test may be either continued until the throughput criterion is met, or resumed the next day with at least another 6 complete hours of testing.

ii. For intermittent control devices:

(a) The vapor holder level of the intermittent control device shall be recorded at the start of the performance test. The end of the performance test shall coincide with the time when the vapor holder is at its original level.

(b) At least two startups and shutdowns of the control device shall occur during the performance test. If this does not occur under an automatically controlled operation, the system shall be manually controlled.

iii. An emission testing interval shall consist of each 5-minute period during the performance test. For each interval:

(a) The reading from each measurement instrument shall be recorded.

(b) Method 1 or 1A of 40 CFR, Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site.

(c) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR, Part 60, Appendix A, as appropriate.

(d) The average benzene concentration upstream and downstream of the control device in the vent shall be determined using Method 25A or Method 25B of 40 CFR, Part 60, Appendix A, using benzene as the calibration gas. The average benzene concentration shall correspond to the volume measurement by taking into account the sampling system response time.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(3) The mass emitted during each testing interval shall be calculated as follows:

Mi = FKVsC

where:

Mi = Mass of benzene emitted during testing interval i, kg;

Vs = Volume of air-vapor mixture exhausted, m^3 at standard conditions;

C = Benzene concentration (as measured) at the exhaust vent, ppmv;

K = Density, (kg/m^3 benzene), standard conditions;

K = 3.25 for benzene;

F = Conversion factor, (m^3 benzene/m^3 air)(1/ppmv);

F = 10^-6; and

s = Standard conditions, 20 degrees Celsius and 760 mm Hg.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(4) The benzene mass emission rates before and after the control device shall be calculated as follows:

E = (summation of Mi, i=1,n)/T

where:

E = Mass flow rate of benzene emitted, kg/hr;

Mi = Mass of benzene emitted during testing interval i, kg;

T = Total time of all testing intervals, hr; and

n = Number of testing intervals.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(5) The percent reduction across the control device shall be calculated as follows:

R = [(Eb-Ea)/Eb](100)

where:

R = Control efficiency of control device, %;

Eb = Mass flow rate of benzene prior to control device, kg/hr; and

Ea = Mass flow rate of benzene after control device, kg/hr.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(6) For the purpose of determining compliance with 40 CFR 61.302(h), the following procedures shall be used:

a. Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), which has a precision of +/- 2.5 mm water in the range that the tank truck or railcar was initially pressured to during the most recent vapor-tightness test.

b. Connect the pressure measurement device to a pressure tap in the affected facility's vapor collection system, located as close as possible to the connection with the tank truck or railcar.

c. During the performance test, record the pressure every 5 minutes while a tank truck or railcar is being loaded, and record the highest instantaneous pressure that occurs during each loading cycle. Every loading rack shall be tested at least once during the performance test.

d. If more than one loading rack is used simultaneously, then the performance test shall be conducted simultaneously to represent the maximum capacity.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(7) Immediately prior to a performance test required for determination of compliance with 40 CFR 61.302(b), all potential sources of vapor leakage in the affected facility's vapor collection system equipment shall be inspected for detectable emissions as required in 40 CFR 61.302(k). The monitoring shall be conducted only while a vapor-tight tank truck or railcar is being loaded. All identified leaks in the terminal's vapor collection system shall be repaired prior to conducting the performance test.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart BBand PTI No. P0107934]

(8) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart EEEE, including the following sections:

63.2362(a)	Subsequent Performance Tests
63.2362(b)(1)	Annual Vapor Tightness Testing

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart EEEEand PTI No. P0107934]

(9) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart SS, including the following sections:

63.990(b)	Performance Test Requirements
63.997(b)	Prior Test Results and Waivers

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 63, Subpart SSand PTI No. P0107934]

g) Miscellaneous Requirements

(1) None.

28. P025, Oil/Water Separator System

Operations, Property and/or Equipment Description:

Benzene NESHAPs Sewer System including Oil/Water Separator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107935, modification issued 4/8/11)	See b)(2)a.
b.	OAC rule 3745-15-06(A)(3)	See b)(2)f.
c.	OAC rule 3745-21-09(M)	See b)(2)b.
d.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source consisting of a sewer system and oil/water separator associated with wastewater operations for processing wastewater containing benzene.]	See b)(2)c., d)(1), d)(3) through d)(5), e)(1) and f)(1)
e.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
f.	40 CFR, Part 60, SubpartQQQ	See b)(2)d., d)(7),e)(3) and f)(2)
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
h.	40 CFR, Part 63, Subpart DD [40 CFR 63.680 – 63.698] [In accordance with 40 CFR 63.680, this emissions unit is an affected source since the facility accepts waste materials from other facilities for processing in this emissions unit and both of the following conditions in paragraphs (a)(1) and (a)(2) of 40	See b)(2)g.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	CFR 63.680are applicable: The plant site is a major source of hazardous air pollutant (HAP) emissions as defined in 40 CFR 63.2; and One or more operations at the facility receive off-site materials as specified in paragraph (b) of 40 CFR 63.680and the operation is one of the waste management operations or recovery operations as specified in paragraphs (a)(2)(i) through (a)(2)(vi) of 40 CFR 63.680.]	
i.	40 CFR 63.1 through 63.15	Table 2 to 40 CFR, Part 63, Subpart DD – Applicability of General Provisions to Subpart DD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. PTI No. P0106824 was an administrative modification of PTI No. 03-07545 to delete the requirement to use a portable flare during periods of compressor maintenance. PTI No. 03-07545 modification was issued for installation of a new compressor system; as listed in paragraph No. 266 of the federal consent decree addendum, civil action No.SA07CA0683RF, dated 11/20/07. This installation was completed by the due date of April 1, 2008.

The permittee shall operate and maintain a compressor system to routeall vapors from this emissions unit to the existing sulfur recovery unit fuel gasamine treater ("Compressor System").

b. Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting fromaccumulated precipitation, the permittee shall control the emissions of volatileorganic compounds (VOC) from any wastewater separator by equipping allforebay sections and other separator sections with covers and seals whichminimize the amount of oily water exposed to the ambient air. In addition, allcovers and forebay and separator sections shall be equipped with lids and sealswhich are kept in a closed position at all times except when in actual use.

c. During all times when the vent from this emissions unit is routed to theCompressor System used to compress vapors from emissions unit P025, thegaseous stream is exempt from 40 CFR, Part 61, Subpart FF, per 40

CFR61.340(d). In accordance with 40 CFR 61.340(d), during these times, no testing,monitoring, recordkeeping or reporting is required under this subpart for the ventstream from this emissions unit.

The permittee shall comply with the applicable control requirements, operating limits and emission standards under 40 CFR, Part 61, Subpart FF, including the following sections:

61.340(c)	Exempted Streams
61.342(a)(2) through 61.342(a)(4)	Total Annual Benzene Quantity Calculation Procedure – Material Sold, Remediation Waste, and Calculated Before Treatment
61.342(b)	Compliance Dates
61.342(c)(1)	General Operating Requirements and Definition of Exempt Waste Stream
61.342(e)(1)	6 Megagram Compliance Alternative – Less Than 10% Water Streams
61.342(e)(2)	6 Megagram Compliance Alternative – Greater Than or Equal to 10% Water Streams
61.342(g)	General Compliance Demonstration Procedure
61.345(a)(1)(i), 61.345(a)(1)(ii), 61.345(a)(2), 61.345(a)(3)(i), 61.345(a)(3)(ii)(B), 61.345(a)(3)(ii)(C), 61.345(a)(3)(iii) and 61.345(a)(4),	Standards: Containers – Annual No Detectable Emissions Check, Closed Sealed Covers; Pump Must Use Submerged Fill; Treatment of Waste Closed Vent/Control Device Options; Treatment of Waste Closed Vent/Control Device Design Requirements; Treatment of Waste – Covers With No Detectable Emissions; Treatment of Waste – Safety Devices Allowed; Negative Pressure
61.345(b)	Standards: Containers – Quarterly Visual Inspection
61.345(c)	Standards: Containers – Repair
61.346(a)(1) through 61.346(a)(3), 61.346(b)(1) through 61.346(b)(5)	Standards: Individual Drain Systems – Cover and Closed Vent, Quarterly Visual Inspection, Repair, Alternative Seal, Alternative Junction Box, Alternative Sewer Lines, Alternative Quarterly

	Inspection, and Alternative Repair
61.347(a) through 61.347(c)	Standards: Oil/Water Separators – Fixed Roof and Closed Vent, Quarterly Visual Inspection, and Repair
61.348(a)(1), 61.348(a)(2), 61.348(a)(4), 61.348(b)(2)(ii)(B), 61.348(d), 61.348(e)(1), 61.348(e)(2) and 61.348(g)	Standards: Treatment Processes – General Standards Compliance Options, Referenced Standards, Aggregation Allowed to Facilitate Treatment, Mixed Streams Conditions for Waste Management Unit Exemption, Exemption for Certain Treatment Processes, Quarterly Visual Inspection, Repair, Treatment Processes Shall Be Monitored Per 61.354
61.349(a)(1)(i) through 61.349(a)(1)(iv), 61.349(a)(2)(ii), 61.349(b), 61.349(c), 61.349(e), 61.349(f) and 61.349(g)	Standards: Closed-Vent Systems and Control Devices – No Detectable Emissions, Bypass Monitoring, Gauging and Sampling Systems, Permissible Vent Devices, Control Device Design Requirements, Operate Closed Vent System and Control Device During Operation, Control Device Compliance Demonstration, Testing of Control Device at Request of Administrator, Visual Inspection of Closed-Vent System and Control Device, and Repair Defects Within 15 Calendar Days
61.350(a) and 61.350(b)	Standards: Delay of Repair
61.354(d) and 61.354(f)	Monitoring of Non-regenerated Carbon Adsorption System, and Bypass Monitoring Requirements

d. The permittee shall comply with the applicable standards required under 40CFR, Part 60, Subpart QQQ, including the following sections:

60.692-1(a) through (d)	Standards: General
60.692-2(a)(1) through (e)	Standards: Individual Drain Systems
60.692-3(a) through (f)	Standards: Oil-Water Separators
60.692-4	Standards: Aggregate Facility

60.692-5(a) through (e)	Standards: Closed Vent Systems and Control Devices
60.692-6(a) and (b)	Standards: Delay of Repair
60.692-7(a) and (b)	Standards: Delay of Compliance

e. The permittee shall identify and mark all area drains that are segregatedstorm water drains.

f. During periods of compressor maintenance, recordkeeping and reporting forthe compressorsystem shall be conducted in accordance with OAC rule 3745-15-06(A)(3).

g. The permittee accepts chemical wastes from other facilities, and has the capability to process these waste materials in this emissions unit. Thus, the permittee shall comply with the applicable compliance dates and general standards under 40 CFR, Part 63, Subpart DD, including the following sections:

63.680(a)(1)	Applicability – Major Hazardous Air Pollutant Source
63.680(a)(2)(ii)	Applicability – Waste Management Operation Exemption from Treatment, Storage and Disposal Facility Requirements
63.680(b)(1), 63.680(b)(2)(iii) and 63.680(b)(2)(vi)	Off-site Material: Criteria, Exemption - RCRA Corrective Action, and Exemption – Benzene Waste Operations NESHAP
63.680(c)(1) and 63.680(c)(3)	Affected Sources: Off-site Material Management Units and Equipment Leaks
63.680(e)(1)(i)	Compliance Dates – Existing Sources
63.683(a)	General Standards
63.683(b)(1)(iii)	Volatile Organic Hazardous Air Pollutant Concentration Option
63.683(d)	Equipment Leaks
63.694	Testing Methods and Procedures

h. This emissions unit is exempt from requirements in 40 CFR, Part 63, Subpart CC since the emission points are routed to a fuel gas system, as defined in 40 CFR 63.641 of this subpart. No testing, monitoring, recordkeeping, or reporting is

required for refinery fuel gas systems or emission points routed to refinery fuel gas systems.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.356(a)	Maintain Records for 2 Years
61.356(b)(1), and 61.356(b)(4) through 61.356(b)(6)	Recordkeeping: Identity of Each Waste Stream, Whether it is Controlled for Benzene Emissions, and Related Data
61.356(d)	Recordkeeping: Design Documentation of Control Equipment
61.356(e)(1) through 61.356(e)(4)	Recordkeeping: Waste Treatment System Unit: Certification of Design, Design Analysis, Performance Tests and Control Device Records Per 61.356(f)
61.356(f)(1) and 61.356(f)(2)	Recordkeeping: Closed Vent System and Control Device: Certification of Design, Design Analysis, and Performance Tests
61.356(g)	Recordkeeping: Visual Inspections
61.356(h)	Recordkeeping: Test Results of No Detectable Emissions
61.356(i)	Recordkeeping: Unit Operation
61.356(j)(1) through 61.356(j)(3), and 61.356(j)(10)	Recordkeeping: Control Device Operation and Carbon Canister Breakthrough

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. P0107935]

(2) The permittee shall include the benzene NESHAPS sewer system, including oil/water separator, fugitive emissions and associated components in the current site leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee.

Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107935]

(3) The permittee shall conduct monthly visual inspections of all water traps within theRefinery's individual drain systems that are controlled under 40 CFR, Part 61, SubpartFF.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. P0107935]

(4) Where installed pursuant to 40 CFR, Part 61, Subpart FF, the permittee shall visually monitor all conservation vents or indicators on process sewers for detectable leaks on a weekly basis and reset any vents where leaks are detected. After two (2) years of weekly inspection, and based upon an evaluation of the recorded results, the permittee may submit a request to U.S. EPA Region V to modify the frequency of the inspections.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. P0107935]

(5) The permittee shall conduct quarterly monitoring, in accordance with the "no detectable emissions" provision in 40 CFR 61.347, of oil-water separators controlled in accordance with 40 CFR 61.347.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. P0107935]

(6) Once per shift, the permittee shall verify that the Compressor System is in operation.The permittee shall keep records of any instance when the Compressor System wasnot operating.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107935]

(7) The permittee shall comply with the applicable monitoring and record keepingrequirements required under 40 CFR, Part 60, Subpart QQQ, including the followingsections:

60.695(a) through (c)	Parametric Monitoring Device for Appropriate Control Device
60.697(a) through (k)	Record Keeping Requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart QQQ and PTI No. P0107935]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements required under 40 CFR, Part 61, Subpart FF, including the following sections:

61.357(a)(1) through 61.357(a)(4)	Initial Report and Reporting for New Sources

61.357(d)(1)	Initial Certification
61.357(d)(2) and 61.357(d)(5)	Annual Benzene Waste Operations NESHAPS Report, Including Requirements Under 61.342(e)
61.357(d)(6) and 61.357(d)(7)(i)	Quarterly Report: Inspection Certification, and 10 ppm Benzene Exceedances
61.357(d)(7)(ii), 61.357(d)(7)(iii), 61.357(d)(7)(iv)(D), 61.357(d)(7)(iv)(I), and 61.357(d)(8)	Annual Report: Treatment Process Exceedances, Benzene Exceedances, Exceedances in Control Device Exhaust, Carbon Canister Replacement Exceedances, and Problems Detected in Inspection

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart FF and PTI No. P0107935]

(2) The permittee shall submit to the Administrator quarterly reports documenting all periods when the Compressor System was not operating. The first quarterly report shall be submitted by July 30, 2008. Subsequent quarterly reports shall be submitted on January 30, April 30, July 30 and October 30 each year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107935]

(3) The permittee shall submit reports and such other notifications and reports to theOhio EPA, Northwest District Office as are required pursuant to 40CFR, Part 60, Subpart QQQ, per the following sections:

60.698(a) through (e)	Reporting Requirements, including any deviationsfound during parametric monitoring

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart QQQ and PTI No. P0107935]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements required under 40 CFR, Part 61, Subpart FF, including the following sections:

61.355(a)(1) through 61.355(a)(3), and 61.355(a)(6)	Total Annual Benzene (TAB) Determination – Streams With Greater Than 10% Water, Sum Waste Streams, Requirements if 10 Megagrams Per Year or Greater, and Streams Generated Less Than One Time Per Year

61.355(b)(1)	TAB Determination – Streams Processed In Sour Water Strippers
61.355(b)(5) through 61.355(b)(7)	Methods for Determining Annual Waste Quantity (Options)
61.355(c)(1)(i)(A), 61.355(c)(1)(i)(D), 61.355(c)(1)(ii) through 61.355(c)(1)(v), 61.355(c)(2), and 61.355(c)(3)(i) through 61.355(c)(3)(v)	Determination of Flow-Weighted Annual Average Benzene Concentration: Sour Water Stripper Exemption, Process Turnaround Waste, Volatilization Not Used, Mixing or Dilution Not Used, Prior to Treatment, Multiple Phases, Waste Knowledge, Measurement, Waste in Enclosed Pipes, Sampling From Enclosed Pipes Not Feasible, Measurement Methods, and Calculation of Flow-Weighted Average
61.355(h)	Testing for No Detectable Emissions
61.355(k)(1), 61.355(k)(2)(i) through 61.355(k)(2)(v), and 61.355(k)(3) through 61.355(k)(7)	Determination of Benzene Quantity for 61.342(e)(2): Uncontrolled Streams, Controlled Streams Waste Entering Management Unit, Controlled Streams Wastes Not Treated, Controlled Streams Transferred Offsite, Controlled Streams Annual Waste Quantity Determination, Controlled Streams Flow Weighted Annual Average Benzene Concentration, Streams Generated Less Than One Time Per Year, Mixed Streams Entering Enhanced Biodegradation Unit, Sum Quantities for Streams, Controlled Streams Multiply Waste Quantity Times Flow-Weighted Annual Average Benzene Concentration, Multiple Counting of Streams

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 61, Subpart FF and P0107935]

(2) The permittee shall comply with the applicable performance test methods, procedures and compliance provisions required under 40 CFR, Part 60, Subpart QQQ, section 60.696(a) through (d).

[40 CFR, Part 60, Subpart QQQ and PTI No. P0107935]

g) Miscellaneous Requirements

(1) None.

29. P027, Process

Operations, Property and/or Equipment Description:

Decanted Oil Filter with Knockout Drum controlled by flare

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since the emissions are routed to the FCC flare (emissions unit P006), which is subject to 40 CFR, Part 63, Subpart CC.]	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) (PTI No. 03-6995, issued on 2/24/93)	less than 0.1 lb of volatile organic compounds (VOC)/hr
c.	OAC rule 3745-21-09(T)	See b)(2)b. and d)(1)
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is controlled by the FCC flare (emissions unit P006). Thus, the permittee shall comply with all terms and conditions for emissions unit P006.

b. The requirements of this rule are equivalent to or less stringent than the alternative leak detection and repair (LDAR) plan submitted by the permittee. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall include the decanted oil filter with knockout drum and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1)of these terms and conditions shall be determined in accordance with the following method:

a. <u>Emission Limitation:</u>

less than 0.1 lb of VOC/hr

<u>Applicable Compliance Method:</u>

The permittee may determine compliance with the hourly allowable VOC limitation by multiplying an emission factor of 10.8 lbs of VOC/day* vented to the FCC flare from this emissions unit, dividing by 24 hr/day, and then multiplying by (1 - 95% control efficiency of the FCC flare).

* The emission factor was supplied by the company, and was based on material balance in conjunction with a Pro/II Version 3.12 computer simulation for emissions vented to the FCC flare.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-6995]

g) Miscellaneous Requirements

(1) None.

30. P028, Process

Operations, Property and/or Equipment Description:

Oily sludge centrifuge system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(T)	See b)(2)a. and d)(1)
b.	40 CFR, Part 60, Subpart GGG and Subpart VV	See b)(2)a.
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19

(2) Additional Terms and Conditions

a. The requirements of this rule are equivalent to or less stringent than the alternative leak detection and repair (LDAR) plan submitted by the permittee. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall include the oily sludge system process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(2) The vent from this emissions unit is routed to the Compressor System used to compress vapors from emissions unit P025 and route these vapors to the existing fuel gas amine

treater. Therefore, the permittee shall comply with all applicable monitoring and record keeping requirements for the Compressor System listed for emissions unit P025.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall comply with all applicable reporting requirements for theCompressor System listed for emissions unit P025.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

31. P030, Process

Operations, Property and/or Equipment Description:

catalytic reformer, controlled by LIU flare

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR, Part 63, Subpart UUU [40 CFR 63.1560 – 63.1579] [In accordance with 40 CFR 63.1562, this emissions unit is an affected source consisting of groups of process vents on the catalytic reforming unit (including but not limited to semi-regenerative, cyclic, or continuous processes) that are associated with regeneration of the catalyst used in the unit. This affected source includes vents that are used during the unit depressurization, purging, coke burn, and catalyst rejuvenation, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)a., b)(2)b., d)(1), e)(1) and f)(1)
b.	40 CFR 63.1 through 63.15	Table 44 to 40 CFR, Part 63, Subpart UUU – Applicability of General Provisions to Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is controlled by the LIU flare (emissions unit P007). Thus, the permittee shall comply with all terms and conditions for emissions unit P007.

b. The permittee shall comply with the applicable control requirements, operating limits and emission limits under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1566(a)(1)(i) and Table 15	Emission Limitations – Catalyst Depressuring/Purging metal HAP
63.1566(a)(4)	Table 15 and 16 Emission Limitations Not Applicable at 5 psig Metal HAP
63.1566(a)(5)	Prepare Operation, Maintenance and Monitoring Plan
63.1566(b)(3) and Table 16	Flare Operating Limits
63.1566(b)(6) and Table 19	Initial Compliance Demonstration for Flare Visible Emissions
63.1566(c)(2)	Comply with Operations, Maintenance and Monitoring Plan
63.1567(a)(1)(ii) and Table 22	Emission Limitation – Catalyst Depressuring/Purging Organic HAP
63.1567(a)(2) and Table 23	Emission Limitation – Coke Burn-off, Catalyst Rejuvenation, Reduction or Activation Vent Organic HAP
63.1567(a)(3)	Prepare Operation, Maintenance and Monitoring Plan
63.1570(a)	Compliance with Non-Opacity Standards
63.1570(g)	Deviations during Startup, Shutdown or Malfunction

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1567(b)(1), Table 24 and Table 41	Install and Operate Temperature Monitor on Adsorption System Exit, including Colorimetric Tube Sampling for HCl
63.1567(c)(1), 63.1567(c)(2), Table 22, Table 23, Table 27 and Table 28	HCl Control during Coke Burn-off and Catalyst Rejuvenation; Continuous Compliance Demonstration – HCl Measurement, Absorber Outlet Temperature; and Document Conformance with Operation, Maintenance and Monitoring Plan
63.1570(c)	General Duty – Log Prior to Continuous Monitoring System Validation
63.1572(c)(1) through 63.1572(c)(5), and Table 41	Continuous Parameter Monitoring System Installation, Operation and Quality Assurance Requirements
63.1572(d)(1) and 63.1572(d)(2)	Monitor at all times Affected Source is Operating, Excluding Malfunctions, Repair Periods and Quality Assurance/Quality Control Activities
63.1576(a)(1) through 63.1576(a)(3), 63.1576(d) through 63.1576(i), , Table 20, Table 21, Table 27 and Table 28	Recordkeeping Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1563(e), 63.1574(a) and 63.1574(b)	Notification Requirements
63.1566(b)(7),63.1567(b)(6),63.1566(b)(8), 63.1567(b)(7),63.1574(a)(3)(ii), 63.1574(d), 63.1574(f)(1), 63.1574(f)(2)(i) through 63.1574(f)(2)(xi) and Table 42	Submit Notice of Compliance Status; Identify Affected Sources and Emission Points; Identify Compliance Options; Identify Monitoring Options; Submit Operation, Maintenance and Monitoring Plan as part of Notice of Compliance Status
63.1570(f)	Report Deviations

63.1574(a)(2)	Performance Test Notification
63.1575(a), 63.1575(b)(1) through 63.1575(b)(5), 63.1575(c), 63.1575(d), 63.1575(f), 63.1575(g) and Table 43	Compliance Reports Required
63.1575(h)	Startup, Shutdown and Malfunction Reporting

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1566(b)(2) and Table 18	Conduct Flare Performance Test
63.1566(b)(5)(i)	Total Organic Compounds performance test not required if emissions are vented to a flare
63.1567(b)(2) and Table 25	Establish Operating Limits – CRU Absorber
63.1567(b)(3) and Table 23	Establish Operating Limits – Coke Burn-off and Catalyst Rejuvenation
63.1567(b)(4)(i) and 63.1567(b)(4)(iii)	Initial Compliance Demonstration – HCl Calculation
63.1567(b)(5) and Table 26	Initial Compliance Demonstration – HCl
63.1571(a), 63.1571(b)(1) through 63.1571(b)(5)	Performance Test Requirements
63.1571(e)(1) and 63.1571(e)(2)	Procedures for Changing Operating Limit for Continuous Parameter Monitoring System

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

g) Miscellaneous Requirements

(1) None.

32. Emissions Unit Group -Knock Motors: P031, P032

EU ID	Operations, Property and/or Equipment Description
P031	4 horsepower, gasoline fired stationary small internal combustion engine (knock motors, laboratory)
P032	4 horsepower, gasoline fired stationary small internal combustion engine (knock motors, plant)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)(5)(a)	0.310 lb of particulate emissions (PE) per million Btu of actual heat input for a stationary small internal combustion engine
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-18-06	Exempt [See b)(2)a.]

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of this rule because the rated heat input capacity of this emissions unit is less than 10 mmBtu/hr total rated capacity.

c) Operational Restrictions

(1) The permittee shall burn only gasoline in this emissions unit.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than gasoline, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation:

0.310 lb of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee may determine compliance with the limitation above based on an emission factor from AP-42, Table 3.3-1. (revised 10/96) of 0.10 lb of PM10/mmBtu of actual heat input.

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A; and the requirements specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

33. P033, SRU Cooling Tower

Operations, Property and/or Equipment Description:

Sulfur Recovery Unit Cooling Tower

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107936, modification issued 4/7/11)	22.95 tons of particulate emissions (PE)/yr The requirements of this rule also include compliance with OAC rule 3745-17-11(B) and OAC rule 3745-17-07(A).
b.	OAC rule 3745-17-11(B)	5.24 lbs of PE/hr [See b)(2)a.]
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

a. The total dissolved solids (TDS) present in cooling water drift are directly responsible for the formation of PE when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 1,600 ppm and the cooling water maximum process flow rate of 3,600 gallons per minute, a PWR of 1.442 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 5.24 lbs/hr.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per month. The TDS content shall be measured using test procedures that conform to regulation 40 CFR, Part 136, "Test Procedures for the Analysis of Pollutants" or an equivalent method approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

(2) The permittee shall calculate and record the PE, in lbs per hr. The PE shall be calculated as follows:

[(3,600 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7,000 grains/lb) = PE, in lbs/hr

where:

3,600 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level, on a monthly average basis, if more than one measurement is taken in a month;

0.0002 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon; and

7,000 gr/lb = conversion factor for grains to pounds.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

e) Reporting Requirements

(1) The permittee shall submit deviation reports in accordance with the Standard Terms and Conditions of this permit that identify any exceedances of the allowable mass emission limitation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

5.24 lbs of PE/hr

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(1) and d)(2) of these terms and conditions.

If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

b. Emission Limitation:

22.95 tons of PE/yr

Applicable Compliance Method:

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A; and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

g) Miscellaneous Requirements

(1) None.

34. P034, BH Cooling Tower

Operations, Property and/or Equipment Description:

Boiler House Cooling Tower

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107936, modification issued 4/7/11)	24.05 tons of particulate emissions (PE)/yr The requirements of this rule also include compliance with OAC rule 3745-17-11(B) and OAC rule 3745-17-07(A).
b.	OAC rule 3745-17-11(B)	5.49 lbs of PE/hr [See b)(2)a.]
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

a. The total dissolved solids (TDS) present in cooling water drift are directly responsible forthe formation of PE when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 1,600 ppm and the cooling water maximum process flow rate of 3,860 gallons per minute, a PWR of 1.546 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 5.49 lbs/hr.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the Total Dissolved Solids (TDS) content, in ppm, of thecooling water at least once per month. The TDS content shall be measured using test procedures that conform to regulation 40 CFR, Part 136, "Test Procedures for the Analysis of Pollutants" or an equivalent method approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

(2) The permittee shall calculate and record the PE, in lbs per hr. ThePE shall be calculated as follows:

[(3,860 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7,000 grains/lb) =PE, in lbs/hr

where:

3,860 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level, on a monthly average basis, if more than one measurement is taken in a month;

0.0002 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon; and

7,000 gr/lb = conversion factor for grains to pounds.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

e) Reporting Requirements

(1) The permittee shall submit deviation reports in accordance with the Standard Terms and Conditions of this permit that identify any exceedances of the allowable mass emission limitation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

5.49 lbs of PE/hr

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(1) and d)(2) of these terms and conditions.

If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

b. Emission Limitation:

24.05 tons of PE/yr

Applicable Compliance Method:

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A; and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107936]

g) Miscellaneous Requirements

(1) None.

35. P036, Acid Gas Flare

Operations, Property and/or Equipment Description:

Sulfur Recovery Unit Acid Gas Flare (PR196128), non-assisted

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) (PTI No. P0107883, modification issued 4/6/11)	1.00 ton of nitrogen oxides (NOx)/yr during periods of process unit start-up and shutdown 100.00 tons of sulfur dioxide (SO2)/yr during periods of process unit start-up and shutdown See b)(2)c.
b.	40 CFR, Part 63, Subpart UUU [40 CFR 63.1560 – 63.1579] [In accordance with 40 CFR 63.1562, this emissions unit is an affected source due to its use for process vents associated with the sulfur recovery unit, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)a.
c.	40 CFR, Part 60.18	See b)(2)b.
d.	40 CFR 63.1 through 63.15	Table 44 to 40 CFR, Part 63, Subpart UUU – Applicability of General Provisions to Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This flare is used to control emissions from the sulfur recovery unit, emissions unit P040, during periods of start-up, shutdown and malfunction of that emissions unit and its associated equipment. The sulfur recovery unit is subject to MACT standards in 40 CFR, Part 63, Subpart UUU. Applicable rules for the sulfur recovery unit are detailed in 40 CFR 63.1560 – 63.1563 and 63.1568 - 63.1579, and these specific requirements can be found in the terms and conditions for P040. MACT Subpart UUU does not list any specific requirements for flares used as a control device for sulfur recovery units. Table 44 of 40 CFR, Part 63, Subpart UUU details the applicable requirements of the General Provisions in 40 CFR 63.1 – 63.15 to this emissions unit.

b. This emissions unit shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

c. The permittee has requested to voluntarily limit allowable emissions of NOx and SO2 to the following:

i. 1.00 ton of NOx/yr during periods of process unit start-up and shutdown

ii. 100.00 tons of SO2/yr during periods of process unit start-up and shutdown

The emission limitations are being established to alleviate reporting requirements associated with reportable quantities (RQ) under the Superfund Amendments and Reauthorization Act (SARA). The allowable limitations above do not apply to emissions associated with malfunctions and/or process upsets of the process unit. Any SO2 emissions associated with the start-up and shutdown of the sulfur recovery unit at the facility (emissions unit P040) that are routed to this flare must still be applied to the emissions limitation of 100 lbs SO2/1,000 lbs of sulfur processed contained in OAC rule 3745-18-08(C)(3).

c) Operational Restrictions

(1) The flare shall be operated at all times when emissions are being vented to it.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(2) The flare shall be operated with a pilot flame present at all times.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(3) Only gases with a net heating value of 7.45 MJ/scm (200 Btu/scf) or greater shall be burned in this emissions unit. Net heating value shall be calculated as specified in 40 CFR Part 60.18(f)(3).

The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec) exceptas specified in sections c)(4) and c)(5).

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(4) If the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000Btu/scf), the permittee may operate the flare at an exit velocity equal to or greater than18.3 m/sec (60 ft/sec), but less than122 m/sec (400 ft/sec).

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

(5) Non-assisted flares may be operated with an exit velocity less than the maximumpermitted velocity, but not greater than 122 m/sec (400 ft/sec). The maximumpermitted velocity shall be determined in accordance with 40 CFR, Part60.18(f)(5).

[OAC rule 3745-77-07(A)(1) and PTI No. P0107883]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information during periods ofstart-up and shut-down:

a. the flare flow rate, in scf per hour;

b. the high heating value, in Btu/scf, as determined from the flare gas molecularweight and source of the gas;

c. the concentration of hydrogen sulfide in the flare gas, in weight fraction;

d. an indication of which process is undergoing start-up/shut-down mode;

e. the number of hours the process operated in start-up/shut-down mode;

f. the calculated NOx emissions using the following equation:

E = (FR) x (HV) x (T) x (EF)/1,000,000

Where:

E = NOx emissions in tons for each individual start-up and shut-downevent;

FR = flare flow rate in scf per hour;

HV = high heating value, in Btu/scf;

T = time duration for each start-up/shut down event, in hours; and

EF = NOx emission factor of 0.068 lb of NOx/mmBtu (AP-42 Section 13.5,Industrial Flares [9/91])

g. the annual NOx emission rate calculated as follows:

ET = E1 + E2 + E3 +... +En

Where:

ET =Annual NOx emissions, in tons, as summed for the calendar year fromJanuary to December; and

En = NOx emissions, in tons, for each individual start-up/shut-down event duringthe calendar year

h. the calculated SO2 emissions using the following equation:

E = {(FR) x (H2S)]/379.7} x (0.98) x (64) x (T)

where:

E = SO2 emissions in tons for each individual start-up and shut-downevent;

FR = flare flow rate in scf per hour;

H2S = volume fraction of hydrogen sulfide in flare gas;

379.7 = the volume, in ft3, of one lb mole of gas at standardconditions (60 degrees F & 1 atm) from the ideal gas law;

0.98 = efficiency of the flare for converting a lb mole of H2S into a lb moleof SO2;

64 = molecular weight of SO2 in lb/lb mole; and

T = time duration for each start-up/shut down event, in hours

i. the annual SO2 emission rate calculated as follows:

ET = E1 + E2 + E3 +... +En

Where:

ET =Annual SO2 emissions, in tons, as summed for the calendar year fromJanuary to December; and

En = SO2 emissions, in tons, for each individual start-up/shut-down event duringthe calendar year

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(2) The permittee shall operate and maintain a device to continuously monitor the pilotflame when the emissions unit is in operation. The monitoring device and any recordershall be calibrated, operated, and maintained in accordance with the manufacturer'srecommendations, instructions, and operating manuals. The monitoring device must complete a minimum of one cycle of operation for each successive 15-minute period.

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 and monitoring equipment.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(3) The permittee shall continuously monitor either visually and/or by camera whether or notthere are visible emissions from the flare. Whenever the permittee observes visibleemissions from the flare, the permittee shall record the start-time and end-time of visible emissions in an operations log.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods duringwhich the flare pilot flame was not functioning properly. The reports shall include thedate, time, and duration of each such period.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(2) The permittee shall submit quarterly deviation reports that include the start-time and end-time of visible emissions observed from theflare that exceed a total time of five minutes during any consecutive two hour period.The quarterly deviation reports shall be submitted by January 30, April 30, July 30, andOctober 30 of each year and shall address the data obtained during the previouscalendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

(3) The permittee shall submit annual reports that summarize the total annual actualemissions of NOx and SO2 during periods of process unit start-up and shutdown. Thereport shall be submitted by January 31 of each year and shall cover the previouscalendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) shall be determined inaccordance with the following methods:

a. <u>Emission Limitation:</u>

1.00 ton of NOx/yr during periods of process unit start-upand shutdown

<u>Applicable Compliance Method:</u>

Compliance with the annual NOx emission limitation shall be demonstratedthrough recordkeeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

b. Emission Limitation:

100.00 tons of SO2/yr during periods of process unit start-upand shutdown

Applicable Compliance Method:

Compliance with the annual SO2 emission limitation shall be demonstratedthrough record keeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

c. Emission Limitation:

No visible emissions except for periods not to exceed a total of five minutes during any two consecutive hours

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specifiedin Method 22 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107883]

g) Miscellaneous Requirements

(1) None.

36. P037, LIU Cooling Tower

Operations, Property and/or Equipment Description:

LIU Cooling Tower

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)	43.95 lbs particulate emissions (PE)/hr See b)(2)a.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

a. The total dissolved solids (TDS) present in cooling water drift are directly responsible for the formation of PE when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 2,800 ppm and the cooling water maximum process flow rate of 66,675 gallons per minute, a PWR of 46.7378 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 43.95 lbs/hr.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per month. The TDS content shall be measured using test procedures that

conform to regulation 40 CFR, Part 136, "Test Procedures for the Analysis of Pollutants" or an equivalent method approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall calculate and record the PE, in lbs per hr. The PE shall be calculated as follows:

[(66,675 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7000 grains/lb) = PE, in lbs/hr

where:

66,675 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level, on a monthly average basis, if more than one measurement is taken in a month;

0.0002 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon; and

7,000 gr/lb = conversion factor for grains to pounds.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation reports in accordance with the Standard Terms and Conditions of this permit that identify any exceedances of the allowable mass emission limitation.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

43.95 lbs of PE/hr

<u>Applicable Compliance Method:</u>

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(1) and d)(2) of these terms and conditions.

If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement

Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A; and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

37. P038, FCC Cooling Tower

Operations, Property and/or Equipment Description:

Northside (FCC) Cooling Tower

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107904, modification issued 6/9/11)	9.34 tons of particulate emissions (PE)/yr 1.24 lbs of volatile organic compounds (VOC)/hr, 5.43 tons of VOC/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)	28.2 lbs of PE/hr [See b)(2)c.]
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) control requirements for this emissions unit have been determined to be use of high efficiency drift eliminators.

b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B).

c. The total dissolved solids (TDS) present in cooling water drift are directly responsible for the formation of PE when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 2,400 ppm and the cooling water maximum process flow rate of 29,600 gallons per minute, a PWR of 17.77 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 28.2 lbs/hr.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for this emissions unit each month:

a. The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per month. The TDS content shall be measured using test procedures that conform to regulation 40 CFR, Part 136, "Test Procedures For The Analysis of Pollutants" or an equivalent method approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

(2) Each month, the permittee shall calculate and record the PE, in lbs per hr. The PE shall be calculated as follows:

[(29,600 gallons/minute) x (ppm TDS) x (0.00006) x (60 min/hr) x (0.0584)] / (7,000 grains/lb) = PE, in lbs/hr

where:

29,600 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level, on a monthly average basis, if more than one measurement is taken in a month;

0.00006 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon; and

7,000 gr/lb = conversion factor for grains to pounds.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

(3) Each month, the permittee shall use the information in d)(2) to calculate the cumulative PE to date, for the calendar year from January to December.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify all exceedances of the hourly and annual allowable particulate emission limitation. The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

28.2 lbs of PE/hr

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(1) and d)(2) of these terms and conditions. If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

b. Emission Limitation:

9.34 tons of PE/yr

Applicable Compliance Method:

The annual emission limitation was established as follows:

[(29,600 gallons/minute) x (2,400 ppm TDS) x (0.00006) x (60 min/hr) x (8,760 hours/year) x (0.0584)] / [(7,000 grains/lb) x (2,000 lbs/ton)] = PE, in tons/yr

where:

29,600 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level;

0.00006 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon; and

7,000 gr/lb = conversion factor for grains to pounds.

Therefore, provided compliance is shown with the TDS limitation, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

c. Emission Limitation:

1.24 lbs of VOC/hr, 5.43 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation by multiplying the appropriate VOC emission factor of 0.7 pounds per million gallons of flow, from AP-42 Table 5.1-2 (dated 1/95), by the maximum flow of 1,776,000 gallons per hour.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A, and the requirements specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

g) Miscellaneous Requirements

(1) None.

38. P040, Sulfur Recovery Unit

Operations, Property and/or Equipment Description:

Sulfur Recovery Unit (SRU) including Claus Unit 1, 55 long tons per day and Claus Unit 2, 55 long tons per day; with Tail Gas Treatment Unit, 110 long tons per day; and Natural Gas Fired Tail Gas Incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a) (PTI No. P0107933, modification issued 4/19/11)	See b)(2)a. and b)(2)b. Combustion emissions from the tail gas incinerator shall not exceed the following: 0.14 lb of particulate emissions (PE)/hr, 0.61 ton of PE/yr [See b)(2)c.]; 1.84 lbs of nitrogen oxides (NOx)/hr, 8.06 tons of NOx/yr; 1.88 lbs of carbon monoxide (CO)/hr, 8.23 tons of CO/yr; and 0.10 lb of volatile organic compounds (VOC)/hr, 0.44 ton of VOC/yr. Visible PE shall not exceed 20% opacity, as a six-minute average. Process emissions from the tail gas incinerator shall not exceed the following: 19.18 lbs of sulfur dioxide (SO2)/hr, as a 12-hr average, and 84.02 tons of SO2/yr; and 250 parts per million by volume (dry basis) of SO2 at 0% excess air.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The requirements of this rule also include compliance with 40 CFR, Part 63, Subpart CC; 40 CFR 60.104(a); and OAC rule 3745-18-08(C)(3).
b.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since it contains Group 1 process vents that are routed to either the FCC/Coker flare (emissions unit P006) or the LIU flare (emissions unit P007)]	See b)(2)f., b)(2)g. and e)(4)
c.	40 CFR, Part 63, Subpart UUU [40 CFR 63.1560 – 63.1579] [In accordance with 40 CFR 63.1562, this emissions unit is an affected source consisting of process vent or group of process vents on the two Claus sulfur recovery plant units and the tail gas treatment unit serving the sulfur recovery plant, that are associated with sulfur recovery, including any bypass line(s), subject to the emission limitations/control measures specified in this section.]	See b)(2)h., d)(5) , e)(5) , and f)(2)
d.	40 CFR 60.104(a)(2)(i)	250 parts per million by volume (dry basis) of SO2 at 0% excess air.
e.	OAC rule 3745-21-09(T)	leaks from petroleum refinery equipment [See b)(2)i.]
f.	OAC rule 3745-21-09(DD)	leaks from petroleum refinery equipment [See b)(2)i.]
g.	40 CFR, Part 60, Subpart VV	leaks from petroleum refinery equipment [See b)(2)i.]
h.	40 CFR, Part 60, Subpart GGG	leaks from petroleum refinery equipment [See b)(2)i.]
i.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
j.	40 CFR, Part 61, Subpart V	leaks from petroleum refinery equipment [See b)(2)i.]
k.	OAC rule 3745-18-08(C)(3)	100 lbs SO2/1,000 lbs of sulfur processed [See b)(2)b.]

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
l.	OAC rule 3745-17-11(B)(1)	None [See b)(2)d.]
m.	OAC rule 3745-17-07(A)	None [See b)(2)e.]
n.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source since processing of wastewater containing benzene occurs.]	See b)(2)j.
o.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
p.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 44 to 40 CFR, Part 63, Subpart UUU – Applicability of General Provisions to Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.
q.	40 CFR, Part 60, Subpart J [In accordance with 40 CFR 60.101(g), the tail gas incinerator is considered a fuel gas combustion device due to the combustion of the BB Treater spent air stream, Ohio EPA emissions unit P041.]	See 40 CFR 60.104(a)(1), 60.105(a)(4)(iv) and 60.105(b) See b)(2)k.

(2) Additional Terms and Conditions

a. Federal consent decree addendum, civil action No. SA07CA0683RF which became effective on November 20, 2007, requires the reduction of SO2 at the Lima Refining Company by requiring that all heaters and boilers be affected facilities and subject to the applicable fuel gas combustion requirements of 40 CFR, Part 60, Subpart J. Emissions unit P040 consists of two sulfur recovery units (Claus Unit 1 and Claus Unit 2) which operate in a parallel configuration with the tail gas from each unit being routed to a common tail gas treating unit and incinerator. Claus Units 1 and 2 receive acid gas from the "Lima Intergrated Unit" (LIU) amine treatment system, historical Ohio EPA emissions unit P002. The LIU amine treatment system treats the sour gas generated by various LIU process units and provides this treated fuel gas to heaters located on the LIU units. In order for heaters and boilers served by the LIU fuel gas system to meet the fuel gas combustion requirements of 40 CFR, Part 60, Subpart J, the LIU amine treatment system must be upgraded. The upgrade to the amine treatment

system does not constitute a modification as defined in OAC rule 3745-31-01 based on PTI No. 03-13794, issued on 5/29/08 [see b)(2)b. for additional details].

This permit action is being issued as requested by the permittee to address any activities associated with the upgrade to the LIU amine treatment system that could be considered applicable to new source review requirements. It should be noted that this permit is virtually identical in requirements to those contained in PTI No. 03-13794 issued on 5/29/08.

b. Emissions unit P040 was established in PTI No. 03-13794, issued on 5/29/08, as a consolidation of three existing emission units (P002, P011, and P015) whichcomprised an existing sulfur recovery unit/system at the facility.

Theconsolidation was granted by Ohio EPA as requested by the permittee due tomodifications which resulted in the sulfur recovery unit/system having onecommon egress point of emissions, the exhaust stack for the tail gas incinerator.It should be noted that the consolidation resulting in the establishment of P040 does not remove the applicability of OAC rule 3745-18-08. Because P040 is simply a grouping of P002, P011 and P015, it will continue to be subject to OACrule 3745-18-08. In addition, this common egress point will include a spent airstream from the new Butane-Butylene Treater (emissions unit P041) which isrouted to the oxidation chamber of the tail gas incinerator. Therefore, all theabove emission limits are combined for these emissions units (P040 and P041).Requirements for Emissions unit P041 were established in PTI No. 03-13794, issued 5/29/08.

c. It is assumed that all particulate emissions are PM_{10}.

d. The uncontrolled mass rate of PE* from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure IIof OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Processweight" is defined in OAC rule 3745-17-01(B)(14).

* The burning of gaseous fuels is the only source of PE from this emissions unit

e. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

f. Pursuant to the Group 1 miscellaneous process vent requirements in 40 CFR 63.641, the permittee shall reduce emissions of organic HAP's using a flare(s) that meets the requirements of 40 CFR 63.11(b) of subpart A.

g. MACT requirements in 40 CFR, Part 63, Subpart CC are applicable for each Group 1 process vent that is part of this emissions unit, and is routed to either emissions unit P006 and/or P007, the FCC/Coker flare or LIU flare, respectively.

The permittee shall comply with the applicable control requirements, emission limit and compliance demonstration methods under 40 CFR, Part 63, Subpart CC, including the following sections:

63.643(a)(1)	Required Use of Flare to Reduce Organic Hazardous Air Pollutants

h. The permittee shall comply with the applicable control requirements, operating limits, emission limits and work practice standards under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1568(a)(1) and Table 29	Sulfur Dioxide (SO2) Emission Limit for New Source Performance Standard Units: Meet Option A – 250 parts per million by volume (dry basis) of SO2 at 0% excess air (use of oxidation or reduction control system followed by incineration)
63.1568(a)(3)	Prepare Operation, Maintenance and Monitoring Plan
63.1570(a)	Compliance with Non-opacity Standards
63.1570(g)	Deviations during Startup, Shutdown or Malfunction

i. This emissions unit is subject to the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of OAC rule 3745-21-09(T) – Leaks from petroleum refinery equipment, OAC rule 3745-21-09(DD) – Leaks from process units that produce organic chemicals, 40 CFR, Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), 40 CFR, Part 60, Subpart GGG (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries, 40 CFR, Part 63, Subpart CC (Petroleum Refinery MACT Standards), and 40 CFR, Part 61, Subpart V (National Emission Standard for Equipment Leaks – Fugitive Emission Sources).

The requirements of these rules are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to OAC rule 3745-21-09(T)(4) and 40 CFR, Part 63, Subpart CC. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

j. The permittee shall include the SRU in the current site benzene waste operations program.

k. NSPS requirements for fuel gas combustion devices at 40 CFR 60.104(a)(1) are applicable to the tail gas incinerator. The tail gas incinerator is considered a fuel gas combustion device per 40 CFR 60.101(h) due to the combustion of the BB treater spent air stream (Ohio EPA emissions unit P041.)

As this stream has been previously demonstrated to be inherently low in sulfur content, this stream is exempt from the monitoring requirements of 60.105(a)(4), per 60.105(a)(4)(iv)(d). Details are provided in the written application submitted to Ohio EPA on 11/3/2009, company file #A14-09-46, in accordance with 60.105(b).

A fuel gas stream that is determined to be low-sulfur is exempt from the monitoring requirements of 60.105(a)(3) and (4) until there are changes in the operating conditions or stream composition.

No further action is required outside of the written application request in accordance with 40 CFR Part 60.105(b)(3) unless refinery operating conditions change in a way that would affect the composition of the exempt fuel gas stream.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain equipment to continuously monitor and record SO2from this emissions unitin units of the applicable standard. The span value of the continuous emissionmonitoring system (CEMS) shall be 500 ppm SO2. Such continuous monitoring and recordingequipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the continuous SO2monitoring system including, but not limited to, parts per million of SO2for each cycle time of the analyzer, with no resolution less than one data point per minute required, and lbs/hr of SO2, as a 12-hr average; results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

The permittee shall maintain a written quality assurance/quality control (QA/QC) plan for the SO2CEMS that follows the requirements of 40 CFR, Part 60, Appendix F. The QA/QC plan and logbook for the SO2CEMS must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60.13; 40 CFR, Part 60, Appendix F; and PTI No. P0107933]

(2) The permittee shall operate and maintain equipment to continuously monitor and record the oxygen (O2) from this emissions unit in percent O2. The span value of the CEMS shall be 25 percent O2. Such continuous monitoring and recordingequipment shall comply with the requirements specified in 40 CFR, Part 60.13 or asapproved by the Ohio EPA, Central Office.

The permittee shall maintain records of all data obtained by the continuous O2monitoring system including, but not limited to percent O2for each cycle time of the analyzer, with no resolution less than one data point per minute required, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain a quality assurance/quality control plan for the continuous O2monitoring system designed to ensurecontinuous valid and representative readings. The plan shall follow the requirements of40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbookdedicated to the continuous O2system must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60.13 and PTI No. P0107933]

(3) The permittee shall maintain daily records of the following information for this emissions unit:

a. the total amount of sulfur processed;

b. the total SO2emissions, in lbs; and

c. the average SO2 emission rate, in lb of SO2per 1,000 lbs of sulfur processed.

For a specific period of time, the amount of sulfur processed is equal to the amount of sulfur entering the Claus units plus the amount of any sulfur bypassed to the flare(s) from the amine units and/or the sour water stripper, except for periods of start-up, shutdown, or malfunction as defined in 40 CFR 60.2.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60.2 and PTI No. P0107933]

(4) The permittee shall include the SRU fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with the alternative monitoring plan submitted by the permittee. Applicable requirements are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(5) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1568(b)(1) and Table 31	Install, Operate and Maintain Sulfur Dioxide Continuous Emission Monitor
63.1568(c)(1), Table 34 and Table 35	Continuous Compliance - Sulfur Dioxide Continuous Emission Monitor
63.1568(c)(2)	Continuous Compliance with Operation, Maintenance and Monitoring Plan
63.1570(c)	General Duty – Log Prior to Continuous

	Monitoring System Validation
63.1572(a)(1), 63.1572(a)(3), 63.1572(a)(4), 63.1572(d)(1), 63.1572(d)(2) and Table 40	Sulfur Dioxide Continuous Emission Monitor Requirements
63.1574(f)(2)(i), 63.1574(f)(2)(ii), and 63.1574(f)(2)(viii) through 63.1574(f)(2)(x)	Operation, Maintenance and Monitoring Plan Requirements
63.1576(a)(1), 63.1576(a)(2), 63.1576(b)(1) through 63.1576(b)(5), 63.1576(d) through 63.1576(i), Table 34 and Table 35	Recordkeeping Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

(6) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO2 monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (Ohio EPA, Northwest District Office) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

e) Reporting Requirements

(1) Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031 and 40CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days followingthe end of each calendar quarter to the Ohio EPA, Northwest District Office documenting the date, commencement and completion times, duration,magnitude, reason (if known), and corrective actions taken (if any), of all 12 hour periods of SO2 values in excess of the applicable lbs/hr and NSPS limitations for SO2.

Thesereports also shall identify all instances of daily SO2 emission values in excess of thelimitation specified in OAC rule 3745-18-08 (including those instances due to thebypassing of the Claus unit(s)) and shall specify the total SO2 emissions for the calendarquarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendarquarter to the Ohio EPA, Northwest District Office documenting anycontinuous SO2 monitoring system downtime while the emissions unit was on line (date,time, duration and reason) along with any corrective action(s) taken.

The permittee shallprovide the emissions unit operating time during the reporting period and the date, time,reason and corrective action(s) taken for each time period of emissions unit and controlequipment malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions.

The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR, Part 60.7. The summary shall be submitted to the Ohio EPA, Northwest District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[OAC rule 3745-77-07(C)(1); OAC rule 3745-15-04; ORC sections 3704.03(I) and 3704.031; 40CFR, Parts 60.7 and 60.13(h); and PTI No. P0107933]

(2) Pursuant to 40 CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest DistrictOffice documenting any continuous O2system downtime while theemissions unit was on line (date, time, duration and reason) along with any correctiveaction(s) taken.

The permittee shall provide the emissions unit operating time during thereporting period and the date, time, reason and corrective action(s) taken for each timeperiod of emissions unit and control equipment malfunctions.

The total operating time ofthe emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

[OAC rule 3745-77-07(C)(1); 40CFR, Parts 60.7 and 60.13(h); and PTI No. P0107933]

(3) All quarterly reports and deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

(4) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f)(1)(ii)	Notification of Compliance Status – Identification of Miscellaneous Process Vents
63.655(g)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents
63.655(g)(6)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents – Excess Emissions Reporting

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(5) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1563(e)	Notification Requirements
63.1568(b)(6) and 63.1658(b)(7)	Submit Notice of Compliance Status, including Operation, Maintenance and Monitoring Plan
63.1570(f)	Report Deviations
63.1574(a), 63.1574(a)(3), 63.1574(b), 63.1574(d), 63.1574(f)(1), Table 42.1, Table 42.2 and Table 42.3	Notice of Compliance Status – Identify Affected Sources, Emission Limits and Monitoring Options
63.1575(a), 63.1575(b)(1) through 63.1575(b)(5), 63.1575(c), 63.1575(e)(1) through 63.1575(e)(13), 63.1575(f)(1), 63.1575(f)(2), 63.1575(g) and Table 43	Compliance Report Requirements
63.1575(h)(1) and 63.1575(h)(2)	Startup, Shutdown and Malfunction Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.14 lb of PE/hr, 0.61 ton of PE/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying the appropriate particulate emission factor of 7.6 pounds per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flow rate of 18,431 standard cubic foot/hr. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

b. Emission Limitation:

1.84 lbs of NOx/hr, 8.06 tons of NOx/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying the appropriate NOx emission factor of 100 pounds per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flow rate of 18,431 standard cubic foot/hr.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

c. Emission Limitation:

1.88 lbs of CO/hr, 8.23 tons of CO/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The CO emission limitation was derived from a vendor guarantee of a maximum CO emission rate of 100 ppm. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in

accordance with the requirements specified in Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

d. Emission Limitation:

0.10 lb of VOC/hr, 0.44 ton of VOC/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying the appropriate VOC emission factor of 5.5 pounds per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flow rate of 18,431 standard cubic foot/hr.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by conducting emission testing in accordance with Methods 1 through 4, and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

e. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, combustion emissions from the tail gas incinerator

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107933]

f. Emission Limitation:

250 parts per million by volume (dry basis) of SO2 at 0% excess air, process emissions from the tail gas incinerator

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit; 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the monitoring and record keeping in d)(1) and d)(2), and through demonstration of compliance with the quality assurance/quality control plan which shall meet the testing and recertification requirements of 40 CFR, Part 60. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0107933]

g. Emission Limitation:

19.18 lbs of SO2/hr, as a 12-hr average; 84.02 tons of SO2/yr process emissions from the tail gas incinerator

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit; 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the monitoring and record keeping in d)(1) and d)(2), and through demonstration of compliance with the quality assurance/quality control plan which shall meet the testing and recertification requirements of 40 CFR, Part 60.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emission rate derived from the following equation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and P0107933]

h. Emission Limitation:

100 lbs of SO2/1,000 lbs of sulfur processed, process emissions from the tail gas incinerator

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit; 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the monitoring and record keeping in d)(1) and d)(2), and through demonstration of compliance with the quality

assurance/quality control plan which shall meet the testing and recertification requirements of 40 CFR, Part 60.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0107933]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart UUU, including the following sections:

63.1568(b)(5) and Table 33	Initial Compliance – New Source Performance Standard Test

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart UUU]

g) Miscellaneous Requirements

(1) None.

39. P041, Butane-Butylene Treater

Operations, Property and/or Equipment Description:

Butane-Butylene (B-B) Treater

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0107904, modification issued 6/9/11)	See b)(2)a. Combustion emissionsfrom the tail gas incinerator shall notexceed the following: 0.14 lb of particulateemissions (PE)/hr, 0.61ton of PE/yr [See b)(2)b.]; 1.84 lbs of nitrogenoxides (NOx)/hr, 8.06tons of NOx/yr; 1.88 lbs of carbonmonoxide (CO)/hr, 8.23tons of CO/yr; and 0.10 lb of volatile organiccompounds (VOC)/hr,0.44 ton of VOC/yr. Visible PE shall notexceed 20% opacity, as asix-minute average. Process emissions fromthe tail gas incineratorshall not exceed thefollowing: 19.18 lbs of sulfur dioxide(SO2)/hr, as a 12-hraverage, and 84.02 tons of SO2/yr; and 250 parts per million by volume(drybasis) of SO2 at 0% excess air.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-18-06(E)	See b)(2)c.
c.	OAC rule 3745-17-11(B)(1)	None [See b)(2)d.]
d.	OAC rule 3745-17-07(A)	None [See b)(2)e.]
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source since it contains Group 1 process vents that are routed to either the FCC/Coker flare (emissions unit P006) or the LIU flare (emissions unit P007)]	See b)(2)f. and e)(4)
f.	OAC rule 3745-21-09(T)	leaks from petroleum refinery equipment [See b)(2)h.]
g.	OAC rule 3745-21-09(DD)	leaks from petroleum refinery equipment [See b)(2)h.]
h.	40 CFR, Part 60, Subpart VV	leaks from petroleum refinery equipment [See b)(2)h.]
i.	40 CFR, Part 60, Subpart GGG	leaks from petroleum refinery equipment [See b)(2)h.]
j.	40 CFR, Part 60, Subpart J	See b)(2)i.
k.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source since processing of wastewater containing benzene occurs.]	See b)(2)g.
l.	40 CFR, Part 61, Subpart V	leaks from petroleum refinery equipment [See b)(2)h.]
m.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The spent air stream from the B-B Treater shall be routed to the oxidationchamber of the tail gas incinerator at the sulfur recovery unit (SRU),emissions unit P040. The tail gas incinerator is a common egress point foremissions from the SRU and the B-B Treater spent air stream; therefore, all theemission limitations are combined for these emission units (P040 and P041).

b. It is assumed that all particulate emissions are PM10.

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

d. The uncontrolled mass rate of PE* from this emissions unit is less than 10pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure IIof OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Processweight" is defined in OAC rule 3745-17-01(B)(14).

* The burning of gaseous fuels is the only source of PE from this emissions unit.

e. This emissions unit is exempt from the visible PE limitations specified in OACrule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because theemissions unit is not subject to the requirements of OAC rule 3745-17-11.

f. MACT requirements in 40 CFR, Part 63, Subpart CC are applicable for each Group 1 process vent that is part of this emissions unit, and is routed to either emissions unit P006 and/or P007, the FCC/Coker flare or LIU flare, respectively.

The permittee shall comply with the applicable control requirements, emission limit and compliance demonstration methods under 40 CFR, Part 63, Subpart CC, including the following sections:

63.643(a)(1)	Required Use of Flare to Reduce Organic Hazardous Air Pollutants

g. The permittee shall include the B-B Treater in the current site benzene waste operations program.

h. This emissions unit is subject to the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of OAC rule 3745-21-09(T) – Leaks from petroleum refinery equipment, OAC rule 3745-21-09(DD) – Leaks from process units that produce organic chemicals, 40 CFR, Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), 40 CFR, Part 60, Subpart GGG (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries, 40 CFR, Part 63, Subpart CC (Petroleum Refinery MACT Standards), and 40 CFR, Part 61, Subpart V (National Emission Standard for Equipment Leaks – Fugitive Emission Sources).

The requirements of these rules are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to OAC rule 3745-21-09(T)(4) and 40 CFR, Part 63, Subpart CC. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of this permit.

i. NSPS requirements in 40 CFR, Part 60, Subpart J, 60.104(a)(1) are applicable to the tail gas incinerator, part of Ohio EPA emissions unit P040, as the tail gas incinerator is considered a fuel gas combustion device as per 40 CFR, Part 60, Subpart J, 60.101(h) due to the combustion of the B-B treater spent air stream. As this stream has been previously demonstrated to be inherently low in sulfur content, this stream is exempt from the monitoring requirements presented in 40 CFR, Part 60, Subpart J, 60.105(a)(4) according to 40 CFR, Part 60, Subpart J, 60.105(a)(4)(iv)(d). Please refer to the written application submitted to Ohio EPA on 11/3/2009, company file #A14-09-46, in accordance with the application requirements presented in 40 CFR, Part 60, Subpart J, 60.105 (b).

A fuel gas stream that is determined to be low-sulfur is exempt from the monitoring requirements in 40 CFR, Part 60, Subpart J, 60.105(a)(3) and (4) until there are changes in the operating conditions or stream composition. No further action is required outside of the written application request in accordance with 40 CFR, Part 60, Subpart J, 60.105(b)(3) unless refinery operating conditions change in such a way that affects the exempt fuel gas stream (e.g. the stream composition changes).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain equipment to continuously monitor andrecord SO2 from this emissions unit in units of the applicable standard. The spanvalue of the continuous emission monitoring system (CEMS) shall be 500 ppm SO2. Suchcontinuous monitoring and recording equipment shall comply with the requirementsspecified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous SO2monitoring system including, but not limited to, parts per million of SO2 for each cycle time of the analyzer, with no resolution less than one data point per minute required, and lbs/hr of SO2; as a 12-hr average, results ofdaily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

The permittee shall maintain a written quality assurance/quality control (QA/QC) planfor the SO2 CEMS that follows the requirements of 40 CFR, Part 60 Appendix F. TheQA/QC plan and logbook for the SO2 CEMS must be kept on site and available forinspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60.13; 40 CFR, Part 60, Appendix F and PTI No. P0107904]

(2) The permittee shall operate and maintain equipment to continuously monitor andrecord the oxygen (O2) from this emissions unit in percent O2. The span value of the CEMS shall be 25 percent O2. Such continuous monitoring andrecording equipment shall comply with the requirements specified in 40 CFR Part 60.13or as approved by the Ohio EPA, Central Office.

The permittee shall maintain recordsof all data obtained by the continuous O2 monitoring system including, but not limited topercent O2 for each cycle time of the analyzer, with no resolution less than one data point per minute required, results of daily zero/spancalibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain a quality assurance/quality control plan for the continuous O2monitoring system designed to ensurecontinuous valid and representative readings. The plan shall follow the requirements of40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbookdedicated to the continuous O2system must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60.13 and PTI No. P0107904]

e) Reporting Requirements

(1) Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031 and 40CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 daysfollowing the end of each calendar quarter to the Ohio EPA, Northwest District Officedocumenting the date, commencement and completion times,duration magnitude, reason (if known), and corrective actions taken (if any), of all 12 hour periods of SO2 values in excess of the applicable lbs/hr and ppm limitations. Thesereports shall also contain the total SO2 emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendarquarter to the Ohio EPA, Northwest District Officedocumenting anycontinuous SO2 monitoring system downtime while the emissions unit was on line (date,time, duration and reason) along with any corrective action(s) taken.

The permitteeshall provide the emissions unit operating time during the reporting period and thedate, time, reason and corrective action(s) taken for each time period of emissions unitand control equipment malfunctions.

The total operating time of the emissions unit andthe total operating time of the analyzer while the emissions unit was on line shall alsobe included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submita statement to that effect along with the emissions unit operating time during thereporting period and the date, time, reason, and corrective action(s) taken for each timeperiod of emissions unit, control equipment, and/or monitoring system malfunctions.The total operating time of the emissions unit and the total operating time of theanalyzer while the emissions unit was on line also shall be included in the quarterlyreport.

These quarterly excess emission reports shall be submitted by January 30, April30, July 30, and October 30 of each year and shall address the data obtained duringthe previous calendar quarter.

Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, thepermittee shall submit a summary of the excess emission report pursuant to 40 CFR, Part 60.7. The summary shall be submitted to the Ohio EPA, Northwest District

Officewithin 30 days following the end of each calendar quarter in amanner prescribed by the Director.

[OAC rule 3745-77-07(C)(1); OAC rule 3745-15-04; ORC sections 3704.03(I) and 3704.031; 40CFR, Parts 60.7 and 60.13(h); and PTI No. P0107904]

(2) Pursuant to 40 CFR, Parts 60.7 and 60.13(h), the permittee shall submit reports within30 days following the end of each calendar quarter to the Ohio EPA, Northwest DistrictOffice documenting any continuous O2 system downtime while theemissions unit was on line (date, time, duration and reason) along with any correctiveaction(s) taken. The permittee shall provide the emissions unit operating time duringthe reporting period and the date, time, reason and corrective action(s) taken for eachtime period of emissions unit and control equipment malfunctions. The total operatingtime of the emissions unit and the total operating time of the analyzer while theemissions unit was on line shall also be included in the quarterly report.

[OAC rule 3745-77-07(C)(1); 40CFR, Parts 60.7 and 60.13(h); and PTI No. P0107904]

(3) All quarterly reports and deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

(4) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f)(1)(ii)	Notification of Compliance Status – Identification of Miscellaneous Process Vents
63.655(g)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents
63.655(g)(6)	Semi-annual Deviation Report for Group 1 Miscellaneous Process Vents – Excess Emissions Reporting

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. 0107904]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.14 lb of PE/hr, 0.61 ton of PE/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation bymultiplying the appropriate particulate emission factor of 7.6 pounds per millionstandard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flowrate of 18,431 standard cubic foot/hr. If required, the permittee shall demonstratecompliance with this emission limitation by conducting emission testing inaccordance with the requirements specified in Methods 1 through 4, and 5 of 40CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

b. Emission Limitation:

1.84 lbs of NOx/hr, 8.06 tons of NOx/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation bymultiplying the appropriate NOx emission factor of 100 pounds per millionstandard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flowrate of 18,431 standard cubic foot/hr.

If required, the permittee shalldemonstrate compliance with this emission limitation by conducting emissiontesting in accordance with the requirements specified in Methods 1 through 4,and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

c. Emission Limitation:

1.88 lbs of CO/hr, 8.23 tons of CO/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The CO emission limitation was derived from a vendor guarantee of a maximumCO emission rate of 100 ppm. If required, the permittee shall demonstratecompliance with this emission limitation by conducting emission

testing inaccordance with the requirements specified in Methods 1 through 4, and 10 of40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

d. Emission Limitation:

0.10 lb of VOC/hr, 0.44 ton of VOC/yr combustion emissions from the tail gas incinerator

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation bymultiplying the appropriate VOC emission factor of 5.5 pounds per millionstandard cubic feet, from AP-42 Chapter 1.4 (7/98), by the maximum fuel flowrate of 18,431 standard cubic foot/hr. If required, the permittee shalldemonstrate compliance with the hourly emission limitation by conductingemission testing in accordance with Methods 1through 4, and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionlimitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with theannual limitation shall be shown as long as compliance with the hourly emissionlimitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

e. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, combustion emissions from the tail gas incinerator

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods andprocedures specified in Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107904]

f. Emission Limitation:

250 parts per million by volume (dry basis) of SO2 at 0% excess air, process emissions from the tail gas incinerator

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit; 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the monitoring and record keeping in d)(1) and d)(2), and through demonstration of compliance with the quality assurance/quality control plan which shall meet the testing and recertification requirements of 40 CFR, Part 60.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. 0107904]

g. Emission Limitation:

19.18 lbs of SO2/hr, as a 12-hr average; 84.02 tons of SO2/yr process emissions from the tail as incinerator

Applicable Compliance Method:

Ongoing compliance with the SO2 emission limitations contained in this permit; 40 CFR, Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the monitoring and record keeping in d)(1) and d)(2), and through demonstration of compliance with the quality assurance/quality control plan which shall meet the testing and recertification requirements of 40 CFR, Part 60.

If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was derived by multiplying the hourly emissionrate derived from the following equation times 8,760 hrs/yr and dividing by 2,000lbs/ton. Compliance with the annual limitation shall be shown as long ascompliance with the hourly emission limitation is maintained.

[OAC rule 3745-77-07(C)(1) and PTI No. 0107904]

g) Miscellaneous Requirements

(1) None.

40. P047, Backup AWWT Pump

Operations, Property and/or Equipment Description:

300 HP diesel pump

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI No. P0108339, issued 7/26/11)	Nitrogen oxides (NOx) emissions shall not exceed 6.3 g/kW-hr Volatile organic compound (VOC) emissions shall not exceed 6.3 g/kW-hr See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0108339, issued 7/26/11)	Carbon monoxide (CO) emissions shall not exceed 0.00668 lb/hp-hr and 8.78 tons/yr Sulfur dioxide (SO_2) emissions shall not exceed 0.00205 lb/hp-hr and 2.69 tons/yr Particulate matter 10 microns or less in size (PM_{10}) shall not exceed 0.18 g/kW-hr and 0.39 ton/yr See b)(2)b.
c.	OAC rule 3745-31-05(A)(3)(a)(ii) as effective 12/1/06	See b)(2)c.
d.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input. See b)(2)d.
e.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-18-06(G)	See b)(2)e.
g.	OAC rule 3745-110-03(F)(3)	See b)(2)f.
h.	40 CFR Part 63, Subpart ZZZZ	See b)(2)g.
i.	40 CFR Part 60, Subpart IIII	See b)(2)h.
j.	40 CFR 60. 1-19 (40 CFR 60.4218)	Table 8 to Subpart IIII of 40 CFR Part 60 – Applicability of General Provisions to Subpart IIII shows which parts of the General Provisions in 40 CFR 60. 1-19 apply.
k.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(4)

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with the emission limitations of 6.3 g/kW-hr for NOx and 6.3 g/kW-hr for VOC.

b. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.

c. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the CO, PM_{10}, and SO_2 emissions from this air contaminant source since the uncontrolled potential to emit for CO, PM_{10}, and SO_2 are each less than 10 tons per year.

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

e. OAC rule 3745-18-06(B) exempts stationary internal combustion engines which have rated heat input capacities equal to, or less than, 10 mmBtu/hr from the sulfur dioxide emission limit in OAC rule 3745-18-06(G). This emissions unit has a rated heat input of less than 10 mmBtu/hr.

f. Pursuant to OAC rule 3745-110-03(J)(3), this emissions unit is not subject to this rule because it has an energy output capacity of less than 2000 horsepower.

g. The new emergency or limited use compression ignition (CI) reciprocating internal combustion engine(s) (RICE), located at an area source for hazardous air pollutants (HAPs), is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. The new stationary CI RICE installed on or after 6/12/06, shall meet the requirements of Part 63, Subpart ZZZZ upon startup, through demonstration of compliance with the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, Part 60, Subpart IIII.

h. The emission standards for NOx, CO, and VOC specified by this rule are equivalent to or less stringent than the emission limitations established pursuant to ORC 3704.03(T) and OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee shall burn only distillate fuel oil in this emissions unit.

The oil combusted in this emissions unit shall only be distillate fuel oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils"). The sulfur content of the distillate fuel oil shall contain no more than 0.5 weight percent sulfur.

[OAC rule 3745-77-07(A)(1) and PTI No. P0108339]

(2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart IIII, 40 CFR 60.4200 to 60.4219.

[OAC rule 3745-77-07(A)(1) and PTI No. P0108339]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall use records of fuel supplier certification to demonstrate compliance with the operational restriction in section c)(1). Records of fuel supplier certification shall include the following information:

a. the name of the oil supplier;

b. and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate fuel oil in c)(1) above.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(2) For each day during which the permittee burns a fuel other than distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart IIII, 40 CFR 60.4200 to 60.4219.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(4) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIprior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than distillate fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel containing greater than 0.5 weight percent sulfur was burned in the emissions unit. These deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(3) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart IIII, 40 CFR 60.4200 to 60.4219.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

NOx emissions shall not exceed 6.3 g/kW-hr

CO emissions shall not exceed 6.68 x 10-3 lb/hp-hr

PM_{10} emissions shall not exceed 0.18 g/kW-hr

VOC emissions shall not exceed 6.3 g/kW-hr

SO_2 emissions shall not exceed 0.00205 lb/hp-hr

Applicable Compliance Methods:

The emission limitations above were established in accordance with the engine manufacturer's emissions specifications. The compliance requirements outlined in 40 CFR Part 60, Subpart IIII shall be used for purposes of demonstrating compliance with the NOx, VOC and CO emission limitations.

If required, the permittee shall demonstrate compliance with the PM_{10} emission limitation above based on the results of emissions testing conducted in accordance with Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

If required, the permittee shall demonstrate compliance with the CO emission limitation above based on the results of emissions testing conducted in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

If required, the permittee shall demonstrate compliance with the VOC emission limitation above based on the results of emissions testing conducted in accordance with Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

If required, the permittee shall demonstrate compliance with the NOx emission limitation above based on the results of emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

If required, the permittee shall demonstrate compliance with the SO_2 emission limitation above based on the results of emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

b. Emission Limitations:

CO emissions not to exceed 8.78 tons/yr

SO_2 emissions not to exceed 2.69 tons/yr

PM_{10} emissions not to exceed 0.39 ton/yr

Applicable Compliance Methods:

The annual emission limitations for CO and SO_2 were developed by multiplying the manufacturer supplied emission factors (0.00668 lb CO/hp-hr and 0.00205 lb SO_2/hp-hr) by the pump rating (300 hp), the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the emission factors, compliance with the annual emission limitations shall also be demonstrated.

The annual emission limitation for PM_{10} was developed by multiplying the PM_{10} emission factor (0.18 g/kW-hr) by the pump rating (300 hp), the maximum operating schedule of 8760 hrs/yr, applying the conversion factors 2.2 lb/kg, 1.34 hp/kW and 1000 g/kg and then dividing by 2000 lbs/ton. Therefore, provided, compliance is shown with the emission factor, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

c. Emission Limitation:

PE shall not exceed 0.310 pound/mmBtu actual heat input

Applicable Compliance Method:

The emission factor found in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1(10/2006) is equivalent to the emission limitation of 0.310 pound/mmBtu actual heat input for PE. Therefore, provided compliance is shown with the emission factor, compliance with the emission limitation shall also be demonstrated. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation above shall be determined in accordance with the methods and procedures in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0108339]

g) Miscellaneous Requirements

(1) None.

41. P048, Wastewater Treatment Plant

Operations, Property and/or Equipment Description:

6,000 gallons per minute capacity Oil/Water Separator System including three API separators (PR-190786, PR-190790 and PR-190794); In Ground Lift Station (PR-190785), Two Dissolved Nitrogen Flotation Units (PR-190798 and PR-190801); and the following exempt storage vessels:

Description	Capacity (gallons)	Exempt by:
Flow splitter tank (PR-100133)	3,525	OAC rule 3745-31-03(A)(1)(I)(iv) – less than 19,815 gallons with submerged fill
Coagulation tank A (PR-100157)	940	OAC rule 3745-31-03(A)(1)(I)(iv) – less than 19,815 gallons with submerged fill
Coagulation tank B (PR-100159)	878	OAC rule 3745-31-03(A)(1)(I)(iv) – less than 19,815 gallons with submerged fill
Air dissolution standpipe A (PR-190804)	92.4	OAC rule 3745-31-03(A)(1)(I)(iii) – less than 700 gallons
Air dissolution standpipe B (PR-190805)	92.4	OAC rule 3745-31-03(A)(1)(I)(iii) – less than 700 gallons
Sludge standpipe A (PR-100158)	350	OAC rule 3745-31-03(A)(1)(I)(iii) – less than 700 gallons
Sludge standpipe B (PR-100600)	350	OAC rule 3745-31-03(A)(1)(I)(iii) – less than 700 gallons
Coagulant storage tank (PR-100630)	6,150	OAC rule 3745-31-03(A)(1)(I)(i) – inorganic liquid
Polymer storage tank (PR-100164)	2,250	OAC rule 3745-31-03(A)(1)(I)(i) – inorganic liquid

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (PTI No. P0109018, issued 3/5/12)	9.79 tons volatile organic compounds (VOC)/yr from inlet lift station 6.98 tons VOC/yr from fugitive emissions associated with leak detection and repair (LDAR) from wastewater operations for this emissions unit See b)(2)a.
b.	ORC 3704.03(T)	See b)(2)b.
c.	OAC rule 3745-21-09(M)(2)	See b)(2)c.
d.	40 CFR, Part 60, Subpart GGGa	See b)(2)d.
e.	40 CFR, Part 60, Subpart QQQ	See b)(2)e.
f.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
g.	40 CFR, Part 61, Subpart FF	See b)(2)f.
h.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
i.	40 CFR, Part 63, Subpart CC	See b)(2)d. and b)(2)g.
j.	40 CFR, Part 63, Subpart A	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for purposes of limiting potential to emit (PTE). The limitations on PTE result in actual emission reductions and the establishment of creditable emission decreases which may be applied towards contemporaneous emission changes associated with the applicability of Prevention of Significant Deterioration requirements.

i. 9.79 tons VOC/yr from inlet lift station; and

ii. 6.98 tons VOC/yr from fugitive emissions associated with LDAR from wastewater operations for this emissions unit.

b. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be compliance with OAC rule 3745-31-05(D) and compliance with the terms and conditions of this permit.

c. Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall control the emissions of volatile organic compounds from any wastewater separator no later than the date specified in paragraph (C)(13) of OAC rule 3745-21-04 by equipping all forebay

sections and other separator sections with covers and seals which minimize the amount of oily water exposed to the ambient air.

In addition, all covers and forebay and separator sections shall be equipped with lids and seals which are kept in a closed position at all times except when in actual use.

d. This emissions unit is subject to the appropriate provisions of 40 CFR, Part 60, Subpart GGGa (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006; and 40 CFR, Part 63, Subpart CC (Petroleum Refinery MACT Standards).

The requirements of these rules are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to OAC rule 3745-21-09(T)(4) and 40 CFR, Part 63, Subpart CC. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of the facility's Title V renewal permit.

e. The permittee shall comply with the applicable standards under 40 CFR, Part 60, Subpart QQQ, including the following sections:

40 CFR 60.692-2	Standards: Individual drain systems
40 CFR 60.692-3	Standards: Oil-water separators
40 CFR 60.693-1	Alternative standards for individual drain systems

f. During all times when the gaseous waste stream from this emissions unit is routed to the refinery fuel gas system, thegaseous waste stream is exempt from 40 CFR, Part 61, Subpart FF, per 40 CFR61.340(d). In accordance with 40 CFR 61.340(d), during these times, no testing,monitoring, recordkeeping or reporting is required under this subpart for the gaseous waste stream from this emissions unit.

In addition, all equipment located downstream of the inlet lift station which contacts the wastewater and is subject to 40 CFR, Part 61, Subpart FF is controlled by a nitrogen blanket routed to the refinery fuel gas system by the NESHAPS gas compressor system, and is thus, exempt from testing,monitoring, recordkeeping and reporting requirements of 40 CFR, Part 61, Subpart FF.

Note: on a facility-wide basis for benzene containing waste streams, the permittee complies with 40 CFR, Part 61, Subpart FF by use of 40 CFR 61.342(e)(2) – annual benzene quantity equal to or less than 6 megagrams (6 metric tons) for water streams containing greater than or equal to 10%.

g. The permittee shall comply with the applicable standards under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.640(d)(5)	Operate closed vent to the refinery fuel gas system for API separators, DNF system, flow splitter tank, coagulation tanks, air dissolution standpipes and sludge standpipes.
40 CFR 63.647(a) – for the API Lift Station only	Except as provided in paragraph (b) of this section, each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR,Part 61, subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

9.79 tons VOC/yr from inlet lift station

Applicable Compliance Method

The annual emission limitation was derived from Water9® computer program, and represents the potential to emit for the inlet lift station. The permittee shall use this computer program to demonstrate compliance with the emission limitation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109018]

b. Emission Limitation

6.98 tons VOC/yr from fugitive emissions associated with LDAR from wastewater operations for this emissions unit

Applicable Compliance Method

Compliance with the annual limitation shall be demonstrated by use of the U.S. EPA Protocol Document for Equipment Leaks (EPA-453/R-95-017, November 1995) – emission factors from Tables 2-2, 2-10 and 2-12. The emissions are based on the following approximate number of new LDAR components for this project:

Valves: 500 in vapor service, 500 in liqht liquid service

Pumps: 25 in liqht liquid service

Connectors/Flanges: 500 in vapor service, 500 in liqht liquid service

Heavy Liquid Components: 250 valves, 25 pumps, 250 connectors

Pressure Relief Valves: 50 in gas service

Sampling Connectors: 30 in gas service

Compressors: 10 in gas service

[OAC rule 3745-77-07(C)(1) and PTI No. P0109018]

g) Miscellaneous Requirements

(1) None.

42. P801, Sewers

Operations, Property and/or Equipment Description:

Central, North, South Refinery Sewers

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	None	None

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

43. P803, Piping Components

Operations, Property and/or Equipment Description:

Leak Detection and Repair (LDAR) Piping Components, connectors, flanges, pumps, compressors, valves, open ended lines and other affected equipment not associated with an existing emissions unit.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI #P0118429, issued 2/18/15)	See b)(2)b.
b.	OAC rule 3745-21-09(T)	Leaks from piping components [See b)(2)c.]
d.	40 CFR, Part 60, Subpart GGGa	Leaks from piping components [See b)(2)c.]
e.	40 CFR, Part 63, Subpart CC	Leaks from piping components [See b)(2)c.]

(2) Additional Terms and Conditions

a. Emissions unit P803 was part of a project addressed by PTI P0110510, issued November 21, 2012 to allow for the continued operation of refinery processes while maintenance is performed on facility heat exchangers to restore lost utilization. Prior to the implementation of the utilization project, maintenance to heat exchangers was performed during scheduled facility “turnarounds”. The ability to perform heat exchanger maintenance before scheduled turnarounds and while continuing refinery operations results in an increase in the utilization of the current refinery capacity and an increase in actual emissions. The following requirements from PTI P0110510 are being reestablished as applicable components of this permit action:

i. The permittee will demonstrate that no major modification under Prevention of Significant Deterioration (PSD) regulations will occur based on the “net emissions increase” associated with the installation of new “components” regulated under the facility alternative LDAR monitoring

plan and through a comparison of baseline actual emissions to projected actual emissions [see d)(1)] for the following emissions units which will experience increased utilization without any physical change or change in the method of operation: B001, B004, B026, B032 and P040.

b. The Best Available Technology (BAT) requirements for this emission unit have been determined to be equivalent to the requirements of 40 CFR, Part 63, Subpart CC.

c. This emissions unit is subject to the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of OAC rule 3745-21-09(T) – Leaks from petroleum refinery equipment; 40 CFR, Part 60, Subpart GGGa (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction or Modification Commenced after November 7, 2006); and 40 CFR, Part 63, Subpart CC (Petroleum Refinery MACT Standards)

The requirements of these rules are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to OAC rule 3745-21-09(T)(4) and 40 CFR, Part 63, Subpart CC. Terms and conditions for the alternative LDAR plan are listed in section B.2 of the Facility-Wide Terms and Conditions of the facility's Title V renewal permit which became effective on February 1, 2012.

d. The requirements of this permit shall become enforceable on the date the permittee commences any type of operation associated with the implementation of the increased utilization project.

Authorization and permitting requirements associated with the current operation (prior to operation under increased utilization project) of emissions units P803, B001, B004, B026, B032, and P040 are contained in the facility's Title V permit and are incorporated by reference (IBR) as requirements of this permit as indicated by the following:

The permittee shall comply with all applicable emission limitations/control measures, operational restrictions, monitoring and recordkeeping requirements, reporting requirements, testing requirements, and additional term and condition requirements contained in the facility's Title V Chapter 3745-77 permit issued January 11, 2012 with an effective date of February 1, 2012. The IBR requirements shall cease to be enforceable for each affected emissions unit after the date an emissions unit commences any type of operation under the increase utilization project authorized by this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records for emissions units B001, B004, B026, B032, and P040, as described in the application (A0044370) for Permit Number: P0110510 issued on November 21, 2012 in order to demonstrate that the increased utilization project described in b)(2)a. does not trigger a major modification for:

- particulate matter 10 microns or less is size (PM_{10}), particulate matter 2.5 microns or less in size ($PM_{2.5}$). It should be noted all emissions of particulate matter are $PM_{10}/PM_{2.5}$;
- sulfur dioxide (SO_2);
- nitrogen oxide (NO_x);
- carbon monoxide (CO);
- volatile organic compounds (VOC); and
- greenhouse gases quantified as carbon dioxide equivalent (CO_2e).

a. the projected actual annual emissions for $PM_{10}/PM_{2.5}$, SO_2, NO_x, CO, VOC and CO_2e, in tons per year, from the increased utilization project described in b)(2)a and as submitted in the application (A0044370) for Permit Number: P0110510 issued on November 21, 2012; and

b. the total actual annual emissions for $PM_{10}/PM_{2.5}$, SO2, NOx, CO, VOC and CO_2e, in tons per year, from emissions units B001, B004, B026, B032, and P040, combined.

c. The increased utilization project is planned to be phased in over an extended time period and the recordkeeping requirements above shall begin with the commencement of any type of operation under the initial phase of the increased utilization project and shall end 5 years following the date the increased utilization project has been totally phased in and operation under the completed project has commenced.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118429]

e) Reporting Requirements

(1) The permittee shall notify the Northwest District Office in writing if annual emissions from all emissions units in the increased utilization project described in b)(2)a, result in a significant $PM_{10}/PM_{2.5}$, SO_2, NOx, CO, VOC and/or CO_2e emissions increase and exceed the projected actual $PM_{10}/PM_{2.5}$, SO_2, NOx, CO, VOC and CO_2e emissions contained in the application (A0044370) for Permit Number: P0110510 issued on November 21, 2012. This notification shall identify the cause for the significant emissions increase and the estimated $PM_{10}/PM_{2.5}$, SO_2, NOx, CO, VOC and/or CO_2e emissions. This notification shall be submitted to the Northwest District Office within 120 days after the end of such year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118429]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. None.

g) Miscellaneous Requirements

(1) None.

44. T009, Tank 100216

Operations, Property and/or Equipment Description:

aboveground, internal floating roof organic liquids storage tank No. 100216, with a capacity of 79,800 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a., b)(2)b., and d)(1)
b.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)f., d)(4) and e)(2)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	Storage Tank Emission Reduction Partnership Program – 65 Federal Register 19891 (April 13, 2000)	See b)(2)e. and d)(2)
e.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	See b)(2)c., b)(2)d., d)(3) and e)(1)
f.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
g.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656]	See b)(2)b. and b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	
h.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110, these emissions units are affected sources due to the storage vessels being subject to 40 CFR 63.149 within a source subject to Subpart F of this part, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)g., d)(5) and e)(3)
i.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The fixed roof storage tank shall be equipped with an internal floating roof.

b. 40 CFR, Part 63, Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

c. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with therequirements of 40 CFR 61.340 through 61.355 of 40 CFR Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.[40 CFR 63.647(a)]

d. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 61, Subpart FF, including the following section:

61.351(a)	Alternative Standards for Tanks

e. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (U.S. EPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

f. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i) through 60.112b(a)(1)(ix)	Standards for VOC: Internal Floating Roof Must Rest on Liquid Surface, Closure Devices, Openings Must be Below Liquid Surface and Have Cover, Vents Must be Gasketed and Only Open When Roof not Floating, Ladder Must Have Fabric Sleeve, Vents Must be Gasketed and Closed, Rim Vents Must Have Gasket, Supports Columns Must Have Fabric Sleeve

g. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart G.

The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(a)(1), 63.119(b)(1) and 63.119(b)(2)	Reference Control Technology – Internal Floating Roof Requirements

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(2) In accordance with the STERPP agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.356(a) and 61.356(k)	Recordkeeping, Including Requirements in 40 CFR 60.115b

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(4) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(4)	Internal Floating Roof Visual Inspections, Seal Inspections, Emptying and Degassing Requirements
60.115b and 60.115b(a)(2)	Internal Floating Roof, Records of

	Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(5) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(b)(3), 63.119(b)(4), 63.120(a)(1), 63.120(a)(3)(i) through 63.120(a)(3)(iii), and 63.120(a)(4)	Storage Vessel Provisions – Procedures to Determine Compliance: Internal Floating Roof Requirements, Automatic Bleeder Vent Requirements, Visual Inspection Requirements
63.119(d)(1)	Storage Vessel Provisions – External Floating Roof Converted to Internal Floating Roof
63.120(a)(7)	Storage Vessel Provisions – Repairs Required by Inspection Results
63.123(a)	Storage Vessel Provisions – Recordkeeping for Dimensions and Capacity
63.123(c)	Storage Vessel Provisions – Recordkeeping Requirements for Inspections

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.357(e)	Reporting Requirements – Notification of

	Alternative Standard
61.357(f)	Reporting Requirements – Comply with 60.115b

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(5)	Internal Floating Roof: Notification for Filling or Refilling
60.115b(a)(1)	Internal Floating Roof: Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(a)(5) and 63.120(a)(6)	Notification Requirements Prior to Refilling Tanks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

45. Emissions Unit Group –Internal Floating RoofGroup 1 Vessels subject to 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 61, Subpart FF; 40 CFR, Part 63, Subpart CC; and 40 CFR, Part 63, Subpart DD: T078, T220

EU ID	Operations, Property and/or Equipment Description
T078	above ground,internal floating roof organic liquids storage tank No. 100076 (tank 77A) with a capacity of 56,402 gallons(tank storing group 1 wastewater)
T220	above ground, internal floating roof organic liquids storage tank No. 100077 with a capacity of 79,800 gallons (tank storing group 1 wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a. through b)(2)d.,d)(1) and e)(3)
b.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)i., d)(3) and e)(2)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	See b)(2)f., b)(2)g., d)(2) and e)(1)
e.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
f.	40 CFR, Part 63, Subpart CC	See b)(2)f. andb)(2)h.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	
g.	40 CFR, Part 63, Subpart DD	See b)(2)j.
h.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports; and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

e. As an alternative to the standards for tanks specified in 40 CFR 61.343 of this subpart, the permittee has elected to comply with the following:

i. A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

If the permittee elects to comply with the provisions of 40 CFR 61.351(b), then the permittee is exempt from the provisions of 40 CFR 61.343 of this subpart applicable to the same facilities.

f. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with therequirements of 40 CFR 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.[40 CFR 63.647(a)]

g. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 61, Subpart FF, including the following section:

61.351(a)	Alternative Standards for Tanks

h. Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and record keeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average. Record keeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs (f)(5) and (g)(8) of this section.

i. Since the permittee has elected to comply with tank roof requirements as shown in section b)(2)e. for this emissions unit, this emissions unit is subject to NSPS standards in 40 CFR, Part 60, Subpart Kb.

The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i) through 60.112b(a)(1)(ix)	Standards for VOC: Internal Floating Roof Must Rest on Liquid Surface, Closure Devices, Openings Must be Below Liquid Surface and Have Cover, Vents Must be Gasketed and Only Open When Roof not Floating, Ladder Must Have Fabric Sleeve, Vents Must be Gasketed and Closed, Rim Vents Must Have Gasket, Supports Columns Must Have Fabric Sleeve

j. An off-site material management unit is exempted from the requirements in 40 CFR 63.683(b)(1) when the permittee meets one of the exemptions provided in paragraphs 63.683(b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit. An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR, Part 61 or 40 CFR, Part 63, and the permittee is controlling the HAPs listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under Part 61 or Part 63.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.356(a) and 61.356(k)	Recordkeeping, Including Requirements in 40 CFR 60.115b

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(4)	Internal Floating Roof Visual Inspections, Seal Inspections, Emptying and Degassing Requirements
60.115b and 60.115b(a)(2)	Internal Floating Roof, Records of Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.357(e)	Reporting Requirements – Notification of Alternative Standard
61.357(f)	Reporting Requirements – Comply with 60.115b

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(5)	Internal Floating Roof: Notification for Filling or Refilling
60.115b(a)(1)	Internal Floating Roof: Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) If the permittee places, stores, or holds in the internal floating roof tank any petroleum liquid with a true vapor pressure which is greater than 11.1 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

46. Emissions Unit Group –External Floating Roof Group 1 Vessels subject to 40 CFR, Part 63, Subpart CC: T017, T020, T021, T025, T027, T028, T029, T033, T034, T037, T039, T042, T043, T044, T049, T205, T206, T207, T208

EU ID	Operations, Property and/or Equipment Description
T017	above ground, external floating roof organic liquids storage tank No. 100096 with a capacity of 1,381,844 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T020	above ground, external floating roof organic liquids storage tank No. 100201with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T021	above ground, external floating roof organic liquids storage tank No. 100202 with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T025	above ground, external floating roof organic liquids storage tank No. 100206 with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T027	above ground, external floating roof organic liquids storage tank No. 100208 with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T028	above ground, external floating roof organic liquids storage tank No. 100209with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T029	above ground, external floating roof organic liquids storage tank No. 100210 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T033	above ground, external floating roof organic liquids storage tank No. 100215 with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T034	above ground, external floating roof organic liquids storage tank No. 100220 with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T037	above ground, external floating roof organic liquids storage tank No. 100227 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T039	above ground, external floating roof organic liquids storage tank No. 100231 with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T042	above ground, external floating roof organic liquids storage tank No. 100239 with a capacity of 4,275,820 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T043	above ground, external floating roof organic liquids storage tank No. 100244 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T044	above ground, external floating roof organic liquids storage tank No. 100245 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T049	above ground, external floating roof organic liquids storage tank No. 100223with a capacity

EU ID	Operations, Property and/or Equipment Description
	of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T205	above ground, external floating roof petroleum liquids storage tank No. 100320 with a capacity of 13,649,234 gallons(welded shell construction, liquid-mounted, resilient foam-filled primary seal, rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T206	above ground, external floating roof petroleum liquids storage tank No. 100321 with a capacity of 13,649,234 gallons (welded shell construction, mechanical shoe primary seal, rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T207	above ground, external floating roof petroleum liquids storage tank No. 100322 with a capacity of 13,649,234 gallons (welded shell construction, liquid-mounted, resilient foam-filled primary seal, rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T208	above ground, external floating roof petroleum liquids storage tank No. 100323with a capacity of 13,649,234 gallons(welded shell construction, mechanical shoe primary seal, rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g., d)(1), d)(2), and e)(1)
b.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)h., d)(3) and e)(2)
c.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears, or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Officewithin 30 days after the change occurs.

b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

f. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

g. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

h. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart CC.

The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(a)	Requirements for Group 1 Storage Vessels
63.646(b)	Storage Vessel Provisions – Determination of HAP Weight Percent
63.646(c)	Storage Vessel Provisions – Non-applicable Paragraphs
63.646(d)(1) through 63.646(d)(4)	Storage Vessel Provisions – Replacement Language for Schedule and Compliance Dates
63.646(e)	Storage Vessel Provisions – Compliance for Gaskets, Slotted Membranes and Sleeve Seals Not Applicable
63.646(f)	Storage Vessel Provisions – Group 1 Storage Vessel Requirements

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(g)	Storage Vessel Provisions – Failure to Perform Inspections and Monitoring
63.655(i)(1)	Storage Vessel Provisions – Recordkeeping Requirement Exceptions
63.655(i)(4)	Storage Vessel Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall notify the Director (Ohio EPA, Northwest District Office) within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(l)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(e)	Storage Vessel Provisions – Reporting Requirements
63.655(f), 63.655(f)(1)(i)(A)(1) through 63.655(f)(1)(i)(A)(3), 63.655(f)(6)	Storage Vessel Provisions – Notification of Compliance Status
63.655(g)(1), and 63.655(g)(3)(i)(A) through 63.655(g)(3)(i)(D)	Storage Vessel Provisions – Periodic Reporting Requirements
63.655(g)(3)(ii) and 63.655(g)(3)(iii)	Storage Vessel Provisions – Request for Reporting Extension
63.655(h)(1), 63.655(h)(2)(i),	Storage Vessel Provisions – Reporting per

63.655(h)(2)(i)(A)	Subpart A of Startup, Shutdown and Malfunction Plan
63.655(h)(2)(i)(B)	Storage Vessel Provisions – Exceptions for Internal Inspections
63.655(h)(2)(i)(C)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(h)(2)(ii)	Storage Vessel Provisions – Notification of Seal Gap Measurements
63.655(h)(6)(ii)	Storage Vessel Provisions – Notification of Variation in Use of Any Storage Vessel

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

47. T023, Tank 100204

Operations, Property and/or Equipment Description:

above ground, external floating roof organic liquids storage tank No. 100204 with a capacity of 424,482 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g., d)(1),d)(4), and e)(1)
b.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)h., d)(5) and e)(2)
c.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110, this emissions unit is an affected source due to the storage vessel being subject to 40 CFR 63.149 within a source subject to Subpart F of this part, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)i., d)(2), d)(3), d)(6) and e)(3)
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		General Provisions in 40 CFR 63.1 - 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears, or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Officewithin 30 days after the change occurs.

b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

f. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

g. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

h. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart CC.

The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(h)(2)	Storage Vessel Provisions – Schedule and Compliance Dates
63.640(n)(5)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subparts K and Ka
63.646(a)	Applicability and Overlap Provisions for 40 CFR, Part 63, Subpart G
63.646(b)	Storage Vessel Provisions – Determination of HAP Weight Percent
63.646(c)	Storage Vessel Provisions – Non-applicable Paragraphs
63.646(d)(1) through 63.646(d)(4)	Storage Vessel Provisions – Replacement Language for Schedule and Compliance Dates
63.646(e)	Storage Vessel Provisions – Compliance for Gaskets, Slotted Membranes and Sleeve Seals Not Applicable
63.646(f)	Storage Vessel Provisions – Group 1 Storage Vessel Requirements

i. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart G.

The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(a), 63.119(a)(1), 63.119(c)(1), 63.119(c)(1)(i) through 63.119(c)(1)(iv), 63.119(c)(3) and 63.119(c)(4)	Reference Control Technology – External Floating Roof Requirements
63.120(b)(5)	Storage Vessel Provisions – Procedures to Determine Compliance, Additional Primary Seal Requirements
63.120(b)(6)	Storage Vessel Provisions – Procedures to Determine Compliance, Additional Secondary Seal Requirements

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

[OAC rule 3745-77-07(C)(1)]

(2) The secondary seal gap shall be measured annually in accordance with the methods specified in 40 CFR, Part 63, Subpart G, which are equivalent to, or more stringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(3) The primary seal gap shall be measured at least once every 5 years, in accordance with the methods specified in 40 CFR, Part 63, Subpart G, which are equivalent to, or more stringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(4) The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(5) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(g)	Storage Vessel Provisions – Failure to Perform Inspections and Monitoring
63.655(i)(1)	Storage Vessel Provisions – Recordkeeping Requirement Exceptions
63.655(i)(4)	Storage Vessel Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(6) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(b)(1), 63.120(b)(1)(i) through 63.120(b)(1)(iv), 63.120(b)(2) through 63.120(b)(4), 63.120(b)(7), 63.120(b)(8), 63.120(b)(10) and 63.120(b)(10)(i)	Storage Vessels Provisions – Procedures to Determine Compliance: Seal Gap Measurements, Visual Inspections and Repair Provisions
63.123(a)	Storage Vessel Provisions – Recordkeeping for Dimensions and Capacity
63.123(d)	Storage Vessel Provisions – Recordkeeping for External Floating Roof Tanks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall notify the Director (Ohio EPA, Northwest District Office) within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(l)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(e)	Storage Vessel Provisions – Reporting Requirements
63.655(f), 63.655(f)(1)(i)(A)(1) through 63.655(f)(1)(i)(A)(3), 63.655(f)(6)	Storage Vessel Provisions – Notification of Compliance Status
63.655(g)(1), and 63.655(g)(3)(i)(A) through 63.655(g)(3)(i)(D)	Storage Vessel Provisions – Periodic Reporting Requirements
63.655(g)(3)(ii) and 63.655(g)(3)(iii)	Storage Vessel Provisions – Request for Reporting Extension
63.655(h)(1), 63.655(h)(2)(i), 63.655(h)(2)(i)(A)	Storage Vessel Provisions – Reporting per Subpart A of Startup, Shutdown and Malfunction Plan
63.655(h)(2)(i)(B)	Storage Vessel Provisions – Exceptions for Internal Inspections
63.655(h)(2)(i)(C)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(h)(2)(ii)	Storage Vessel Provisions – Notification of Seal Gap Measurements
63.655(h)(6)(ii)	Storage Vessel Provisions – Notification of Variation in Use of Any Storage Vessel

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(b)(9), 63.120(b)(10)(ii) and 63.120(b)(10)(iii)	Storage Vessel Provisions – Procedures to Determine Compliance: Notification of Gap Measurements and Visual Inspections

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

48. Emissions Unit Group –External Floating Roof Group 2 Vessels subject to 40 CFR, Part 63, Subpart CC: T018, T019

EU ID	Operations, Property and/or Equipment Description
T018	aboveground, external floating roof organic liquids storage tank No. 100134 with a capacity of 846,027 gallons (welded shell construction with mechanical shoe primary seal)(group 2 storage vessel)
T019	above ground, external floating roof organic liquids storage tank No. 100135 with a capacity of 846,027 gallons (welded shell construction with mechanical shoe primary seal)(group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(Z)(3)(c)	See b)(2)a., c)(1) and e)(1)
b.	40 CFR Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b., d)(1) and e)(2)
c.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(Z)(1) and 3745-21-09(Z)(2) as long as the permittee does not store any

petroleum liquid with a maximum true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

b. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart CC.

The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l), 63.640(l)(1), 63.640(l)(2), 63.640(l)(2)(i) and 63.640(l)(2)(ii)	Applicability and Compliance Dates if a Process Change Creates Additional Group 1 Emission Point(s)
63.640(n)(7)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subparts K and Ka

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(1)(iv)	If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.
63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with a true vapor pressure which is greater than 1.5 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(Z)(1), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l)(3), and 63.640(l)(3)(i) through 63.640(l)(3)(vii)	Applicability of Reporting Requirements and Notification of Compliance Status if a Process Change Occurs for Existing Source
63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

49. Emissions Unit Group –External Floating Roof Group 1 Vessels subject to 40 CFR, Part 63, Subpart CC; and Storage Tank Emission Reduction Partnership Program 65 Federal Register 19891 (April 13, 2000): T026, T030, T036, T038, T040

EU ID	Operations, Property and/or Equipment Description
T026	above ground, external floating roof organic liquids storage tank No. 100207 with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T030	above ground, external floating roof organic liquids storage tank No. 100212 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T036	above ground, external floating roof organic liquids storage tank No. 100226with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T038	above ground, external floating roof organic liquids storage tank No. 100228 with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)
T040	above ground, external floating roof organic liquids storage tank No. 100233 with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)(group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g., d)(1), d)(2), and e)(1)
b.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)h., d)(3) and e)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	Storage Tank Emission Reduction Partnership Program 65 Federal Register 19891 (April 13, 2000)	See b)(2)i. and d)(4)
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears, or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Office within 30 days after the change occurs.

b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

f. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

g. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

h. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(a)	Requirements for Group 1 Storage Vessels
63.646(b)	Storage Vessel Provisions – Determination of HAP Weight Percent
63.646(c)	Storage Vessel Provisions – Non-applicable Paragraphs
63.646(d)(1) through 63.646(d)(4)	Storage Vessel Provisions – Replacement Language for Schedule and Compliance Dates
63.646(e)	Storage Vessel Provisions – Compliance for Gaskets, Slotted Membranes and Sleeve Seals Not Applicable
63.646(f)	Storage Vessel Provisions – Group 1 Storage Vessel Requirements

i. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (U.S. EPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)j.]:

The permittee shall not exceed a material throughput rate of 114,848,340 gallons per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(g)	Storage Vessel Provisions – Failure to Perform Inspections and Monitoring
63.655(i)(1)	Storage Vessel Provisions – Recordkeeping Requirement Exceptions
63.655(i)(5)	Storage Vessel Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(4) In accordance with the STERPP agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(l)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(e)	Storage Vessel Provisions – Reporting Requirements
63.655(f), 63.655(f)(1)(i)(A)(1) through 63.655(f)(1)(i)(A)(3), 63.655(f)(6)	Storage Vessel Provisions – Notification of Compliance Status
63.655(g)(1), and 63.655(g)(3)(i)(A) through 63.655(g)(3)(i)(D)	Storage Vessel Provisions – Periodic Reporting Requirements
63.655(g)(3)(ii) and 63.655(g)(3)(iii)	Storage Vessel Provisions – Request for

	Reporting Extension
63.655(h)(1), 63.655(h)(2)(i), 63.655(h)(2)(i)(A)	Storage Vessel Provisions – Reporting per Subpart A of Startup, Shutdown and Malfunction Plan
63.655(h)(2)(i)(B)	Storage Vessel Provisions – Exceptions for Internal Inspections
63.655(h)(2)(i)(C)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(h)(2)(ii)	Storage Vessel Provisions – Notification of Seal Gap Measurements
63.655(h)(6)(ii)	Storage Vessel Provisions – Notification of Variation in Use of Any Storage Vessel

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

50. Emissions Unit Group –Internal Floating RoofGroup 1 Vessels subject to 40 CFR, Part 63, Subparts G and CC: T031, T032, T041

EU ID	Operations, Property and/or Equipment Description
T031	above ground, internal floating roof organic liquids storage tank No. 100213with a capacity of 3,412,308 gallons(group 1 storage vessel)
T032	above ground, internal floating roof organic liquids storage tank No. 100214 with a capacity of 3,412,308 gallons(group 1 storage vessel)
T041	above ground, internal floating roof organic liquids storage tank No. 100238 with a capacity of 4,060,929gallons(group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a. through b)(2)d., d)(1) and e)(3)
b.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)e., d)(2) and e)(1)
c.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110, these emissions units are affected sources due to the storage vessels being subject to 40 CFR 63.149 within a source subject to Subpart F of this part, subject to the emissionlimitations/controlmeasures	See b)(2)f., d)(3) and e)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	specified in this section.]	
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports; and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

e. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart CC.

The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(a)	Requirements for Group 1 Storage Vessels
63.646(b)	Storage Vessel Provisions – Determination of HAP Weight Percent
63.646(c)	Storage Vessel Provisions – Non-applicable Paragraphs
63.646(d)(1), 63.646(d)(4) and	Storage Vessel Provisions – Replacement Language for Schedule and Compliance

63.646(d)(5)	Dates
63.646(f)	Storage Vessel Provisions – Group 1 Storage Vessel Requirements

f. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart G.

The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(a)(1), 63.119(b)(1) and 63.119(b)(2)	Reference Control Technology – Internal Floating Roof Requirements

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(g)	Storage Vessel Provisions – Failure to Perform Inspections and Monitoring
63.655(g)(2)(ii)	Storage Vessel Provisions – Internal Inspection
63.655(i)(1)	Storage Vessel Provisions – Recordkeeping Requirement Exceptions
63.655(i)(5)	Storage Vessel Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(b)(3), 63.119(b)(4), 63.120(a)(1), 63.120(a)(3)(i) through 63.120(a)(3)(iii), and 63.120(a)(4)	Storage Vessel Provisions – Procedures to Determine Compliance: Internal Floating Roof Requirements, Automatic Bleeder Vent Requirements, Visual Inspection Requirements
63.119(d)(1)	Storage Vessel Provisions – External Floating Roof Converted to Internal Floating Roof
63.120(a)(7)	Storage Vessel Provisions – Repairs Required by Inspection Results
63.123(a)	Storage Vessel Provisions – Recordkeeping for Dimensions and Capacity
63.123(c)	Storage Vessel Provisions – Recordkeeping Requirements for Inspections

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(l)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(e)	Storage Vessel Provisions – Reporting Requirements
63.655(f), 63.655(f)(1)(i)(A) and 63.655(f)(6)	Storage Vessel Provisions – Notification of Compliance Status
63.655(g)(1), 63.655(g)(2)(i), 63.655(g)(2)(i)(A), 63.655(g)(2)(i)(B) and 63.655(g)(2)(ii)	Storage Vessel Provisions – Periodic Reporting Requirements
63.655(g)(2)(i)(C)	Storage Vessel Provisions – Request for Reporting Extension

63.655(h)(1)	Startup, Shutdown and Malfunction Reporting Requirements
63.655(h)(2)(i) and 63.655(h)(2)(i)(A)	Storage Vessel Provisions – Reporting per Subpart A of Startup, Shutdown and Malfunction Plan
63.655(h)(2)(i)(B)	Storage Vessel Provisions – Notification of Unplanned Inspections
63.655(h)(2)(i)(C)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(h)(6)(ii)	Storage Vessel Provisions – Notification of Variation in Use of Any Storage Vessel

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(a)(5) and 63.120(a)(6)	Notification Requirements Prior to Refilling Tanks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(3) If the permittee places, stores, or holds in the internal floating roof tank any petroleum liquid with a true vapor pressure which is greater than 11.1 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

51. T045, Tank 100248

Operations, Property and/or Equipment Description:

4,060,929 Gallon Fixed Roof Diesel Product Storage Tank (storing organic liquid with a vapor pressure less than 0.754 psia)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (PTI No. P0115043, issued 8/22/13)	36.1 tons volatile organic compounds (VOC) per rolling, 12-month period See b)(2)a.
b.	ORC rule 3704.03(T) (PTI No. P0115043, issued 8/22/13)	See b)(2)b.
c.	OAC rule 3745-21-09(L)	See b)(2)c
d.	40 CFR, Part 60, Subpart Kb 40 CFR, Part 60.116b(a) – (d)	See b)(2)d. See d)(2) – d)(5)
e.	40 CFR, Part 63, Subpart CC	See b)(2)e.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitation for the purpose of establishing the potential to emit (PTE) for this emissions unit:

i. 36.1 tons VOC per rolling, 12-month period.

The federally enforceable emission limitation is based on the operational restriction contained in c)(1).

b. In accordance with ORC 3704.03(T), Best Available Technology (BAT) requirements for this emission unit have been determined to be compliance with 40 CFR, Part 63, Subpart CC.

c. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC; 40 CFR, and Part 60, Subpart Kb.

d. This emissions unit is exempt from the control requirements specified in 40 CFR, Part 60, Subpart Kb because the maximum true vapor pressure of the stored organic liquid is less than 5.2 kPa (0.754 psia).

e. This emissions unit is a Group 2 storage vessel as defined in 40 CFR, Part 63.641. After the compliance date specified in paragraph (h) of 40 CFR, Part 63.640, a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640.

[40 CFR 63.640(n)(1)]

c) Operational Restrictions

(1) The maximum rolling, 12-month quantity of material throughput for this emissions unit is limited by the following equation:

$$\sum_{M=1}^{12} \sum_{i=1}^{n} [(STE_i) \div 2000 \leq 36.1$$

Where:

M = the increment of the rolling 12-month period

n = the total number of unique petroleum liquids stored in emissions unit T045

STE_i = VOC emissions in pounds from each material i stored, determined using the most current version of USEPA's "Tanks Program".

[OAC rule 3745-77-07(A)(1) and PTI No. P0115043]

(2) To ensure federal enforceability during the first 12 calendar months of operation under the provisions of this permit, material throughput for emissions unit T045 is limited by the following:

Maximum Allowable Material Throughput

MONTH(S)	$\left\{\sum [(STE_i) \div 2000\right\}$ is less than or equal to
1-1	7.2
1-2	14.4

MONTH(S)	$\{\sum [(STE_i) \div 2000\}$ is less than or equal to
1-3	21.6
1-4	28.8
1-12	36.1

After the first 12 calendar months of operation under the provisions of this permit, compliance with the material throughput restriction shall be based upon a rolling 12-month summation.

[OAC rule 3745-77-07(A)(1) and PTI No. P0115043]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit T045:

a. name and identification for each material stored;

b. the throughput of each material stored, in gallons;

c. the calculated VOC emissions from each material stored, in tons, determined using the most current version of USEPA's "Tanks Program";

d. the total VOC emission rate from all materials stored, in tons/month, calculated as follows:

$E_M = (E_1 + E_2 + E_3 + ... + E_n)$

where:

E_M = Monthly VOC emissions, in tons/month; and

E_n = VOC from individual materials stored, in tons;

e. beginning after the first 12 calendar months following the issuance of this permit, the rolling, 12-month total VOC emission rate calculated as follows:

$E_T = (E_{M1} + E_{M2} + E_{M3} + ... + E_{M12})$

where:

E_T = Annual VOC emissions (tons) as summed from the previous 12 months of monthly VOC emissions;

E_M = Monthly OC emissions from all individual materials stored (tons/month).

f. Also, during the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative total VOC emission rate from all materials stored, in tons.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115043]

(2) The owner or operator shall keep copies of all records required under 40 CFR 60.116b for at least 2 years.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(a) and PTI No. P0115043]

(3) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(b) and PTI No. P0115043]

(4) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(c) and PTI No. P0115043]

(5) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Northwest District Office within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure for each volume range.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(d) and PTI No. P0115043]

(6) The owner or operator shall maintain records of the following information in a readily accessible location for at least 5 years and shall make copies of the records available to the Northwest District Office upon verbal or written request:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115043]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of:

a. the rolling, 12-month VOC emission limitation; and

b. any exceedances of the maximum allowable cumulative material throughput for the first 12 months of operation as specified in c)(2).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northwest District Office).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115043]

(2) If the permittee places, stores, or holds in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 0.754 pound per square inch absolute, the permittee shall so notify the director within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115043]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

36.1 tons VOC per rolling, 12-month period

<u>Applicable Compliance Method:</u>

Compliance shall be based upon the record keeping requirements specified in d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115043]

g) Miscellaneous Requirements

(1) None.

52. Emissions Unit Group –Fixed Roof Group 2Vessels subject to 40 CFR, Part 63, Subpart CC: T053, T054, T057, T058, T059, T060, T061, T065, T066, T067, T068, T093, T123, T164, T177, T178, T195

EU ID	Operations, Property and/or Equipment Description
T053	above ground, fixed roof organic liquids storage tank No. 100229 with a capacity of 3,412,308 gallons (group 2 storage vessel)
T054	above ground, fixed roof organic liquids storage tank No. 100230 with a capacity of 3,412,308 gallons (group 2 storage vessel)
T057	above ground, fixed roof organic liquids storage tank No. 100235 with a capacity of 3,412,308 gallons (group 2 storage vessel)
T058	above ground, fixed roof organic liquids storage tank No. 100236 with a capacity of 3,412,308 gallons (group 2 storage vessel)
T059	above ground, fixed roof organic liquids storage tank No. 100246 with a capacity of 4,060,929gallons (group 2 storage vessel)
T060	above ground, fixed roof organic liquids storage tank No. 100247 with a capacity of 4,060,929gallons (group 2 storage vessel)
T061	above ground, fixed roof organic liquids storage tank No. 100249 with a capacity of 4,060,929gallons (group 2 storage vessel)
T065	above ground, fixed roof organic liquids storage tank No. 100264 with a capacity of 2,284,273gallons (group 2 storage vessel)
T066	above ground, fixed roof organic liquids storage tank No. 100324 with a capacity of 4,235,399 gallons (group 2 storage vessel)
T067	above ground, fixed roof organic liquids storage tank No. 100325 with a capacity of 4,235,399 gallons (group 2 storage vessel)
T068	above ground, fixed roof organic liquids storage tank No. 100326 with a capacity of 4,235,399 gallons (group 2 storage vessel)
T093	above ground, fixed roof organic liquids storage tank No. 100060 with a capacity of 1,504,048gallons (group 2 storage vessel)
T123	above ground, fixed roof organic liquids storage tank No. 100022with a capacity of 1,381,844gallons (group 2 storage vessel)
T164	above ground, fixed roof organic liquids storage tank No. 100298 with a capacity of 4,060,929 gallons (group 2 storage vessel)
T177	above ground, fixed roof organic liquids storage tank No. 100458 with a capacity of 705,022gallons (group 2 storage vessel)
T178	above ground, fixed roof organic liquids storage tank No. 100459 with a capacity of 705,022gallons (group 2 storage vessel)
T195	above ground, fixed roof organic liquids storage tank No. 100460 with a capacity of338,411gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a. See c)(1) and e)(1)
b.	40 CFR Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b., d)(1) and e)(2)
c.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The requirements in OAC rule 3745-21-09(L) are less stringent than the requirements in 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(1)(iv)	If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing

	sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.
63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52psia, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l)(3), and 63.640(l)(3)(i) through 63.640(l)(3)(vii)	Applicability of Reporting Requirements and Notification of Compliance Status if a Process Change Occurs for Existing Source
63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

53. Emissions Unit Group –Fixed Roof Group 2Vessels subject to 40 CFR, Part 60, Subpart Ka and 40 CFR, Part 63, Subpart CC: T055, T064

EU ID	Operations, Property and/or Equipment Description
T055	above ground, fixed roof organic liquids storage tank No. 100232 with a capacity of2,820,090 gallons(group 2 storage vessel)
T064	above ground, fixed roof organic liquids storage tank No. 100263 with a capacity of2,289,273 gallons(group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a) (PTI No. P0104760, issued 10/8/10)	Emissions Limitation for T055: 5.59 tons of volatile organic compounds (VOC)/yr Emissions Limitation for T064: 6.71 tons of VOC/yr
b.	OAC rule 3745-21-09(L)	See c)(1), d)(4), and e)(1)
c.	40 CFR, Part 60, Subpart Ka	See b)(2)a.
d.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b., d)(1) and e)(2)
e.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. After the compliance date of August 18, 1998, a Group 2 storage vessel that is also subject to 40 CFR, Part 60, Subpart Ka, but not the control requirements of Subpart Ka, is required to comply only with the requirements of 40 CFR, Part 63, Subpart CC. [40 CFR 63.640(n)(7)]

b. This emissions unit is subject to MACT standards in 40 CFR, Part 63, Subpart CC.

The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(7)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subparts K and Ka

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in each fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. P0104760]

(2) The maximum throughput for each tank shall not exceed 735,840,000 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI No. P0104760]]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(1)(iv)	If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.
63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(2) The permittee shall maintain monthly records of the amount of material throughput for each emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(3) The permit shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank; and

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 psia, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l)(3), and 63.640(l)(3)(i) through 63.640(l)(3)(vii)	Applicability of Reporting Requirements and Notification of Compliance Status if a Process Change Occurs for Existing Source
63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(3) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for each emissions unit. These reports shall be submitted electronically through Ohio EPA Air Services by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. Emissions Limitations:

5.59 tons of VOC/yr from T055; and

6.71 tons of VOC/yr from T064

Applicable Compliance Method:

The permittee shall demonstrate compliance through working and breathing loss calculations as determined by U.S. EPA TANKS 4.09d program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

g) Miscellaneous Requirements

(1) None.

54. Emissions Unit Group –Internal Floating Roof Group 1Vessels subject to 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 63, Subpart CC; : T071, T072, T073, T075

EU ID	Operations, Property and/or Equipment Description
T071	above ground, internal floating roof organic liquids storage tank No. 100026 with a capacity of 177,194 gallons(tank storing group 1wastewater)
T072	above ground, internal floating roof organic liquids storage tank No. 100028 with a capacity of 177,194 gallons(tank storing group 1wastewater)
T073	above ground, internal floating roof organic liquids storage tank No. 100256 with a capacity of 230,307 gallons(tank storing group 1wastewater)
T075	above ground, internal floating roof organic liquids storage tank No. 100255 with a capacity of 475,890 gallons(tank storing group 1wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-03(A)(3)(a) (PTI No. P0104760, issued 10/8/10)	Emissions limitation for T071: 5.25 tons of volatile organic compounds (VOC)/yr Emissions limitation for T072: 6.14 tons of VOC/yr Emissions limitation for T073: 7.51 tons of VOC/yr Emissions limitation for T075: 12.04 tons of VOC/yr
b.	OAC rule 3745-21-09(L)	See b)(2)b. and d)(2)
c.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR60.110a,	See b)(2)e.ii

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	these emissions units are affected sources consisting of organic liquids storage tanks,subject to the emissionlimitations/control measuresspecified in this section.]	
d.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, these emissions units are affected sources consisting of organic liquids storage tanks,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)e.ii.
e.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, these emissions units are affected sources, since the storage tanks include a Group 1 wastewater stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	See b)(2)e.i.
f.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
g.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions unit are affected sources, since the storage tanks include a Group 1 wastewater stream, with benzene containing waste.]	<u>Wastewater Provisions</u> See b)(2)d. and e)(1)
h.	40 CFR, Part 60, Subpart QQQ	See b)(2)c.
i.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Each fixed roof storage tank shall be equipped with an internal floating roof meeting the following specifications:

i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a

fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as readily as possible.

ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted but both must be continuous.

(c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

vi. Rim space vents shall be equipped with a gasket and are set to be open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or gasketed sliding cover.

ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(i) – (ix)]

b. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC.

c. Storage vessels that are subject to the standards in 60.112, 60.112a, and 60.112b and associated requirements in 40 CFR, Part 60, Subparts K, Ka, or Kb are not subject to the requirements of 40 CFR, Part 60, Subpart QQQ. [40 CFR 60.692-3]

d. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with the requirements of 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641. [40 CFR 63.647(a)]

e. This term summarizes the interrelationship and overlap between the applicable storage tank requirements of 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC:

i. 40 CFR, Part 61, Subpart FF:

Each storage tank is applicable to the requirements under 40 CFR 61.351 – Alternative standards for tanks. The alternative standard allows for compliance to be achieved by complying with the internal floating roof standards provided in 40 CFR 60.112b(a)(1) of 40 CFR, Part 60, Subpart Kb.

ii. The requirements of 40 CFR, Part 60, Subpart Kb are more stringent than the requirements of 40 CFR, Part 60, Subpart Ka, since these emissions units are regulated as wastewater units, not as storage tanks.

c) Operational Restrictions

(1) The maximum throughput for each tank shall not exceed the following:

a. T071: 64,675,810 gallons per year;

b. T072: 64,675,810 gallons per year;

c. T073: 153,300,000 gallons per year;

d. T075: 316,766,671 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI No. P0104760]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material throughput for each emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(2) The permit shall maintain records of the following information:

a. The types of petroleum liquids stored in each tank;

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(5)	Internal Floating Roof Visual Inspections, Seal Inspections and Degassing Requirements
60.115b and 60.115b(a)(2)	Internal Floating Roof, Records of Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

(4) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.356(k)	Recordkeeping, Including Requirements in 40 CFR 60.115b

e) Reporting Requirements

(1) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the recordkeeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR, Part 61, Subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and recordkeeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average. Recordkeeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs (f)(5) and (g)(8) of 40 CFR 63.655. [40 CFR 63.655(a)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(2) Each permittee subject to 40 CFR, Part 63, Subpart CC shall submit the following reports as required in 63.655(e)(1) – (4) except as provided in 63.655(h)(5), and shall keep records as described in section 63.655(i):

a. A Notification of Compliance Status report as described in paragraph (f) of 40 CFR 63.655.

b. Periodic reports as described in paragraph (g) of 40 CFR 63.655; and

c. Other reports as described in paragraph (h) of 40 CFR 63.655. [40 CFR 63.655(e)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(3) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for each emissions unit. These reports shall be submitted electronically through Ohio EPA Air Services by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(4) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.115b(a)(1)	Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

(5) The permittee shall comply with the reporting requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.357(e)	Reporting Requirements – Notification of Alternative Standard

61.357(f)	Reporting Requirements – Comply with 60.115b

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. Emissions Limitations:

5.25 tons of VOC/yr from T071;

6.14 tons of VOC/yr from T072;

7.51 tons of VOC/yr from T073; and

12.04 tons of VOC/yr from T075

Applicable Compliance Method:

The permittee shall demonstrate compliance through working and breathing loss calculations as determined by U.S. EPA TANKS 4.09d program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

g) Miscellaneous Requirements

(1) None.

55. T074, Tank 100253

Operations, Property and/or Equipment Description

above ground, internal floating roof organic liquids storage tank No. 100253 with a capacity of 475,890 gallons(tank storing group 1wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-03(A)(3)(a) (PTI No. P0104760, issued 10/8/10)	12.04 tons of volatile organic compounds (VOC)/yr.
b.	OAC rule 3745-21-09(L)	See b)(2)b. and d)(2)
c.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)f.iii
d.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit isan affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)f.ii.
e.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank include a Group 1 wastewater	See b)(2)f.i.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	
f.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
g.	Storage Tank Emission Reduction Partnership Program 65 Federal Register 19891 (April 13, 2000)	See b)(2)d. and d)(3)
h.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank include a Group 1 wastewater stream, with benzene containing waste.]	<u>Wastewater Provisions</u> See b)(2)e. and e)(1)
i.	40 CFR, Part 60, Subpart QQQ	See b)(2)c.
j.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The fixed roof storage tank shall be equipped with an internal floating roof meeting the following specifications:

i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as readily as possible.

ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted but both must be continuous.

(c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports

vi. Rim space vents shall be equipped with a gasket and are set to be open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or gasketed sliding cover.

ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(i) – (ix)]

b. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC.

c. Storage vessels that are subject to the standards in 60.112, 60.112a, and 60.112b and associated requirements in 40 CFR, Part 60, Subparts K, Ka, or Kb

are not subject to the requirements of 40 CFR, Part 60, Subpart QQQ. [40 CFR 60.692-3]

d. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (U.S. EPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of each emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper, and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

e. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with the requirements of 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641. [40 CFR 63.647(a)]

f. This term summarizes the interrelationship and overlap between the applicable storage tank requirements of 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC:

i. 40 CFR, Part 61, Subpart FF:

This storage tank is applicable to the requirements under 40 CFR 61.351 – Alternative standards for tanks. The alternative standard allows for compliance to be achieved by complying with the internal floating roof standards provided in 40 CFR 60.112b(a)(1) of 40 CFR, Part 60, Subpart Kb.

ii. The requirements of 40 CFR, Part 60, Subpart Kb are more stringent than the requirements of 40 CFR, Part 60, Subpart Ka, since these emissions units are regulated as wastewater units, not as storage tanks.

c) Operational Restrictions

(1) The maximum throughput for this tank shall not exceed 316,766,671 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI No. P0104760]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material throughput for this emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(2) The permit shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank;

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(3) In accordance with the STERRP agreement, the permittee shall meet the following requirements:

a. The sliding cover shall be in place over the slotted guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeter (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(4) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(5)	Internal Floating Roof Visual Inspections, Seal Inspections and Degassing Requirements
60.115b and 60.115b(a)(2)	Internal Floating Roof, Records of Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material

60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

(5) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.356(k)	Recordkeeping, Including Requirements in 40 CFR 60.115b

e) Reporting Requirements

(1) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the recordkeeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR, Part 61, Subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and recordkeeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average.

(2) Recordkeeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs (f)(5) and (g)(8) of 40 CFR 63.655. [40 CFR 63.655(a)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(3) Each permittee subject to 40 CFR, Part 63, Subpart CC shall submit the following reports as required in 63.655(e)(1) – (4) except as provided in 63.655(h)(5), and shall keep records as described in section 63.655(i):

a. A Notification of Compliance Status report as described in paragraph (f) of 40 CFR 63.655.

b. Periodic reports as described in paragraph (g) of 40 CFR 63.655; and

c. Other reports as described in paragraph (h) of 40 CFR 63.655. [40 CFR 63.655(e)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(4) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted electronically through Ohio EPA Air Services by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

(5) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.115b(a)(1)	Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

(6) The permittee shall comply with the reporting requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.357(e)	Reporting Requirements – Notification of Alternative Standard
61.357(f)	Reporting Requirements – Comply with 60.115b

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. <u>Emissions Limitation:</u>

12.04 tons of VOC/yr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance through working and breathing loss calculations as determined by U.S. EPA TANKS 4.09d program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104760]

g) Miscellaneous Requirements

(1) None.

56. T076, Tank 100219

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 100219 with a capacity of 2,820,090 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-1102, issued 9/30/81)	See b)(2)a.
b.	OAC rule 3745-21-09(L)	See b)(2)c., c)(1) and e)(2)
c.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)b.
d.	40 CFR Part 63, Subpart CC*:* [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)b., b)(2)c., d)(1) and e)(1)
e.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. No limits, pursuant to OAC rule 3745-31-05, were established in PTI No. 03-1102 for this emissions unit.

b. After the compliance dates specified in paragraph (h) of this section a Group 2 storage vessel that is also subject to the provisions of 40 CFR, Part 60, Subpart Ka, but not to the control requirements of 40 CFR, Part 60, Subpart Ka, is required to comply only with the provisions of 40 CFR, Part 63, Subpart CC. [40 CFR 63.640(n)(7)]

The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(7)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Ka

c. The requirements in OAC rule 3745-21-09(L) are less stringent than the requirements in 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(1)(iv)	If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.
63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(2) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52psia, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

57. T083, Tank 164559

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 164559 with a capacity of 203,258 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)b., c)(1), d)(1) and e)(2)
b.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)a.
c.	40 CFR, Part 63, Subpart CC*:* [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)a., d)(2) and e)(1)
d.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. After the compliance dates specified in paragraph (h) of this section a Group 2 storage vessel that is also subject to the provisions of 40 CFR, Part 60, Subpart Ka, but not to the control requirements of 40 CFR, Part 60, Subpart Ka, is required to comply only with the provisions of 40 CFR, Part 63, Subpart CC. [40 CFR 63.640(n)(7)]

The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l), 63.640(l)(1), 63.640(l)(2), 63.640(l)(2)(i) and 63.640(l)(2)(ii)	Applicability and Compliance Dates if a Process Change Creates Additional Group 1 Emission Point(s)

b. The requirements in OAC rule 3745-21-09(L) are less stringent than the requirements in 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(1)(iv)	If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l)(3), and 63.640(l)(3)(i) through 63.640(l)(3)(vii)	Applicability of Reporting Requirements and Notification of Compliance Status if a Process Change Occurs for Existing Source
63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(2) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52psia, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

30. **Emissions Unit Group –Internal FloatingRoof Group 1 Vessels subject to 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 61, Subpart Y; and 40 CFR, Part 63, Subparts CC and G: T084, T085, T086, T087**

EU ID	Operations, Property and/or Equipment Description
T084	above ground, internal floating rooforganic liquids storage tank No. 100166 with a capacity of 452,096 gallons (group 1 storage vessel)
T085	above ground, internal floating rooforganic liquids storage tank No. 100167 with a capacity of 452,096 gallons (group 1 storage vessel)
T086	above ground, internal floating rooforganic liquids storage tank No. 100168 with a capacity of 1,955,262 gallons (group 1 storage vessel)
T087	above ground, internal floating rooforganic liquids storage tank No. 100165 with a capacity of 3,696,667 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a. through b)(2)d.
b.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)e.
c.	40 CFR, Part 61, Subpart Y [40 CFR 61.270 – 61.277] [In accordance with 40 CFR 61.270, these emissions units are affected sources consisting ofstorage vessels storing benzene having a specific gravity within the range of specific	See b)(2)f., b)(2)g., d)(1) and e)(1)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gravities specified in ASTM D836–84 for Industrial Grade Benzene, ASTM D835–85 for Refined Benzene-485, ASTM D2359–85a or 93 for Refined Benzene-535, and ASTM D4734–87 or 96 for Refined Benzene-545, subject to the emissionlimitations/controlmeasures specified in this section.]	
d.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
e.	40 CFR, Part 63, Subpart CC	See b)(2)f.
f.	40 CFR, Part 63, Subpart G	See b)(2)f.

(2) Additional Terms and Conditions

a. The fixed roof storage tank shall be equipped with an internal floating roof.

b. The automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports; and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

c. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

d. 40 CFR, Part 63, Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

e. The requirements of 40 CFR, Part 60, Subpart Ka are less stringent than the requirements of 40 CFR, Part 61, Subpart Y.

f. This emissions unit is subject to NESHAPS standards in 40 CFR, Part 61, Subpart Y. Since the requirements in 40 CFR, Part 61, Subpart Y are more stringent than 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 63, Subpart CC; and 40 CFR, Part 63, Subpart G, the permittee is only required to comply with 40 CFR, Part 61, Subpart Y.

g. The permittee shall comply with the applicable internal floating roof emission standards under 40 CFR, Part 61, Subpart Y, including the following sections:

61.270(f)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Ka
61.271(a)(1)	Emission Standards: Internal Floating Roof Requirement to Rest on Liquid Surface

61.271(a)(2)(iii)	Emission Standards: Internal Floating Roof Closure Device Requirements
61.271(a)(3)	Emission Standards: Internal Floating Roof Bleeder Vent Requirements
61.271(a)(4)	Emission Standards: Internal Floating Roof Opening Requirements
61.271(a)(5)	Emission Standards: Internal Floating Roof Specifications
61.271(a)(6)	Emission Standards: Internal Floating Roof Cover or Lid Requirements
61.271(d)(1)	Emission Standards: Internal Floating Roof Requirements for Compliance

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart Y, including the following sections:

61.272(a)(1) and 61.272(a)(3)(i)	Compliance Provisions – Internal Floating Roof Visual Inspection and Repair Requirements
61.272(a)(2)	Compliance Provisions – Internal Floating Roof Timeline for Visual Inspection and Repairs
61.272(a)(3)(ii)	Compliance Provisions – Internal Floating Roof Visual Inspection and Repair Requirements before Refilling
61.272(a)(4)	Compliance Provisions – Internal Floating Roof Visual Inspection and Repair Requirements for Emptying and Degassing Tank
61.276(a)	Recordkeeping – Retention Period
61.276(b)	Recordkeeping – Retention of Records showing Dimensions and Capacity

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart Y]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 61, Subpart Y, including the following sections:

61.272(a)(3)(i)	Compliance Provisions – Internal Floating Roof, Notification Requirements for Refilling Tank
61.274(a)	Initial Reporting Requirements
61.275(a)(1), 61.275(a)(2), 61.275(a)(3), 61.275(b)(1), 61.275(b)(2) and 61.275(c)	Periodic Reporting Requirements – Inspection Results, Tank Defect Results, Extension Request, Timeline for Report Submittal, Date Tank Emptied, Nature of Repairs, and Identification of Internal Floating Roof Tank with Continuous Seal

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart Y]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

58. T088, Tank 100169

Operations, Property and/or Equipment Description:

aboveground, external floating roof organic liquids storage tank No. 100169 with a capacity of 1,479,936 gallons; welded shell construction, with a mechanical shoe primary seal, and a rim-mounted, flexible wiper secondary seal (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g.,d)(1) through d)(4) ande)(1)
b.	40 CFR, Part 60, Subpart Ka [40 CFR 60.110a – 60.115a] [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)h.
c.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)i., d)(5) and e)(2)
d.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110, this emissions unit is an affected source due to the storage vessel	See b)(2)j., d)(6) and e)(3)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	being subject to 40 CFR 63.149 within a source subject to Subpart F of this part, subject to the emissionlimitations/controlmeasures specified in this section.]	
e.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears, or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Office within 30 days after the change occurs.

b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

f. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

g. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

h. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 1 storage vessel that is also subject to the provisions of 40 CFR, Part 60, Subparts K or Ka is required to only comply with the provisions of 40 CFR, Part 63, Subpart CC. [40 CFR 63.640(n)(7)]

i. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(h)(2)	Storage Vessel Provisions – Schedule and Compliance Dates
63.640(n)(5)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subparts K and Ka
63.646(a)	Applicability and Overlap Provisions for 40 CFR, Part 63, Subpart G
63.646(b)	Storage Vessel Provisions – Determination of HAP Weight Percent
63.646(c)	Storage Vessel Provisions – Non-applicable Paragraphs
63.646(d)(1) through 63.646(d)(4)	Storage Vessel Provisions – Replacement Language for Schedule and Compliance Dates
63.646(e)	Storage Vessel Provisions – Compliance for Gaskets, Slotted Membranes and

	Sleeve Seals Not Applicable
63.646(f)	Storage Vessel Provisions – Group 1 Storage Vessel Requirements

j. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart G, including the following sections:

63.119(a), 63.119(a)(1), 63.119(c)(1), 63.119(c)(1)(i) through 63.119(c)(1)(iv), 63.119(c)(3) and 63.119(c)(4)	Reference Control Technology – External Floating Roof Requirements
63.120(b)(5)	Storage Vessel Provisions – Procedures to Determine Compliance, Additional Primary Seal Requirements
63.120(b)(6)	Storage Vessel Provisions – Procedures to Determine Compliance, Additional Secondary Seal Requirements

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

[OAC rule 3745-77-07(C)(1)]

(2) The secondary seal gap shall be measured annually in accordance with the methods specified in 40 CFR, Part 63, Subpart G, which are equivalent to, or more stringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(3) The primary seal gap shall be measured at least once every 5 years, in accordance with the methods specified in 40 CFR, Part 63, Subpart G, which are equivalent to, or more stringent than OAC rule 3745-21-10

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(4) The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(5) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(g)	Storage Vessel Provisions – Failure to Perform Inspections and Monitoring
63.655(i)(1)	Storage Vessel Provisions – Recordkeeping Requirement Exceptions
63.655(i)(5)	Storage Vessel Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(6) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(b)(1), 63.120(b)(1)(i) through 63.120(b)(1)(iv), 63.120(b)(2) through 63.120(b)(4), 63.120(b)(7), 63.120(b)(8), 63.120(b)(10) and 63.120(b)(10)(i)	Storage Vessels Provisions – Procedures to Determine Compliance: Seal Gap Measurements, Visual Inspections and Repair Provisions
63.123(a)	Storage Vessel Provisions – Recordkeeping for Dimensions and Capacity
63.123(d)	Storage Vessel Provisions – Recordkeeping for External Floating Roof Tanks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification

shall also describe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.646(l)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(e)	Storage Vessel Provisions – Reporting Requirements
63.655(f), 63.655(f)(1)(i)(A)(1) through 63.655(f)(1)(i)(A)(3), 63.655(f)(6)	Storage Vessel Provisions – Notification of Compliance Status
63.655(g)(1), and 63.655(g)(3)(i)(A) through 63.655(g)(3)(i)(D)	Storage Vessel Provisions – Periodic Reporting Requirements
63.655(g)(3)(ii) and 63.655(g)(3)(iii)	Storage Vessel Provisions – Request for Reporting Extension
63.655(h)(1), 63.655(h)(2)(i), 63.655(h)(2)(i)(A)	Storage Vessel Provisions – Reporting per Subpart A of Startup, Shutdown and Malfunction Plan
63.655(h)(2)(i)(B)	Storage Vessel Provisions – Exceptions for Internal Inspections
63.655(h)(2)(i)(C)	Storage Vessel Provisions – Waiver of Notification Requirements
63.655(h)(2)(ii)	Storage Vessel Provisions – Notification of Seal Gap Measurements
63.655(h)(6)(ii)	Storage Vessel Provisions – Notification of Variation in Use of Any Storage Vessel

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart G, including the following sections:

63.120(b)(9), 63.120(b)(10)(ii) and 63.120(b)(10)(iii)	Storage Vessel Provisions – Procedures to Determine Compliance: Notification of Gap Measurements and Visual Inspections

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

59. Emissions Unit Group –Fixed Roof Group 1 Wastewater Vessels subject to 40 CFR, Part 61, Subpart FF and 40 CFR, Part 63, Subpart CC: T010, T011, T090, T091

EU ID	Operations, Property and/or Equipment Description
T010	above ground, fixed roof organic liquids storage tank No. 100085 with a capacity of 88,128 gallons (tank storing group 1 wastewater)
T011	above ground, fixed roof organic liquids storage tank No. 100084 with a capacity of 88,128 gallons (tank storing group 1 wastewater)
T090	above ground, fixed roof organic liquids storage tank No. 100079 with a capacity of 56,402 gallons (tank storing group 1 wastewater)
T091	above ground, fixed roof organic liquids storage tank No. 100078 with a capacity of 56,402 gallons (tank storing group 1 wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	See b)(2)a.
b.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	See b)(2)b. through b)(2)d., d)(1) through d)(3), e)(1) and e)(3)
c.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
d.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	See b)(2)e.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR, Part 63, Subpart DD	See b)(2)f.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The requirements of this rule are less stringent than the requirements proposed to demonstrate compliance with 40 CFR, Part 61, Subpart FF. Compliance with the requirements of this rule is demonstrated by compliance with the requirements of 40 CFR, Part 61, Subpart FF.

b. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with therequirements of 40 CFR 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.[40 CFR 63.647(a)]

Compliance with this requirement is demonstrated by routing emissions to the closed NESHAP sewer (emissions unit P025), whose emissions are routed to the existing sulfur recovery unit fuel gas amine treater ("Compressor System")

During all times when the vent from this emissions unit is routed to the Compressor System used to compress vapors from emissions unit P025, the gaseous stream is exempt from 40 CFR, Part 61, Subpart FF, per 40 CFR 61.340(d). In accordance with 40 CFR 61.340(d) during these times, no testing, monitoring, recordkeeping or reporting is required under this subpart for the vent stream from this emissions unit.

c. Except as provided in paragraph (b) of 40 CFR 63.343 and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342(c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

i. The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to the Compressor System.

The fixed-roof shall meet the following requirements:

(a) The cover and all openings (e.g., access hatches, sampling ports and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at

least once per year by the methods specified in 40 CFR 61.355(h).

(b) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(c) If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of this section does not apply to any opening that meets all of the following conditions:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h);

(iii) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure; and

(iv) The closed-vent system shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

d. Except as provided in 40 CFR 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

e. Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR, Part 61, Subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and record keeping requirements for wastewater under 40 CFR, Part 63, Subpart CC unless a wastewater stream is included in an emissions average. Record keeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs 40 CFR 63.655(f)(5) and (g)(8) of this section. [40 CFR 63.655(a)]

f. An off-site material management unit is exempted from the requirements in 40 CFR 63.683(b)(1) when the permittee meets one of the exemptions provided in paragraphs 63.683(b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit. An off-site material management unit is exempted from the requirements in

paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR, Part 61 or 40 CFR, Part 63, and the permittee is controlling the HAPs listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under Part 61 or Part 63.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

If a bypass line exists that could divert the vent stream from the Compressor System, the permittee shall inspect the valve at least once per month to ensure that the vent stream is not diverted through the bypass line. The permittee shall visually inspect the flow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once per operating day to check that vapors are routed to the Compressor System as required.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(2) The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(3) The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, Compressor System, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

e) Reporting Requirements

(1) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with 61.357(d)(1), the permittee shall submit

quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(2) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the reporting provisions in 40 CFR 61.357 of 40 CFR, Part 61, Subpart FF. There are no additional reporting requirements for wastewater under this subpart.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

(3) Beginning one year after the date that the equipment necessary to comply with these standards has been certified, the permittee shall submit annually to the Administrator a report that summarizes all inspection required by 40 CFR 61.343 during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

f) Testing Requirements

(1) The permittee shall conduct an annual test of the cover and all openings for no detectable emissions (less than 500 ppmv) using the following test methods and procedures:

a. The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

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

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

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

iv. Calibration gases shall be:

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

(b) A mixture of methan or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

v. The background level shall be determined as set forth in Method 21

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

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

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 61, Subpart FF]

g) Miscellaneous Requirements

(1) None.

60. T121, Tank 100391

Operations, Property and/or Equipment Description:

above ground, internal floating roof organic liquids storage tank No. 100391 with a capacity of 1,381,844 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-7232, modification issued 10/21/03)	11.02 tons of volatile organic compounds (VOC)/yr
b.	OAC rule 3745-21-09(L)	See b)(2)a. through b)(2)d., d)(1) and e)(1)
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)e., b)(2)f., d)(2) and e)(2)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)e., b)(2)g., d)(3) and e)(3)
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports; and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

e. Emissions unit T121 is a group 1 storage vessel (as defined in 40 CFR 63.641) that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissions unit T121 is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb.

f. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i) through 60.112b(a)(1)(ix)	Standards for VOC: Internal Floating Roof Must Rest on Liquid Surface, Closure Devices, Openings Must be Below Liquid Surface and Have Cover, Vents Must be Gasketed and Only Open When Roof not Floating, Ladder Must Have Fabric Sleeve, Vents Must be Gasketed and Closed, Rim Vents Must Have Gasket, Supports Columns Must Have Fabric Sleeve

g. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for

	Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(4)	Internal Floating Roof Visual Inspections, Seal Inspections, Emptying and Degassing Requirements
60.115b(a)(2)	Internal Floating Roof, Records of Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the internal floating roof tank any petroleum liquid with a true vapor pressure which is greater than 11.1 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(5)	Internal Floating Roof: Notification for Filling or Refilling
60.115b(a)(1)	Internal Floating Roof: Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) and 63.640(n)(8)(v)	Reporting for Extensions of Repair Deadline; and Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

11.02 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-7232]

g) Miscellaneous Requirements

(1) None.

61. T161, Tank 100057

Operations, Property and/or Equipment Description:

4,060,929 Gallon Fixed Roof Vacuum Bottoms Storage Tank (storing organic liquid with a vapor pressure less than 0.754 psia)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T) [PTI No. P0106608, issued 8/5/10]	39.81 tons of volatile organic compounds (VOC)/rolling 12-month period See b)(2)a.
b.	OAC rule 3745-21-09(L)	See b)(2)b., c)(2), d)(6), and e)(2)
c.	<u>40 CFR, Part 60, Subpart Kb:</u> 40 CFR, Part 60.116b(a) – (d)	 See b)(2)c. See d)(2) through d)(5)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)d.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirement for this emissions unit has been determined to be an emission limitation of 39.81 tons of VOC per rolling 12-month period.

b. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC and 40 CFR, Part 60, Subpart Kb.

c. This emissions unit is exempt from the control requirements specified in 40 CFR, Part 60, Subpart Kb because the maximum true vapor pressure of the stored organic liquid is less than 5.2 kPa (0.754 psia).

d. This emissions unit is a Group 2 storage vessel as defined in 40 CFR, Part 63.641. After the compliance date specified in paragraph (h) of 40 CFR, Part 63.640, a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only with the requirements of 40 CFR, Part 60 Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

c) Operational Restrictions

(1) No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute unless such tank is designed or equipped in accordance with OAC rule 3745-21-09(L)(1)(a) – (d).

[OAC rule 3745-77-07(A)(1) and PTI No. P0106608]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records each month for this emissions unit:

a. the amount of material throughput, in gallons per month;

b. the VOC emissions, in tons per month, as calculated using U.S EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

c. the rolling 12-month emissions of VOC, in tons [summation of d)(1)b.].

[OAC rule 3745-77-07(C)(1) and PTI No. P0106608]

(2) The permittee shall keep copies of all records required under 40 CFR 60.116b for at least 2 years.

[OAC rule 3745-77-07(C)(1), PTI No. P0106608 and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

[OAC rule 3745-77-07(C)(1), PTI No. P0106608 and 40 CFR, Part 60, Subpart Kb]

(4) The permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

[OAC rule 3745-77-07(C)(1), PTI No. P0106608 and 40 CFR, Part 60, Subpart Kb]

(5) The permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Northwest District Office within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure for each volume range.

[OAC rule 3745-77-07(C)(1), PTI No. P0106608 and 40 CFR, Part 60, Subpart Kb]

(6) The permittee shall maintain records of the following information in a readily accessible location for at least 5 years and shall make copies of the records available to the Northwest District Office upon verbal or written request:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106608]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106608]

(2) If the permittee places, stores, or holds in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of OAC rule 3745-21-09(L)(1), the permittee shall so notify the director within 30 days of becoming aware of the occurrence.

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

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined to be in accordance with the following method:

a. Emission Limitation
39.81 tons of VOC/rolling 12-month period

Applicable Compliance Method

Compliance with the annual VOC limit is based on a maximum annual throughput of 129,933,728 gallons of vacuum bottoms, U.S EPA's TANKS version 4.0.9D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

g) Miscellaneous Requirements

(1) None

62. T190, Tank 100044

Operations, Property and/or Equipment Description:

above ground, internal floating roof organic liquids storage tank No. 100044 with a capacity of 230,331 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (PTI No. 03-5614, issued 6/19/91)	0.67 lb of volatile organic compounds (VOC)/hr and 2.93 tons of VOC/yr 0.04 lb of benzene/hr and 0.18 ton of benzene/yr
b.	OAC rule 3745-21-09 (L)	See b)(2)a. through b)(2)d., d)(1) and e)(1)
c.	40 CFR Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.	See b)(2)e., b)(2)f., d)(2) and e)(2)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section	See b)(2)e., b)(2)g., d)(3) and e)(3)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports; and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

e. Emissions unit T190 is a group 1 storage vessel (as defined in 40 CFR 63.641) that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissions unit T190 is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb.

f. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i) through 60.112b(a)(1)(ix)	Standards for VOC: Internal Floating Roof Must Rest on Liquid Surface, Closure Devices, Openings Must be Below Liquid Surface and Have Cover, Vents Must be Gasketed and Only Open When Roof not Floating, Ladder Must Have Fabric Sleeve, Vents Must be Gasketed and Closed, Rim Vents Must Have Gasket, Supports Columns Must Have Fabric Sleeve

g. The permittee shall comply with the applicable internal floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(1) through 60.113b(a)(4)	Internal Floating Roof Visual Inspections, Seal Inspections, Emptying and Degassing Requirements
60.115b(a)(2)	Internal Floating Roof, Records of Inspections
60.116b(a) through 60.116b(c)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Records of Vapor Pressure of Stored Material
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the internal floating roof tank any petroleum liquid with a true vapor pressure which is greater than 11.1 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(a)(5)	Internal Floating Roof: Notification for Filling or Refilling
60.115b(a)(1)	Internal Floating Roof: Control Equipment Notification
60.115b(a)(3) and 60.115b(a)(4)	Internal Floating Roof: Reporting Requirements for Records of Inspection Defects and Repairs

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) and 63.640(n)(8)(v)	Reporting for Extensions of Repair Deadline; and Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

0.67 lb of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-5614]

b. Emission Limitation:

2.93 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-5614]

c. Emission Limitation:

0.04 lb of benzene/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-5614]

d. Emission Limitation:

0.18 ton of benzene/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-5614]

g) Miscellaneous Requirements

(1) None.

63. Emissions Unit Group –Internal Floating RoofGroup 1 vessels subject to 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC (PTI No. 03-13794) T191, T192

EU ID	Operations, Property and/or Equipment Description
T191	above ground, internal floating roof organic liquids storage tank No. 100172 with a capacity of 2,284,273 gallons (tank storing group 1 wastewater)
T192	above ground, internal floating roof organic liquids storage tank No. 100173 with a capacity of 2,284,273 gallons (tank storing group 1 wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13794, modification issued 5/29/08)	5.19 tons of volatile organic compounds (VOC)/yr The requirements of thisrule also include compliance with therequirements of 40 CFR, Part 60, Subpart Kb; 40CFR, Part 61, Subpart FF;40 CFR, Part 63, Subpart CC; and OAC rule3745-21-09(L). See b)(2)n.
b.	40 CFR,Part 60, Subpart Kb: 40 CFR 60.112b 40 CFR 60.113b 40 CFR 60.115b 40 CFR 60.116b	See Subpart Kb sectionsbelow: See b)(2)e. through b)(2)m. See d)(2) through d)(5), and e)(1) See d)(6), d)(7), and e)(2) through d)(4) See d)(1)c., d)(8) through d)(10), and e)(5)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 61, Subpart FF	The control requirements,monitoring and/or recordkeeping requirements,

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		and reporting requirements aresatisfied by therequirements in 40 CFR,Part 60, Subpart Kb.
e.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
f.	40 CFR, Part 63, Subpart CC: 40 CFR 63.647(a)	If the emissions unit is subject tothe provisions of 40 CFR, Part 60,SubpartKb, the permittee is required tocomply only with therequirements of 40 CFR, Part 60,SubpartKb.
g.	OAC rule 3745-21-09(L)	See b)(2)a. through b)(2)d., d)(1)a. through d)(1)b., and e)(6)
h.	40 CFR, Part 63, Subpart DD	See b)(2)o.

(2) Additional Terms and Conditions

a. The maximum true vapor pressure of organic liquid stored in this storage tankshall not exceed 11.1 psia.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times, except when the roof isfloated off or landed on the roof leg supports; and the rim vents, if provided, shallbe set to open when the roof is being floated off the roof leg supports or is at themanufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

e. The internal floating roof shall rest or float on the liquid surface (but notnecessarily in complete contact with it) inside a storage vessel that has a fixedroof. The internal floating roof shall be floating on the liquid surface at all times,except during initial fill and during those intervals when the storage vessel iscompletely emptied or subsequently emptied and refilled. When the roof isresting on the leg supports, the process of filling, emptying, or refilling shall becontinuous and shall be accomplished as rapidly as possible.

f. Each internal floating roof shall be equipped with one of the following closuredevices between the wall of the storage vessel and the edge of the internalfloating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid mountedseal). A liquid-mounted seal means a foam- or liquid-filled sealmounted in contact with the liquid between the wall of the storage

vesseland the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuousclosure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may bevapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

g. Each opening in a noncontact internal floating roof except for automatic bleedervents (vacuum breaker vents) and the rim space vents is to provide a projectionbelow the liquid surface.

h. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when theyare in use.

i. Automatic bleeder vents shall be equipped with a gasket and are to be closed atall times when the roof is floating except when the roof is being floated off or isbeing landed on the roof leg supports.

j. Rim space vents shall be equipped with a gasket and are to be set to open onlywhen the internal floating roof is not floating or at the manufacturer'srecommended setting.

k. Each penetration of the internal floating roof for the purpose of sampling shall bea sample well. The sample well shall have a slit fabric cover that covers at least90 percent of the opening.

l. Each penetration of the internal floating roof that allows for passage of a columnsupporting the fixed roof shall have a flexible fabric sleeve seal or a gasketedsliding cover.

m. Each penetration of the internal floating roof that allows for passage of a laddershall have a gasketed sliding cover.

n. Best available technology (BAT) control requirements for this emissions unithave also been determined to include the use of submerged fill.

o. An off-site material management unit is exempted from the requirements in 40 CFR 63.683(b)(1) when the permittee meets one of the exemptions provided in

paragraphs 63.683(b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit.

An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR, Part 61 or 40 CFR, Part 63, and the permittee is controlling the HAPs listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under Part 61 or Part 63.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute.

c. Available data on the storage temperature may be used to determine themaximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, themaximum true vapor pressure is calculated based upon the highestexpected calendar-month average of the storage temperature. Forvessels operated at ambient temperatures, the maximum true vaporpressure is calculated based upon the maximum local monthly averageambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may beobtained by the following:

(a) Available data on the Reid vapor pressure and the maximumexpected storage temperature based on the highest expectedcalendar-month average temperature of the stored product may beused to determine the maximum true vapor pressure fromnomographs contained in API Bulletin 2517 (incorporated byreference--see Sec. 60.17), unless the Administrator specificallyrequests that the liquid be sampled, the actual storage temperaturedetermined, and the Reid vapor pressure determined from thesample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vaporpressure less than 13.8 kPa or with physical properties thatpreclude determination by the recommended method is to

bedetermined from available data and recorded if the estimatedmaximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by theAdministrator; or

(d) Calculated by an appropriate method approved by theAdministrator.

d. The annual throughput of any petroleum liquid stored in the tank

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (ifone is in service), prior to filling the storage vessel with VOL. If there are holes, tears,or other openings in the primary seal, the secondary seal, or the seal fabric or defectsin the internal floating roof, or both, the permittee shall repair the items before filling thestorage vessel.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visuallyinspect the internal floating roof and the primary seal or the secondary seal (if one is inservice) through manholes and roof hatches on the fixed roof at least once every 12months after initial fill. If the internal floating roof is not resting on the surface of theVOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal isdetached, or there are holes or tears in the seal fabric, the permittee shall repair theitems or empty and remove the storage vessel from service within 45 days. If a failurethat is detected during inspections required in this paragraph cannot be repaired within45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may berequested from the Administrator in the inspection report required in e)(3).

Such arequest for an extension must document that alternate storage capacity is unavailableand specify a schedule of actions the company will take that will assure that the controlequipment will be repaired or the vessel will be emptied as soon as possible.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(4) For vessels equipped with a double-seal system as specified in b)(2)f.ii.:

a. Visually inspect the vessel as specified in d)(5) at least every 5 years; or

b. Visually inspect the vessel as specified in d)(3).

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one isin service), gaskets, slotted membranes and sleeve seals (if any) each time the storagevessel is emptied and degassed.

If the internal floating roof has defects, the primaryseal has holes, tears, or other openings in the seal or the seal fabric, or the secondaryseal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets nolonger close off the liquid surfaces from the atmosphere, or the slotted membrane hasmore than 10 percent open area, the permittee shall repair the items as necessary sothat none of the conditions specified in this paragraph exist before refilling the storagevessel with VOL. In no event shall inspections conducted in accordance with thisprovision occur at intervals greater than 10 years in the case of vessels conducting theannual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greaterthan 5 years in the case of vessels specified in d)(4)a.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(6) The permittee shall keep copies of all reports and records required in e)(2), e)(3),and e)(4), for at least 2 years.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(7) Keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(8) The permittee shall keep copies of all records required by d)(2) through d)(10),excluding d)(9), for at least 2 years.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(9) The permittee shall keep readily accessible records showing the dimension of thestorage vessel and an analysis showing the capacity of the storage vessel (shall bekept for the life of the source).

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(10) The permittee of each vessel storing a waste mixture of indeterminate or variablecomposition shall be subject to the following requirements:

a. Prior to the initial filling of the vessel, the highest maximum true vapor pressurefor the range of anticipated liquid compositions to be stored will be determinedusing the methods described in d)(1)c.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

e) Reporting Requirements

(1) Notify the Director (the Ohio EPA, Northwest District Office) in writing at least 30 days prior to thefilling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Director (the Ohio EPA, Northwest District Office) the opportunity to have an observer present.

If the inspection required by d)(5) is not planned and thepermittee could not have known about the inspection 30 days in advance or refilling thetank, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) at least 7days prior to the refilling of the storage vessel. Notification shall be made by telephoneimmediately followed by written documentation demonstrating why the inspection was unplanned.Alternatively, this notification including the written documentation may be made inwriting and sent by express mail so that it is received by the Director (the Ohio EPA, NorthwestDistrict Office) at least 7 days prior to the refilling.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(2) Furnish the Director (the Ohio EPA, Northwest District Office) with a report that describes thecontrol equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to thenotification of the actual date of initial startup of an affected facility postmarked within15 days after such date.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(3) If any of the conditions described in d)(3) are detected during the annual visualinspection required by d)(3), a report shall be furnished to the Director (the Ohio EPA, NorthwestDistrict Office) within 30 days of the inspection.

Each report shall identify the storagevessel, the nature of the defects, and the date the storage vessel was emptied or thenature of and date the repair was made.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(4) After each inspection required by d)(4) that finds holes or tears in the seal or sealfabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Director (the Ohio EPA, Northwest District Office) within30 days of the inspection. The report shall identify the storage vessel and the reason itdid not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repairmade.

[OAC rule 3745-77-07(C)(1); 40 CFR,Part 60, Subpart Kb; and PTI No. 03-13794]

(5) If the permittee places, stores, or holds in the internal floating roof tank any petroleum liquid with a true vapor pressure which is greater than 11.1 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-

09(L), the permittee shall so notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditionsshall be determined in accordance with the following method:

a. Emission Limitation:

5.19 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing losscalculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

g) Miscellaneous Requirements

(1) None.

64. T196, Tank 100006

Operations, Property and/or Equipment Description:

above ground, internal floating roof organic liquids storage tank No. 100006 with a capacity of 1,265,938 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13742, modification issued 12/11/03)	3.44 tons organic compounds (OC)/yr Control requirements [See b)(2)a.] See b)(2)n.
b.	OAC rule 3745-21-09(L)	See b)(2)b. through b)(2)d., and d)(1)
c.	40 CFR, Part 60, Subpart Kb: 40 CFR, Part 60.112b 40 CFR, Part 60.113b 40 CFR, Part 60.115b 40 CFR, Part 60.116b	See Subpart Kb sectionsbelow: See b)(2)e. through b)(2)m. See d)(2) through d)(5), and e)(1) See d)(6) through d)(7), and e)(2) through e)(4) See d)(8) through d)(10), and e)(5)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)o., d)(12) and e)(7)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) requirement for this emissions unit has been determined to be the use of a submerged fill pipe and an internal floating roof and compliance with OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

d. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

e. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

f. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against thewall of the storage vessel by springs or weighted

levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

h. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

i. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

j. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

k. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

l. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

m. Emissions unit T196 is a group 1 storage vessel (as defined in 40 CFR 63.641) that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissions unit T196 is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb.

n. The requirements of this rule include compliance with the requirements of OAC rule 3745-21-09(L); 40 CFR, Part 60, Subpart Kb; and 40 CFR Part 63, Subpart CC.

o. The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Alternative if

	Tank Roof is Unsafe

c) Operational Restrictions

(1) The permittee shall not exceed an annual material throughput rate of 74,994,026 gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. 03-13742]

(2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

[OAC rule 3745-77-07(A)(1) and PTI No. 03-13742]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

i. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

ii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the Administrator; or

(d) Calculated by an appropriate method approved by the Administrator.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in e)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(4) For vessels equipped with a double-seal system as specified in b)(2)f.ii.:

a. visually inspect the vessel as specified in d)(5) at least every 5 years; or

b. visually inspect the vessel as specified in d)(3).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary

seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL.

In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(6) The permittee shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(7) Keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(8) The permittee shall keep copies of all records required by d)(2) through d)(10), excluding d)(9), for at least 2 years.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(9) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(10) The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in d)(1)b.

b. For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at leastonce every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(11) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13742]

(12) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Administrator the opportunity to have an observer present. If the inspection required by d)(5) is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(2) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(3) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(4) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13742]

(5) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13742]

(6) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) and 63.640(n)(8)(v)	Reporting for Extensions of Repair Deadline; and Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

3.44 tons OC/yr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance by rim seal loss, withdrawal loss and deck fitting loss calculations as determined by the most recent version of the U.S. EPA TANKS program with a maximum annual material throughput of 74,994,026 gallons.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13742]

g) Miscellaneous Requirements

(1) None.

65. T197, Tank 100005

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquid storage tank No. 100005 with a capacity of 3,828,272 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-6335, modification issued 1/6/04)	25.2 tons volatile organic compounds (VOC)/yr
b.	OAC rule 3745-21-09(L)	None [See d)(1)a., d)(1)b. and e)(1)]
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	Record keeping and Reporting Requirements [See c)(1) and d)(2)]
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	Applicability and overlap provisions - See b)(2)a.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR,Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR,Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 5.2 kPa (0.75 psia).

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 60, Subpart Kb]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.116b(a) through 60.116b(e)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Record of Volatile Organic Liquid and Maximum True Vapor Pressure

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 0.75 pounds per square inch absolute, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

25.2 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-6335]

g) Miscellaneous Requirements

(1) None.

66. T198, Tank 100024

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 100024 with a capacity of 121,176 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A) (PTI No. 03-13794, modification issued 5/29/08)	5.66 tons volatile organiccompounds (VOC)/yr See b)(2)a. The requirements of this rule alsoinclude compliance with therequirements of 40 CFR, Part 60,Subpart Kb; 40 CFR, Part 63, SubpartCC; and OAC rule 3745-21-09(L).
b.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	Record keeping and Reporting Requirements [See c)(1) and d)(2)]
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the	Applicability and overlap provisions - See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emissionlimitations/controlmeasures specified in this section.]	
e.	OAC rule 3745-21-09(L)	None [See c)(1)]
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit have been determined to include the use of submerged fill.

b. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR,Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR,Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 5.2 kPa (0.75 psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid.

c. The annual throughput of any petroleum liquid stored in the tank

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.116b(a) through 60.116b(e)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Record of Volatile Organic Liquid and Maximum True Vapor

	Pressure

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with atrue vapor pressure which is equal to or greater than 0.75 pounds per square inchabsolute, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

5.66 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing losscalculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

g) Miscellaneous Requirements

(1) None.

67. T200, Tank 164788

Operations, Property and/or Equipment Description:

aboveground, fixed roof organic liquids storage tank No. 164788 with a capacity of 18,213 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)(2)(a)	Exempt [See b)(2)a.]
b.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.] 40 CFR 63.655(i)(1)(iv) 40 CFR 63.655(i)(5)	 See d)(2) See d)(3)
c.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

(2) All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.655 shall be retained for 5 years.

[OAC rule 3745-77-07(C)(1)and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

68. T201, Tank 100038

Operations, Property and/or Equipment Description:

aboveground, external floating roof organic liquids storage tank No. 100038 with a capacity of 8,000,000 gallons, concrete shell construction, a mechanical shoe primary seal, and a rim-mounted secondary seal (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A) (PTI No. 03-13794, modification issued 5/29/08)	52.48 tons volatileorganic compounds (VOC)/yr The requirements of thisrule also include compliance with therequirements of 40 CFR, Part 60, Subpart Kb; 40CFR, Part 63, SubpartCC; and OAC rule 3745-21-09(Z). See b)(2)l.
b.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g., d)(1) through d)(3), d)(4)b., d)(4)d.,and e)(1)
c.	40 CFR, Part 60, Subpart Kb: 40 CFR 60.112b(a)(2) 40 CFR 60.113b(b) 40 CFR 60.115b 40 CFR 60.116b	See 40 CFR, Part 60, Subpart Kb sectionsbelow: See b)(2)h., b)(2)i., and c)(2) See b)(2)j., b)(2)k., c)(1),and d)(5) through d)(8) See d)(9),e)(2) through e)(4) See d)(4)a., d)(4)e., d)(10) through d)(12), and e)(5)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656]	See b)(2)m, b)(2)n., d)(13) and e)(6)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Any external floating roof storage tank equipped with either a 1) liquid-mounted primary seal and rim-mounted secondary seal; or a 2) mechanical shoe primary seal and a rim-mounted secondary seal; or a 3) mechanical shoe primary seal and a shoe-mounted, secondary seal, provided the shoe-mounted secondary seal was installed prior to 1/10/81; or a 4) vapor-mounted primary seal and a rim mounted secondary seal; or a 5) flexible wiper primary seal and a rim-mounted secondary seal; shall meet the following requirements:

i. there shall be no visible holes, tears, or other openings in the seal orseal fabric;

ii. for the primary seal, the total seal gap area shall not exceed 10.0 squareinches per foot of tank diameter (equivalent of 10.0 square inches forevery 3.14 linear feet of tank circumference); and

iii. for the secondary seal, the total seal gap area shall not exceed 1.0square inch per foot of tank diameter (equivalent of 1.0 square inch forevery 3.14 linear feet of tank circumference).

The permittee may change the seal types during the term of this permit providedthat a written notification and revised "emission activity category" form, includingthe results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Office within 30 days after the changeoccurs.

b. Any opening in the external floating roof, except automatic bleeder vents, rimspace vents, leg sleeves, stub drains, and slotted gauging/sampling wells shallbe equipped with:

i. a cover, seal or lid which remains in the closed position at all timeswithout any visible gaps, except when the opening is in actual use; and

ii. a projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when theexternal floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open only at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof legsupports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabriccover or other device which covers at least 90 percent of the area of theopening.

f. Any stub drain shall be equipped with a projection into the tank below the liquidsurface.

g. Any slotted gauging/sampling well shall be equipped with an object which floatson the liquid surface within the well and which covers at least 90 percent of thearea of the well opening.

h. An external floating roof means a pontoon-type or double-deck type cover thatrests on the liquid surface in a vessel with no fixed roof. Each external floatingroof must meet the following specifications:

i. Each external floating roof shall be equipped with a closure devicebetween the wall of the storage vessel and the roof edge. The closuredevice is to consist of two seals, one above the other. The lower seal isreferred to as the primary seal, and the upper seal is referred to as thesecondary seal.

(a) The primary seal shall be either a mechanical shoe seal or a liquidmountedseal. Except as provided in section c)(1), the seal shallcompletely cover the annular space between the edge of thefloating roof and tank wall.

(b) The secondary seal shall completely cover the annular spacebetween the external floating roof and the wall of the storagevessel in a continuous fashion except as allowed in section c)(1).

ii. Except for automatic bleeder vents and rim space vents, each opening ina noncontact external floating roof shall provide a projection below theliquid surface. Except for automatic bleeder vents, rim space vents, roofdrains, and leg sleeves, each opening in the roof is to be equipped with agasketed cover, seal, or lid that is to be maintained in a closed position atall times (i.e., no visible gap) except when the device is in actual use.Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on theroof leg supports. Rim vents are to be set to open when the roof is beingfloated off the roof legs supports or at the manufacturer's recommendedsetting. Automatic bleeder vents and rim space vents are to

be gasketed.Each emergency roof drain is to be provided with a slotted membranefabric cover that covers at least 90 percent of the area of the opening.

i. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports)except during initial fill until the roof is lifted off leg supports and when the tank iscompletely emptied and subsequently refilled. The process of filling, emptying,or refilling when the roof is resting on the leg supports shall be continuous andshall be accomplished as rapidly as possible.

j. If a failure that is detected during inspections required in section d)(5) cannotbe repaired within 45 days and if the vessel cannot be emptied within 45 days, a30-day extension may be requested from the Administrator in the inspectionreport required in 40 CFR 60.115b(b)(4). Such extension request must include ademonstration of unavailability of alternate storage capacity and a specificationof a schedule that will assure that the control equipment will be repaired or thevessel will be emptied as soon as possible.

k. Notify the Administrator 30 days in advance of any gap measurements requiredby section d)(5) to afford the Administrator the opportunity to have an observerpresent.

l. Best available technology (BAT) control requirements for this emissions unithave been determined to include the use of submerged fill.

m. If the emissions unit is subject tothe provisions of 40 CFR, Part 60,Subpart Kb, the permittee isrequired to comply only with therequirements of 40 CFR, Part 60,Subpart Kb. [40 CFR 63.640(n)(1)]

n. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(i) and 63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) Make necessary repairs or empty the storage vessel within 45 days of identification inany inspection for seals not meeting the requirements listed in the following:

a. The accumulated area of gaps between the tank wall and the mechanical shoe orliquid-mounted primary seal shall not exceed 212 square centimeters per meterof tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

i. One end of the mechanical shoe shall extend into the stored liquid, andthe other end shall extend a minimum vertical distance of 61 cm above thestored liquid surface.

ii. There shall be no holes, tears, or other openings in the shoe, seal fabric,or seal envelope.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

b. The secondary seal shall meet the following requirements:

i. The secondary seal shall be installed above the primary seal so that itcompletely covers the space between the roof edge and the tank wallexcept as provided in section d)(6)c.

ii. The accumulated area of gaps between the tank wall and the secondaryseal shall not exceed 21.2 square centimeters per meter of tank diameter,and the width of any portion of any gap shall not exceed 1.27 cm.

iii. There shall be no holes, tears, or other openings in the seal or seal fabric.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(2) The permittee shall not place, store, or hold in this external floating roof tank anypetroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa(11.1 psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or otheropenings.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(2) The secondary seal gap shall be measured annually in accordance with the methodsspecified in 40 CFR, Part 60, Subpart Kb, which are equivalent to or more stringent thanOAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(3) The primary seal gap shall be measured at least once every 5 years, in accordance withthe methods specified in 40 CFR, Part 60, Subpart Kb, which are equivalent to or morestringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(4) The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gapmeasurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute.

e. Available data on the storage temperature may be used to determine themaximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximumtrue vapor pressure is calculated based upon the highest expectedcalendar-month average of the storage temperature. For vessels operatedat ambient temperatures, the maximum true vapor pressure is calculatedbased upon the maximum local monthly average ambient temperature asreported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may beobtained by the following:

(a) Available data on the Reid vapor pressure and the maximumexpected storage temperature based on the highest expectedcalendar-month average temperature of the stored product may beused to determine the maximum true vapor pressure fromnomographs contained in API Bulletin 2517 (incorporated byreference--see 40 CFR 60.17), unless the Administrator specificallyrequests that the liquid be sampled, the actual storage temperaturedetermined, and the Reid vapor pressure determined from thesample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vaporpressure less than 13.8 kPa or with physical properties thatpreclude determination by the recommended method is to bedetermined from available data and recorded if the estimatedmaximum true vapor pressure is greater than 3.5 kPa.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(5) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequencies:

a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

c. If any emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of sections d)(5)a. and d)(5)b.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(6) Determine gap widths and areas in the primary and secondary seals individually by thefollowing procedures:

a. Measure seal gaps, if any, at one or more floating roof levels when the roof isfloating off the roof leg supports.

b. Measure seal gaps around the entire circumference of the tank in each placewhere a 0.32-cm diameter uniform probe passes freely (without forcing or bindingagainst seal) between the seal and the wall of the storage vessel and measurethe circumferential distance of each such location.

c. The total surface area of each gap described in sections d)(6)b. shall bedetermined by using probes of various widths to measure accurately the actualdistance from the tank wall to the seal and multiplying each such width by itsrespective circumferential distance.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(7) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in sections c)(1).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(8) Visually inspect the external floating roof, the primary seal, secondary seal, and fittingseach time the vessel is emptied and degassed.

a. If the external floating roof has defects, the primary seal has holes, tears, or otheropenings in the seal or the seal fabric, or the secondary seal has holes, tears, orother openings in the seal or the seal fabric, the permittee shall repair the itemsas necessary so that none of the conditions specified in this paragraph existbefore filling or refilling the storage vessel with VOL.

b. For all the inspections required by section d)(8), the permittee shall notify theAdministrator in writing at least 30 days prior to the filling or refilling of eachstorage vessel to afford the Administrator the opportunity to inspect the storagevessel prior to refilling. If the inspection required by section d)(8) is not

plannedand the permittee could not have known about the inspection 30 days in advanceof refilling the tank, the permittee shall notify the Administrator at least 7 daysprior to the refilling of the storage vessel. Notification shall be made by telephoneimmediately followed by written documentation demonstrating why the inspectionwas unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by theAdministrator at least 7 days prior to the refilling.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(9) Keep a record of each gap measurement performed as required by sections d)(5) through d)(7). Each record shall identify the storage vessel in which the measurementwas performed and shall contain:

a. the date of measurement;

b. the raw data obtained in the measurement; and

c. the calculations described in sections d)(6) and d)(7).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(10) The permittee shall keep readily accessible records showing the dimension of thestorage vessel and an analysis showing the capacity of the storage vessel. Theserecords shall be kept for the life of the emissions unit.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(11) The permittee of each vessel storing a waste mixture of indeterminate or variablecomposition shall be subject to the following requirements:

Prior to the initial filling of the vessel, the highest maximum true vapor pressurefor the range of anticipated liquid compositions to be stored will be determinedusing the methods described in section d)(4)d.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(12) The permittee shall keep copies of all records required by 60.116b, except for the record required by 60.116b(b), for at least 2 years. The record required by 60.116b(b) will be kept for the life of the source.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(13) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days ofany seal and seal fabric inspection or any seal gap measurement which documents aviolation of the applicable control equipment requirements. The notification shall alsodescribe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(2) Within 60 days of performing the seal gap measurements required by section d)(5),furnish the Director (the Ohio EPA, Northwest District Office) with a report that contains:

a. the date of measurement;

b. the raw data obtained in the measurement; and

c. the calculations described in sections d)(6) and d)(7).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(3) After each seal gap measurement that detects gaps exceeding the limitations specifiedby section c)(1), submit a report to the Director (the Ohio EPA, Northwest District Office) within 30days of the inspection. The report will identify the vessel and contain the informationspecified in section e)(2) and the date the vessel was emptied or the repairs made anddate of repair.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-13794]

(4) After installing control equipment in accordance with 40 CFR 60.112b(a)(2) (external floating roof), the permittee shall meet the following requirements.

a. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 40 CFR 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(5) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) through 63.640(n)(8)(vi)	Reporting for Extensions of Repair Deadline; Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb; and Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb Reports of Rim Seal Measurements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditionsshall be determined in accordance with the following method:

a. Emission Limitation:

52.48 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing losscalculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

g) Miscellaneous Requirements

(1) None.

69. Emissions Unit Group –Fixed Roof Group 1 Vessels subject to40 CFR, Part 60, SubpartKb; 40 CFR, Part 61, Subpart FF; and 40 CFR, Part 63, Subpart CC: T202, T203, T204

EU ID	Operations, Property and/or Equipment Description
T202	above ground, fixed roof organic liquids storage tank No. 100037 with a capacity of 9,996 gallons (tank storing group 1 wastewater)
T203	above ground, fixed roof organic liquids storage tank No. 100036 with a capacity of 14,500 gallons (tank storing group 1 wastewater)
T204	above ground, fixed roof organic liquids storage tank No. 100032 with a capacity of 14,500 gallons (tank storing group 1 wastewater)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-7545, modification issued 6/3/08)	See b)(2)d. and b)(2)f.
b.	OAC rule 3745-21-09(L)	Exempt [See b)(2)a.]
c.	40 CFR, Part 60, Subpart Kb	Exempt [See b)(2)b.]
d.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	See b)(2)e., d)(1) and e)(1)
e.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 - 61.359] [In accordance with 40 CFR 63.647(a) and 40 CFR 61.340, these emissions units are affected sources consisting of storage vessels at a petroleum refinery used for	See b)(2)c., d)(2) and f)(1)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	wastewater storage classified as a hazardous waste treatment, storage, and disposal facility that treats, stores, or disposes of hazardous waste generated by the facility, subject to the emissionlimitations/controlmeasures specified in this section.]	
f.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
g.	40 CFR, Part 63, Subpart DD	See b)(2)g.
h.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1), since it is a fixed roof tank with a capacity less than 40,000 gallons.The requirements of OAC rule 3745-21-09(L)(3) and 3745-21-09(L)(4) are alsonot applicable since the tank is exempted under OAC rule 3745-21-09(L)(2).

b. This emissions unit is exempt from the requirements of 40 CFR, Part 60, SubpartKb, since the tank capacity is less than 75 cubic meters (19,815 gallons).

c. This emissions unit is subject to NESHAPS standards in 40 CFR, Part 61, Subpart FF.

During all times when the vent from this emissions unit is routed to theCompressor System used to compress vapors from emissions unit P025, thegaseous stream is exempt from 40 CFR, Part 61, Subpart FF, per 40 CFR61.340(d). In accordance with 40 CFR 61.340(d), during these times, no testing,monitoring, recordkeeping or reporting is required under this subpart for the ventstream from this emissions unit.

The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 61, Subpart FF, including the following sections:

61.340(d)	Fuel Gas Exemption
61.343(a)(1), 61.343(a)(1)(i)(A), 61.343(a)(1)(i)(B) and 61.343(a)(1)(ii),	Standards: Fixed Roof Tanks – Requirements for Covers, Closed Openings, and Closed Vent Systems to a Control Device
61.349(a)(1)(i), 61.349(a)(1)(iv) and	Closed Vent System Design and Operation

61.349(b)	Requirements

d. The vent from this emissions unit is routed to the Compressor System used to compress vapors from emissions unit P025. Therefore, additional terms andconditions applicable to operation of the Compressor System are shown in theterms and conditions for emissions unit P025.

e. Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with therequirements of 40 CFR 61.340 through 61.355 of 40 CFR Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.[40 CFR 63.647(a)]

f. PTI No. 03-07545 modification was issued for installation of a new compressor system; as listed in paragraph No. 266 of the federal consent decree addendum, civil action No.SA07CA0683RF, dated 11/20/07. This installation was completed by the due date of April 1, 2008.

The permittee shall operate and maintain a compressor system to routeall vapors from this emissions unit to the existing sulfur recovery unit fuel gasamine treater ("Compressor System").

g. An off-site material management unit is exempted from the requirements in 40 CFR 63.683(b)(1) when the permittee meets one of the exemptions provided in paragraphs 63.683(b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit. An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR, Part 61 or 40 CFR, Part 63, and the permittee is controlling the HAPs listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under Part 61 or Part 63.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall complywith the record keeping provisions in 40 CFR 61.356 of 40 CFR, Part 61, Subpart FF.There are no additionalrecord keeping requirements for wastewater under this subpart.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. 03-7545]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 61, Subpart FF, including the following sections:

61.343(c)	Fixed Roof Tank Visual Inspection Requirements

61.343(d)	Fixed Roof Tank Repair Requirements
61.349(a)(1)(ii)	Bypass Monitoring
61.349(a)(1)(iii)	Gauging and Sampling Devices
61.349(f)	Closed Vent System Inspection Requirements
61.349(g)	Closed Vent System Repair Requirements
61.356(a), 61.356(f)(1), 61.356(g), 61.356(h) and 61.356(j)(3)	Recordkeeping Requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. 03-7545]

e) Reporting Requirements

(1) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall complywith the reporting provisions in 40 CFR 61.357(d)(6) and 61.357(d)(8). Thereare no additional reporting requirements for wastewater under this subpart.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. 03-7545]

f) Testing Requirements

(1) The permittee shall comply with the testing requirements under 40 CFR, Part 61, Subpart FF, including the following section:

61.355(h)	No Detectable Emissions Procedures

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF and PTI No. 03-7545]

g) Miscellaneous Requirements

(1) None.

70. T212, Tank 100072

Operations, Property and/or Equipment Description:

Above-ground fixed roof tank (592,178 gallons) with a closed vent system and control device

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0114999, modification issued 7/5/13)	7.35 tons volatile organic compounds (VOC)/yr See b)(2)d. and b)(2)e.
b.	OAC rule 3745-21-09(L)	See c)(1), d)(1), d)(3), and e)(1)
c.	40 CFR, Part 60, Subpart Kb	See b)(2)a., d)(2), d)(3), d)(4), and e)(2)
d.	40 CFR, Part 61, Subpart FF [40 CFR 61.340-61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	See b)(2)c.
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	See b)(2)b.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR 60.112b(a)(3), the permittee shall equip the storage vessel (tank) with a closed vent system and control device meeting the following specifications:

i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in Part 60, Subpart VV, 40 CFR 60.485(b).

ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. The permittee shall comply with the control device requirements under 40 CFR 60.112b(a)(3)(ii) by routing all closed vent system vapors and gases to the "Compressor System" which is used to compress vapors from emissions unit P025 and route them to the existing fuel gas amine treater which is a component of the existing refinery fuel gas system.

b. In accordance with 40 CFR Part 63.640(n)(1), a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

c. Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

During all times when the vent from this emissions unit is routed to the "Compressor System" which is used to compress vapors from emissions unit P025 and route them to the existing fuel gas amine treater which is a component of the existing refinery fuel gas system, the gaseous stream is exempt from 40 CFR, Part 61, Subpart FF, per 40 CFR 61.340(d). In accordance with 40 CFR 61.340(d), during these times, no testing, monitoring, recordkeeping or reporting is required under this subpart for the vent stream from this emissions unit.

d. Best available technology (BAT) control requirements for this emissions unit has been determined to be the routing of tank emissions to the same Compressor System which is used to compress vapors from emissions unit P025 and route them to the existing fuel gas amine treater which is a component of the existing refinery fuel gas system.

e. The requirements of this rule also include compliance with the applicable requirements of OAC rule 3745-21-09(L); 40 CFR, Part 60, Subpart Kb; 40 CFR, Part 63, Subpart CC; and 40 CFR, Part 61, Subpart FF.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. P0114999]

(2) The permittee shall operate the closed vent system and control device (see b)(2)a.) and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted in accordance with 40 CFR Part 60.113b(c)(1) [see e)(2)c.].

[OAC rule 3745-77-07(A)(1) and PTI No. P0114999]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

c. The annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. P0114999]

(2) After installing control equipment in accordance with 40 CFR 60.112b(a)(3) or (b)(1) (closed vent system and control device other than a flare), the permittee shall keep the following records:

a. A copy of the operating plan; and

b. A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0114999]

(3) The permittee shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0114999]

(4) The permittee of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0114999]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 psia, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. P0114999]

(2) The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR 60.112b(a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR 60.8 of the General Provisions and shall meet the following requirements.

a. Submit for approval by the Administrator as an attachment to the notification required by 40 CFR 60.7(a)(1) or, if the facility is exempt from 40 CFR 60.7(a)(1), as an attachment to the notification required by 40 CFR 60.7(a)(2), an operating plan containing the information listed below.

b. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

c. A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. P0114999]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditionsshall be determined in accordance with the following method:

a. <u>Emission Limitation</u>:

7.35 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing losscalculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0114999]

g) Miscellaneous Requirements

(1) None.

71. Emissions Unit Group -Fixed Roof Group 2 Vessels subject to 40 CFR, Part 60, Subpart Ka and 40 CFR, Part 63, Subpart CC : T213, T214

EU ID	Operations, Property and/or Equipment Description
T213	aboveground, fixed roof organic liquids storage tank No. 100481 with a capacity of 70,476 gallons (group 2 storage vessel)
T214	aboveground, fixed roof organic liquids storage tank No. 100482 with a capacity of 70,476 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13434, modification issued 6/3/08)	6.43 tons volatile organic compounds (VOC)/yr See b)(2)b. and b)(2)c.
b.	OAC rule 3745-21-09(L)	See c)(1), d)(1) and e)(1)
c.	40 CFR, Part 60, Subpart Ka [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)a.
d.	40 CFR Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)a., d)(2) and e)(2)
e.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC –

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is subject to NSPS standards in 40 CFR, Part 60, Subpart Ka and MACT standards in 40 CFR, Part 63, Subpart CC.

After the compliance dates specified in paragraph (h) of this section a Group 2 storage vessel that is also subject to the provisions of 40 CFR, Part 60, Subpart Ka, but not to the control requirements of 40 CFR, Part 60, Subpart Ka, is required to comply only with the provisions of 40 CFR, Part 63, Subpart CC. [40 CFR 63.640(n)(7)]

The permittee shall comply with the applicable storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l), 63.640(l)(1), 63.640(l)(2), 63.640(l)(2)(i) and 63.640(l)(2)(ii)	Applicability and Compliance Dates if a Process Change Creates Additional Group 1 Emission Point(s)
63.640(n)(7)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Ka

b. Best available technology (BAT) control requirements for this emissions unit hasbeen determined to be use of submerged fill.

c. The requirements of this rule also include compliance with the requirements ofOAC rule 40 CFR, Part 60, Subpart Ka; and 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquidwhich, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. 03-13434]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute.

c. The annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13434]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.655(i)(5)	Storage Vessels Provisions – Retention of Reporting Information

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with atrue vapor pressure which is greater than 1.52 psia, thepermittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13434]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(l)(3), and 63.640(l)(3)(i) through 63.640(l)(3)(vii)	Applicability of Reporting Requirements and Notification of Compliance Status if a Process Change Occurs for Existing Source
63.655(f), 63.655(f)(1)(i)(A) and 63.655(h)(6)(ii)	Notification of Compliance Status Reporting Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. <u>Emission Limitation:</u>

6.43 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing losscalculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13434]

g) Miscellaneous Requirements

(1) None.

72. T217, Tank 164468 ("E-tank")

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 164468 with a capacity of 4,478,655 gallons, controlled by a Compressor System (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13434, modification issued 6/3/08)	See b)(2)e. and b)(2)f.
b.	OAC rule 3745-21-09(L)	See c)(1), d)(1) and e)(1)
c.	40 CFR, Part 60, Subpart Ka [In accordance with 40 CFR 60.110a, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)a.
d.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater stream, with benzene containing waste.]	See b)(2)d., d)(2) and d)(4), and e)(2)
e.	40 CFR, Part 61, Subpart FF [40 CFR 61.340 – 61.358] [In accordance with 40 CFR 61.340, this emissions unit is an affected source, since the storage tank includes a Group 1 wastewater	See b)(2)b. , d)(3), d)(5),and d)(6), e)(3), e)(4) and f)(1)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	stream per 40 CFR, Part 63, Subpart CC, with benzene containing waste.]	
f.	40 CFR, Part 61, Subpart A	See 40 CFR 61.01 through 61.19
g.	40 CFR, Part 63, Subpart DD	See b)(2)g.
h.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply. Table 2 to 40 CFR, Part 63, Subpart DD – Applicability of General Provisions to Subpart DD shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. [40 CFR 63.640(n)(5)]

A Group 1 storage vessel that is also subject to the provisions of 40 CFR,Part60, Subpart Ka is required to only comply with the provisions of this subpart.

b. Except as provided in paragraph (b) of this section and in 40 CFR 61.351, the permitteeshall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342(c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

i. The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to the Compressor System.

The fixed-roof shall meet the following requirements:

(a) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) of this subpart.

(b) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(c) If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of this section does not apply to any opening that meets all of thefollowing conditions:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h); and

(iii) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(iv) The closed-vent system shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

c. Except as provided in 40 CFR 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

d. Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR, Part 61, Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

During all times when the vent from this emissions unit is routed to theCompressor System used to compress vapors from emissions unit P025, thegaseous stream is exempt from 40 CFR, Part 61, Subpart FF, per 40 CFR61.340(d). In accordance with 40 CFR 61.340(d), during these times, no testing,monitoring, recordkeeping or reporting is required under this subpart for the ventstream from this emissions unit.

e. Best available technology (BAT) for this emissions unit has been determined to be the routing of tank emissions to the same Compressor System which is usedto compress vapors from emissions unit P025 and route them to the existing fuelgas amine treater. The vent stream routed to the Compressor System is exemptfrom the requirements of 40 CFR, Part 61, Subpart FF: Closed-vent Systemsand Control Devices [40 CFR 61.349], per 40 CFR 61.340(d).

f. The requirements of this rule also include compliance with the requirements ofOAC rule 40 CFR, Part 60, Subpart Ka; 40 CFR, Part 63, Subpart CC; and 40 CFR, Part 61,Subpart FF.

g. An off-site material management unit is exempted from the requirements in 40 CFR 63.683(b)(1) when the permittee meets one of the exemptions provided in

paragraphs 63.683(b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit. An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR, Part 61 or 40 CFR, Part 63, and the permittee is controlling the HAPs listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under Part 61 or Part 63.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquidwhich, as stored, has a true vapor pressure greater than 1.52 pounds per square inchabsolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. 03-13434]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute.

c. The annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13434]

(2) Except as provided in section d)(5), the permittee shall maintain a record of eachpetroleum liquid stored, the period of storage, and the maximum true vapor pressure ofthat liquid during the respective storage period.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. 03-13434]

(3) Each fixed-roof, seal, access door, and all other openings shall be checked by visualinspection initially and quarterly thereafter to ensure that no cracks or gaps occur andthat access doors and other openings are closed and gasketed properly.

If a bypass line exists that could divert the vent stream from the Compressor System,the permittee shall inspect the valve at least once per month to ensure that the ventstream is not diverted through the bypass line. The permittee shall visually inspect theflow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once peroperating day to check that vapors are routed to the Compressor System as required.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

(4) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping provisions in 40 CFR 61.356 of 40 CFR, Part 61, Subpart FF. There are no additional record keeping requirements for wastewater under this subpart.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. 03-13434]

(5) The permittee shall maintain a record for each visual inspection required by 40 CFR61.343 through 61.347 of this subpart that identifies a problem (such as a broken seal,gap or other problem) which could result in benzene emissions. The record shallinclude the date of the inspection, waste management unit and control equipmentlocation where the problem is identified, a description of the problem, a description ofthe corrective action taken, and the date the corrective action was completed.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

(6) The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, Compressor System, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with atrue vapor pressure which is greater than 1.52 psia, thepermittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13434]

(2) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall complywith the reporting provisions in 40 CFR 61.357 of 40 CFR,Part 61, Subpart FF. Thereare no additional reporting requirements for wastewater under this subpart.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC; and PTI No. 03-13434]

(3) Beginning 3 months after the date that the equipment necessary to comply with thesestandards has been certified in accordance with 61.357(d)(1), paragraph (d)(1) of this section, thepermittee shall submit quarterly to the Administrator a certification that all of therequired inspections have been carried out in accordance with the requirements of thissubpart.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

(4) Beginning one year after the date that the equipment necessary to comply with thesestandards has been certified in accordance with paragraph (d)(1) of this section, thepermittee shall submit annually to the Administrator a report that summarizes

allinspections required by 40 CFR 61.343 during which detectable emissions aremeasured or a problem (such as a broken seal, gap or other problem) that could resultin benzene emissions is identified, including information about the repairs or correctiveaction taken.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

f) Testing Requirements

(1) The permittee shall conduct an annual test of the cover and all openings for nodetectable emissions (less than 500 ppmv) using the following test methods andprocedures:

a. The permittee shall test equipment for compliance with no detectable emissionsas required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from Appendix A of 40 CFR, Part60.

ii. The detection instrument shall meet the performance criteria of Method21.

iii. The instrument shall be calibrated before use on each day of its use bythe procedures specified in Method 21.

iv. Calibration gases shall be:

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

(b) A mixture of methane or n-hexane and air at a concentration ofapproximately, but less than, 10,000 ppm methane or n-hexane.

v. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leakinterfaces as close as possible to the interface as described in Method21.

vii. The arithmetic difference between the maximum concentration indicatedby the instrument and the background level is compared to 500 ppm fordetermining compliance.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 61, Subpart FF; and PTI No. 03-13434]

g) Miscellaneous Requirements

(1) None.

73. T222, Tank 100056

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 100056 with a capacity of 2,520,000 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-13669, modification issued 11/6/03)	36.45 tons organic compounds (OC)/yr Control Requirements [See b)(2)a.] See b)(2)c.
b.	OAC rule 3745-21-09(L)	See b)(2)b., c)(1) and e)(1)
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	Record keeping and Reporting Requirements [See c)(1), d)(1) and d)(2)]
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC	Overlap of Subpart CC with otherregulations for storage vessels [See b)(2)b.]
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) requirement for this emissions unit has beendetermined to be the use of a submerged fill pipe.

b. Emissions unit T222 is a group 2 storage vessel (as defined in 40 CFR 63.641) that is partof an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb.In accordance with 40 CFR 63.640(n)(1), emissions unit T222 is required to comply onlywith the requirements of 40 CFR, Part 60, Subpart Kb and is exempt from the control and record keeping requirements of OAC rule 3745-21-09(L).

c. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart Kb and 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, asstored, has a true vapor pressure greater than 0.75 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb and PTI No. 03-13669]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to comply with the requirements of 40 CFR 60.116b(c) and to demonstrate compliancewith the emission limitation of 36.45 tons OC per year the permittee shall collect and record thefollowing information each month:

a. the volatile organic liquid (VOL) stored;

b. the maximum true vapor pressure, in pounds per square inch absolute of VOL stored;

c. the VOL throughput, in gallons per month;

d. the calculated OC emissions, in tons per month (OC emissions shall be calculated usingthe most recent version of the U.S. EPA TANKS program); and

e. the annual OC emissions, in tons per year [summation of d)(2)d. for each month to date forthe calendar year].

[OAC rule 3745-77-07(C)(1);40 CFR, Part 60, Subpart Kb and PTI No. 03-13669]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.116b(a) through 60.116b(e)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Record of Volatile Organic Liquid and Maximum True Vapor

	Pressure

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a truevapor pressure which is greater than 0.75 psia, the permittee shallnotify the Director (the Ohio EPA, Northwest District Office) within 30 daysof becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13669]

(2) The permittee shall submit annual deviation (excursion) reports that identify any and allexceedances of the annual material throughput limitation, as well as the corrective actions takento achieve compliance. If no deviations occurred during a calendar year, the permittee shallsubmit an annual report which states that no deviations occurred during that year. These reportsshall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13669]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall bedetermined in accordance with the following methods:

a. <u>Emission Limitation:</u>

36.45 tons OC/yr

<u>Applicable Compliance Method:</u>

Compliance shall be determined by the monitoring andrecord keeping in section d)(2).

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13669]

g) Miscellaneous Requirements

(1) None.

74. T223, Tank 100071

Operations, Property and/or Equipment Description:

above ground, fixed roof organic liquids storage tank No. 100071 with a capacity of 705,022 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-16166, modification issued 9/7/04)	21.06 tons organic compounds (OC)/yr [See b)(2)a. and b)(2)c.]
b.	OAC rule 3745-21-09(L)	Exempt [See c)(1) and e)(1)]
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	Record keeping and Reporting Requirements [See c)(1), d)(1) and d)(2)]
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC	Overlap of Subpart CC with other regulations for storage vessels [See b)(2)b.]
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) requirement for this emissions unit has beendetermined to be the use of a submerged fill pipe.

b. Emissions unit T223 is a group 2 storage vessel (as defined in 40 CFR 63.641) that is partof an existing source and is also subject to the provisions of 40 CFR, Part 60,Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissions unit T223 is onlyrequired to comply with the requirements of 40 CFR Part 60, Subpart Kb.

c. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart Kb and 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, asstored, has a true vapor pressure greater than 0.75 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb and PTI No. 03-16166]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to comply with the requirements of 40 CFR 60.116b(c) and to demonstrate compliancewith the emission limitation of 21.06 tons OC per year, the permittee shall collect and record thefollowing information each month:

a. the volatile organic liquid (VOL) stored;

b. the maximum true vapor pressure, in pounds per square inch absolute of VOL stored;

c. the VOL throughput, in gallons per month;

d. the calculated OC emissions, in tons per month (OC emissions shall be calculated using themost recent version of the U.S. EPA TANKS program); and

e. the annual OC emissions, in tons per year [summation of d)(2)d. for each month, to date, forthe calendar year].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. 03-16166]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.116b(a) through 60.116b(e)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Record of Volatile Organic Liquid and Maximum True Vapor Pressure

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a truevapor pressure which is greater than 0.75 psia, the permittee shallnotify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming awareof the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-16166]

(2) The permittee shall submit annual deviation (excursion) reports that identify any and allexceedances of the annual material throughput limitation, as well as the corrective actions takento achieve compliance. If no deviations occurred during a calendar year, the permittee shallsubmit an annual report which states that no deviations occurred during that year. These reportsshall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-16166]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall bedetermined in accordance with the following methods:

a. <u>Emission Limitation:</u>

21.06 tons OC/yr

<u>Applicable Compliance Method:</u>

Compliance shall be determined by the monitoring andrecordkeeping in section d)(2).

[OAC rule 3745-77-07(C)(1) and PTI No. 03-16166]

g) Miscellaneous Requirements

(1) None.

31. **T231, Tank 327**

Operations, Property and/or Equipment Description:

aboveground, external floating roof organic liquids storage tank No. 327, Group 1 storage vessel, (rebuild of emissions unit T048, which was shut down on 11/13/06)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. 03-17385, issued 4/8/08)	13.89 tons volatile organic compounds (VOC)/yr Control requirements See b)(2)a.
b.	OAC rule 3745-21-09(Z)	See b)(2)b. through b)(2)h., d)(1) through d)(5), and e)(1) through e)(3)
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)i., b)(2)j., d)(6)through d)(8), e)(4) and e)(6)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.	See b)(2)i., b)(2)k., d)(9) and e)(7)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) requirement for this emissions unit hasbeen determined to be the use of submerged fill, an external floating roof andcompliance with OAC rule 3745-21-09(Z); and 40 CFR, Part 60, Subpart Kb; and40 CFR, Part 63, Subpart CC.

b. Any external floating roof storage tank equipped with either a 1) liquid-mountedprimary seal and rim-mounted secondary seal; or a 2) mechanical shoe primaryseal and a rim-mounted secondary seal; or a 3) mechanical shoe primary sealand a shoe-mounted, secondary seal, provided the shoe-mounted secondaryseal was installed prior to 1/10/81; or a 4) vapor-mounted primary seal and a rimmountedsecondary seal; or a 5) flexible wiper primary seal and a rim-mountedsecondary seal; shall meet the following requirements:

i. there shall be no visible holes, tears, or other openings in the seal orseal fabric;

ii. for the primary seal, the total seal gap area shall not exceed 10.0 squareinches per foot of tank diameter (equivalent of 10.0 square inches forevery 3.14 linear feet of tank circumference); and

iii. for the secondary seal, the total seal gap area shall not exceed 1.0square inch per foot of tank diameter (equivalent of 1.0 square inch forevery 3.14 linear feet of tank circumference).

The permittee may change the seal types during the term of this permit providedthat a written notification and revised "emission activity category" form, includingthe results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Office within 30 days after the changeoccurs.

c. Any opening in the external floating roof, except automatic bleeder vents, rimspace vents, leg sleeves, stub drains, and slotted gauging/sampling wells shallbe equipped with:

i. a cover, seal or lid which remains in the closed position at all timeswithout any visible gaps, except when the opening is in actual use; and

ii. a projection into the tank below the liquid surface.

d. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

e. Any rim vent shall be set to open only at the manufacturer's recommendedsetting, except when the external floating roof is being floated off the roof legsupports.

f. Any emergency roof drain shall be equipped with a slotted membrane fabriccover or other device which covers at least 90 percent of the area of theopening.

g. Any stub drain shall be equipped with a projection into the tank below the liquidsurface.

h. Any slotted gauging/sampling well shall be equipped with an object which floatson the liquid surface within the well and which covers at least 90 percent of thearea of the well opening.

i. Emissions unit T231 is a group 1 storage vessel (as defined in 40 CFR 63.641)that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissions unitT231 is required to comply only with the requirements of 40 CFR, Part 60,Subpart Kb except as provided in paragraph (n)(8) of 40 CFR 63.640.

j. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(2), 60.112b(a)(2)(i), 60.112b(a)(2)(i)(A), 60.112b(a)(2)(i)(B), 60.112b(a)(2)(ii), 60.112b(a)(2)(iii) and 60.113b(b)(6)(i)	Standards for VOC: External Floating Roof, Primary Seal, Secondary Seal, Roof Vents, Filling and Emptying Requirements, and Tank Inspection Procedures

k. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(i) and 63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) The permittee shall not exceed an annual material throughput rate of 1,779,947,685gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. 03-17385]

(2) The maximum true vapor pressure of organic liquid stored in this storage tank shall notexceed 11.1 psia.

[OAC rule 3745-77-07(A)(1) and PTI No. 03-17385]

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or otheropenings.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(2) The secondary seal gap shall be measured annually in accordance with the methodsspecified in 40 CFR, Part 60, Subpart Kb, which are equivalent to or more stringent thanOAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(3) The primary seal gap shall be measured at least once every 5 years, in accordancewith the methods specified in 40 CFR, Part 60, Subpart Kb, which are equivalent to ormore stringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(4) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank;

b. the maximum true vapor pressure (in pounds per square inch absolute), asstored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute; and

c. the annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(5) The permittee shall keep copies of all records required by d)(1) through d)(4) for at least 2 years.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(6) The permittee shall keep readily accessible records showing the dimension ofthe storage vessel and an analysis showing the capacity of the storage vessel (shall bekept for the life of the source).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-17385]

(7) The permittee of each vessel storing a waste mixture of indeterminate orvariable composition shall be subject to the following requirements:

a. Prior to the initial filling of the vessel, the highest maximum true vapor pressurefor the range of anticipated liquid compositions to be stored will be determinedusing the methods described in d)(4)b.

b. For vessels in which the vapor pressure of the anticipated liquid composition isabove 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure

isrequired; and a physical test at least once every 6 months thereafter is requiredas determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17);or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17);or

iii. As measured by an appropriate method as approved by the Administrator.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-17385]

(8) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(1), 60.113b(b)(1)(i) through 60.113b(b)(1)(iii), 60.113b(b)(2)(i) through 60.113b(b)(2)(iii), 60.113b(b)(3), 60.113b(b)(4)(i) and 60.113b(b)(4)(ii)	External Floating Roof Visual Inspection and Seal Gap Measurement Procedures, Refill if Cease to Store Volatile Organic Liquid for One Year, and Seal Repair Requirements
60.115b(b)(3)	Recordkeeping Requirements for Seal Gap Measurements
60.116b(a)	Monitoring of Operations: Records Retention Requirements
60.116b(b) and 60.116b(c)	Monitoring of Operations: Records Required
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(9) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of any seal and seal fabric inspection or any seal gapmeasurement which documents a violation of the applicable control equipmentrequirements. The notification shall also describe the corrective actions which havebeen or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(2) The permittee shall notify the Administrator in writing at least 30 days prior to the fillingor refilling of each storage vessel for which an inspection is required by d)(2) and d)(3) to afford the Administrator the opportunity to have an observer present. If theinspection required by d)(2) and d)(3) is not planned and the permittee couldnot have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of thestorage vessel. Notification shall be made by telephone immediately followed by writtendocumentation demonstrating why the inspection was unplanned. Alternatively, thisnotification including the written documentation may be made in writing and sent byexpress mail so that it is received by the Administrator at least 7 days prior to therefilling.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(3) If any of the conditions described in d)(1) are detected during the annual visualinspection, a report shall be furnished to the Administrator within 30 days of theinspection. Each report shall identify the storage vessel, the nature of the defects, andthe date the storage vessel was emptied or the nature of and date the repair was made.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(4) The permittee of each storage vessel either with a design capacity greater thanor equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that isnormally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to75 cubic meters but less than 151 cubic meters storing a liquid with a maximum truevapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify theAdministrator within 30 days when the maximum true vapor pressure of the liquidexceeds the respective maximum true vapor pressure values for each volume range.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb; and PTI No. 03-17385]

(5) The permittee shall submit annual deviation (excursion) reports that identify any and allexceedances of the annual material throughput limitation, as well as the correctiveactions taken to achieve compliance. If no deviations occurred during a calendar year,the permittee shall submit an annual report which states that no deviations occurredduring that year. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

(6) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(4)(iii)	Extension Request Procedure for External Floating Roof Failure Detected
60.113b(b)(5)	External Floating Roof – Notification of Seal Gap Measurements
60.113b(b)(6)(ii)	External Floating Roof – Notification for Inspections

60.115b(b)(1)	External Floating Roof – Notification of Control Equipment
60.115b(b)(2) and 60.115b(b)(4)	External Floating Roof – Reporting of Seal Gap Measurements and Seal Gap Measurement Exceedances

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(7) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) through 63.640(n)(8)(vi)	Reporting for Extensions of Repair Deadline; Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb; and Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb Reports of Rim Seal Measurements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions ofthis permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

13.89 tons VOC/yr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance byrim seal loss, withdrawal loss and deck fitting loss calculations as determined by the most recent version of the U.S.

EPA TANKS program with a maximum annual material throughput of1,779,947,685 gallons.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-17385]

g) Miscellaneous Requirements

(1) None.

75. T236, Tank 108

Operations, Property and/or Equipment Description:

aboveground,fixed roof kerosene storage/rundown tank No. 108 with a capacity of 345,462 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0104006, issued 12/3/08)	20.0 tons organic compounds(OC)/yr See b)(2)a. and b)(2)c.
b.	OAC rule 3745-21-09(L)	Exempt [See c)(1) and e)(1)]
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	Record keeping and Reporting Requirements [See d)(1), d)(2) and e)(1)]
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC	Overlap of Subpart CC with other regulations for storage vessels [See b)(2)b.]
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The “Best Available Technology “(BAT) requirement for this emissions unit has been determined to be the use of a submerged fill pipe.

b. Emissions unit T236 is a group 2 storage vessel (as defined in 40 CFR 63.641) that is part of an existing source and is also subject to the provisions of 40CFR, Part 60, Subpart Kb. In accordance with 40 CFR 63.640(n)(1), emissionsunit T236 is only required to comply with the requirements of 40 CFR, Part 60, Subpart Kb.

c. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart Kb and 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 0.75 pound per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. P0104006]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to comply with the requirements of 40 CFR 60.116b(c) and to demonstrate compliance with the emission limitation of 20.0 tons OC per year, the permittee shallcollect and record the following information each month:

a. the volatile organic liquid (VOL) stored;

b. the maximum true vapor pressure, in pounds per square inch absolute of VOL stored;

c. the VOL throughput, in gallons per month;

d. the calculated OC emissions, in tons per month (OC emissions shall be calculated using the most recent version of the U.S. EPA TANKS program); and

e. the annual OC emissions, in tons per year [summation of d)(2)d. for each month, to date, for the calendar year].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104006]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.116b(a) through 60.116b(e)	Monitoring of Operations: Records Retention Requirements, Dimensions and Capacity Records, Record of Volatile Organic Liquid and Maximum True Vapor Pressure

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

e) Reporting Requirements

(1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 0.75 psia, thepermittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 daysof becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart Kb and PTI No. P0104006]

(2) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the correctiveactions taken to achieve compliance. If no deviations occurred during a calendar year,the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104006]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditionsshall be determined in accordance with the following method:

a. <u>Emission Limitation:</u>

20.0 tons OC/yr

<u>Applicable Compliance Method:</u>

Compliance shall be determined by the monitoring and record keeping in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0104006]

g) Miscellaneous Requirements

(1) None.

32. **T237, Tank 106**

Operations, Property and/or Equipment Description:

above ground, external floating roof organic liquids storage tank No. 106 with a capacity of 3,968,941 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicableemissions limitations and/or control measures. Emissions from each unit shall notexceed the listed limitations, and the listed control measures shall be specified innarrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0104043, issued 1/13/09)	11.37 tons volatile organic compounds (VOC)/yr
b.	OAC rule 3745-21-09(Z)	See b)(2)a. through b)(2)g., d)(1) through d)(3), d)(4)a., d)(4)b., e)(1) and e(2)
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)h., b)(2)i., c)(1), d)(5) and e)(3)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)i., b)(2)j., d)(6) and e)(4)

(2) Additional Terms and Conditions

a. Any external floating roof storage tank equipped with either a 1) liquid-mounted primary seal and rim-mounted secondary seal; or a 2) mechanical shoe primaryseal and a rim-mounted secondary seal; or a 3) mechanical shoe primary sealand a shoe-mounted secondary seal, provided the shoe-mounted secondary sealwas installed prior to 01/10/81; or a 4) vapor-mounted primary seal and a rimmountedsecondary seal; or a 5) flexible wiper primary seal and a rim-mountedsecondary seal; shall meet the following requirements:

i. there shall be no visible holes, tears, or other openings in the seal or seal fabric;

ii. for the primary seal, the total seal gap area shall not exceed 10.0 square inches per foot of tank diameter (equivalent of 10.0 square inches forevery 3.14 linear feet of tank circumference); and

iii. for the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter (equivalent of 1.0 square inch for every 3.14 linear feet of tank circumference).

The permittee may change the seal types during the term of this permit providedthat a written notification and revised “Emission Activity Category Form”,including the results of the latest seal gap measurements, are submitted to the Ohio EPA, Northwest District Office within 30 days after the change occurs.

b. Any openings in the external floating roof, except automatic bleeder vents, rimspace vents, leg sleeves, stub drains, and slotted gauging/sampling wells shallbe equipped with:

i. a cover, seal, or lid which remains in the closed position, at all timeswithout any visible gaps, except when the opening is in actual use; and

ii. a projection into the tank below the liquid surface.

c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

d. Any rim vent shall be set to open only at the manufacturer’s recommendedsetting, except when the external floating roof is being floated off the roof legsupports.

e. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

f. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

g. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of thearea of the well opening.

h. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(2), 60.112b(a)(2)(i), 60.112b(a)(2)(i)(A), 60.112b(a)(2)(i)(B), 60.112b(a)(2)(ii), 60.112b(a)(2)(iii) and 60.113b(b)(6)(i)	Standards for VOC: External Floating Roof, Primary Seal, Secondary Seal, Roof Vents, Filling and Emptying Requirements; and Tank Inspection Procedures

i. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subjectto the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only withthe requirements of 40 CFR, Part 60, Subpart Kb, except as required in paragraph (n)(8) of 40 CFR 63.640.

j. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(i) and 63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 11.1 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104043]

d) Monitoring and/or Recordkeeping Requirements

(1) The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(2) The secondary seal gap shall be measured annually in accordance with the methods specified in 40 CFR, Part 60, Subpart Kb which are equivalent to or more stringent thanOAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(3) The primary seal gap shall be measured at least once every five years, in accordance with the methods specified in 40 CFR, Part 60, Subpart Kb, which are equivalent to ormore stringent than OAC rule 3745-21-10.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(4) The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank;

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0pound per square inch absolute; and

c. the annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(5) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(1), 60.113b(b)(1)(i) through 60.113b(b)(1)(iii), 60.113b(b)(2)(i) through 60.113b(b)(2)(iii), 60.113b(b)(3), 60.113b(b)(4)(i) and 60.113b(b)(4)(ii)	External Floating Roof Visual Inspection and Seal Gap Measurement Procedures, Refill if Cease to Store Volatile Organic Liquid for One Year, and Seal Repair Requirements
60.115b(b)(3)	Recordkeeping Requirements for Seal Gap Measurements
60.116b(a)	Monitoring of Operations: Records Retention Requirements
60.116b(b) and 60.116b(c)	Monitoring of Operations: Records Required
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature and Vapor Pressure of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(6) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall notify the Ohio EPA, Northwest District Office within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of theapplicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(2) If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with atrue vapor pressure which is equal to or greater than 11.1psia, the permittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. 03-13794]

(3) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(4)(iii)	Extension Request Procedure for External Floating Roof Failure Detected
60.113b(b)(5)	External Floating Roof – Notification of Seal Gap Measurements
60.113b(b)(6)(ii)	External Floating Roof – Notification for Inspections
60.115b(b)(1)	External Floating Roof – Notification of Control Equipment
60.115b(b)(2) and 60.115b(b)(4)	External Floating Roof – Reporting of Seal Gap Measurements and Seal Gap Measurement Exceedances

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(4) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) through 63.640(n)(8)(vi)	Reporting for Extensions of Repair Deadline; Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb; and Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb Reports

	of Rim Seal Measurements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

11.37 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

g) Miscellaneous Requirements

(1) None.

76. T238, Tank 107

Operations, Property and/or Equipment Description:

above ground, external floating roof organic liquids storage tank No. 107 with a capacity of 3,968,941 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicableemissions limitations and/or control measures. Emissions from each unit shall notexceed the listed limitations, and the listed control measures shall be specified innarrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0104043, issued 1/13/09)	13.69 tons volatile organic compounds (VOC)/yr
b.	OAC rule 3745-21-09(Z)	See b)(2)a.
c.	40 CFR, Part 60, Subpart Kb [40 CFR 60.110b – 60.117b] [In accordance with 40 CFR 60.110b, this emissions unit is an affected source consisting of an organic liquids storage tank,subject to the emissionlimitations/control measuresspecified in this section.]	See b)(2)b., b)(2)c., c)(1), d)(1), d)(2) and e)(1)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions units is an affected sources consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)c., b)(2)d., d)(3) and e)(2)
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 -

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		63.15 apply.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-21-09(Z) are less stringent than the requirements of 40 CFR, Part 60, Subpart Kb

b. This emissions unit is subject to NSPS standards in 40 CFR, Part 60, Subpart Kb. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.112b(a)(2), 60.112b(a)(2)(i), 60.112b(a)(2)(i)(A), 60.112b(a)(2)(i)(B), 60.112b(a)(2)(ii), 60.112b(a)(2)(iii) and 60.113b(b)(6)(i)	Standards for VOC: External Floating Roof, Primary Seal, Secondary Seal, Roof Vents, Filling and Emptying Requirements; and Tank Inspection Procedures

c. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subjectto the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only withthe requirements of 40 CFR, Part 60, Subpart Kb, except as required in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

d. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(i) and 63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 11.1 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104043]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the annual throughput of any petroleum liquid stored in the tank.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

(2) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(1), 60.113b(b)(1)(i) through 60.113b(b)(1)(iii), 60.113b(b)(2)(i) through 60.113b(b)(2)(iii), 60.113b(b)(3), 60.113b(b)(4)(i) and 60.113b(b)(4)(ii)	External Floating Roof Visual Inspection and Seal Gap Measurement Procedures, Refill if Cease to Store Volatile Organic Liquid for One Year, and Seal Repair Requirements
60.115b(b)(3)	Recordkeeping Requirements for Seal Gap Measurements
60.116b(a)	Monitoring of Operations: Records Retention Requirements
60.116b(b) and 60.116b(c)	Monitoring of Operations: Records Required
60.116b(e)(1) through 60.116b(e)(3)	Monitoring of Operations: Determination of Temperature of Product Stored

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(3) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall comply with the reporting requirements under 40 CFR, Part 60, Subpart Kb, including the following sections:

60.113b(b)(4)(iii)	Extension Request Procedure for External Floating Roof Failure Detected
60.113b(b)(5)	External Floating Roof – Notification of Seal Gap Measurements
60.113b(b)(6)(ii)	External Floating Roof – Notification for Inspections

60.115b(b)(1)	External Floating Roof – Notification of Control Equipment
60.115b(b)(2) and 60.115b(b)(4)	External Floating Roof – Reporting of Seal Gap Measurements and Seal Gap Measurement Exceedances

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Kb]

(2) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) through 63.640(n)(8)(vi)	Reporting for Extensions of Repair Deadline; Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb; and Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb Reports of Rim Seal Measurements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:

a. <u>Emission Limitation:</u>

13.69 tons VOC/yr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104043]

g) Miscellaneous Requirements

(1) None.

77. T239, Tank 100110

Operations, Property and/or Equipment Description:

above ground, external floating roof organic liquids storage tank No. 100110 with a capacity of 2,664,985 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicableemissions limitations and/or control measures. Emissions from each unit shall notexceed the listed limitations, and the listed control measures shall be specified innarrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0104853, issued 7/2/09)	8.49 tons volatile organic compounds (VOC)/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-21-09(Z)	See b)(2)c. and e)(7)
c.	40 CFR, Part 60, Subpart Kb: 40 CFR, Part 60.112b 40 CFR, Part 60.113b 40 CFR, Part 60.115b 40 CFR, Part 60.116b	 See b)(2)e. through b)(2)g. See d)(4) through d)(8) and e)(3) through e)(4) See e)(2) See d)(1) and d)(3)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC: [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions units is an affected sources consisting of a storage vessel associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	See b)(2)d., b)(2)h., d)(10) and e)(8)
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC –

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. Permit to install No. P0104853 takes into account the following voluntary restriction asproposed by the permittee for the purpose of establishing practically and legallyenforceable limitations representing the potential to emit for VOC from thisemissions unit:

i. an operational restriction limiting the annual material throughput [Seec)(1)].

The potential to emit for this emissions unit is also limited by the federallyenforceable control requirements of 40 CFR, Part 60, Subpart Kb to employ anexternal floating roof. The potential to emit for this emissions unit is 8.49 tons ofVOC/year and is based on an annual throughput of 975,384,510 gallons oforganic liquid, U.S. EPA's TANKS version 4.0.9d, and landing losses calculatedin accordance with AP-42 Section 7.1.3.2.2 (11/06). The landing losses werecalculated assuming RVP 15 gasoline and an estimated one landing event peryear.

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC emissions from this air contaminant sourcesince the potential to emit is less than 10 tons per year taking into considerationpractically and legally enforceable voluntary restrictions and federally enforceable requirements.

c. The requirements of this rule are less stringent than the requirements established under 40 CFR, Part 60, Subpart Kb.

d. This emissions unit is a Group 1 storage vessel as defined in 40 CFR 63.641. In accordance with 40 CFR 63.640(n)(1) and 63.640(h)(1), a Group 1 storagevessel that commences construction after July 14, 1994 and is part of an existingsource and is also subject to the requirements of 40 CFR, Part 60, Subpart Kb, isrequired to comply only with the requirements of 40 CFR, Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

e. The storage tank shall be equipped with an external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rest on the liquidsurface in a vessel with no fixed roof. Each external floating roof must meet thefollowing specifications:

i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof ledge. The

closuredevice is to consist of two seals, one above the other. The lower seal isreferred to as the primary seal, and the upper seal is referred to as thesecondary seal.

(a) The primary seal shall either be a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113(b)(4),the seal shall completely cover the annular space between theedge of the floating roof and tank wall.

(b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113(b)(4). [40 CFR 60.112b(2)(i)(A) and (B)]

f. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquidsurface. Except for automatic bleeder vents, rim space vents, roof drains, andleg sleeves, each opening in the roof is to be equipped with a gasketed cover,seal, or lid that is to be maintained in a closed position at all times (i.e., no visiblegap) except when the device is in actual use.

Automatic bleeder vents are to beclosed at all times when the roof is floating except when the roof is being floatedoff or is being landed on the roof leg supports. Rim vents are to be set to openwhen the roof is being floated off the roof leg supports or at the manufacturer'srecommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [40 CFR 60.112b(a)(2)(ii)]

g. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(2)(iii)]

h. The permittee shall comply with the applicable external floating roof storage vessel provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(i) and 63.640(n)(8)(ii)	Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb – Exemption for Seal Requirements and Alternative if Tank Roof is Unsafe

c) Operational Restrictions

(1) The permittee shall not exceed an annual material throughput rate of 975,384,510 gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. P0104853]

(2) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 11.1 pounds per square inch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. P0104853]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(2) The permittee shall maintain monthly records of the amount of material throughput for this emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104853]

(3) The permittee shall maintain records of the following information for at least two years:

a. The types of petroleum liquids stored in the tank;

b. The period of storage; and

c. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greaterthan 1.0 pound per square inch absolute. Available data onthe storage temperature may be used to determine the maximum true vaporpressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highestexpected calendar-month average of the storage temperature. Forvessels operated at ambient temperatures, the maximum true vaporpressure is calculated based upon the maximum local monthly averageambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expectedcalendar-month average temperature of the stored product maybe used to determine the maximum true vapor pressure fromnomographs contained in API Bulletin 2517 (incorporated byreference - see 40 CFR 60.17), unless the Administratorspecifically requests that the liquid be sampled, the

actual storagetemperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties thatpreclude determination by the recommended method is to bedetermined from available data and recorded if the estimatedmaximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts; or

(b) Determined by ASTM Method 2879-83 (incorporated by reference - see 40 CFR 60.17); or

(c) Measured by an appropriate method approved by the Administrator; or

(d) Calculated by an appropriate method approved by the Administrator.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(4) The permittee shall determine the gap areas and maximum gap widths, between theprimary seal and the wall of the storage vessel and between the secondary seal and thewall of the storage vessel according to the following frequency:

a. Measurements of gaps between the tank wall and the primary seal (seal gaps)shall be performed during the hydrostatic testing of the vessel or within 60 daysof the initial fill with volatile organic liquid (VOL) and at least once every 5 yearsthereafter.

b. Measurements of gaps between the tank wall and the secondary seal shall beperformed within 60 days of the initial fill with VOL and at least once per yearthereafter.

c. If any source ceases to store VOL for a period of 1 year or more, subsequentintroduction of VOL into the vessel shall be considered an initial fill.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(5) The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:

a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or

bindingagainst seal) between the seal and the wall of the storage vessel and measurethe circumferential distance of each such location.

c. The total surface area of each gap described in d)(5)b. above shall be determined using probes of various widths to measure accurately the actualdistance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(6) The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominaldiameter of the tank and compare each ratio to the respective standards in paragraph d)(7) of this section.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(7) The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the following requirements:

a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm2per meter of tankdiameter, and the width of any portion of any gap shall not exceed 3.81 cm.

i. One end of the mechanical shoe seal is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cmabove the stored liquid surface.

ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. The secondary seal is to meet the following requirements:

i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and tank wall exceptas provided in section d)(5)c.

ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm2 per meter of tank diameter and the widthof any portion of any gap shall not exceed 1.27 cm.

iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b(b) cannot be repaired within 45 days and if the vessel cannot beemptied within 45 days, a 30-day extension may be requested from theAdministrator in the inspection report required in 40 CFR 60.115b(b)(4). Suchextension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(8) The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If theexternal floating roof has defects, the primary seal has holes, tears, or other openings inthe seal or the seal fabric, or the secondary seal has holes, tears, or other openings inthe seal or the seal fabric, the permittee shall repair the items as necessary sothat none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(9) The permittee shall comply with the monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart CC, including the following section:

63.640(n)(8)(iii)	Extensions of Repair Deadline

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart CC]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104853]

(2) After installing the external floating roof, the permittee shall meet the following requirements:

a. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR60.112b(a)(2) and 40 CFR 60.113b(b)(2), (b)(3), and (b)(4). This report shall bean attachment to the notification required by 40 CFR 60.7(a)(3).

b. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), furnish the Administrator with a report that contains the following:

i. The date of measurement.

ii. The raw data obtained in the measurement.

iii. The calculations described in 40 CFR 60.113b(b)(2) and (b)(3).

c. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel inwhich the measurement was performed and shall contain the following:

i. The date of measurement.

ii. The raw data obtained in the measurement.

iii. The calculations described in 40 CFR 60.113b(b)(2) and (b)(3).

d. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to theAdministrator within 30 days of the inspection. The report will identify the vesseland contain the information specified in e)(2)b. and the date the vessel was emptied or the repairs made and date of repair.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(3) The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section d)(4) to afford the Administrator the opportunity to have an observer present.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(4) For all inspections required in section d)(8) the permittee shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford theAdministrator the opportunity to inspect the storage vessel prior to refilling. If theinspection is not planned and the permittee could not have known about theinspection 30 days in advance of refilling the tank, the permittee shall notify theAdministrator at least 7 days prior to the refilling of the storage vessel. Notification shallbe made by telephone immediately followed by written documentation demonstratingwhy the inspection was unplanned. Alternatively, the notification including the writtendocumentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(5) This emissions unit is subject to the applicable provisions of Subpart Kb of the New Source Performance Standards (NSPS) as promulgated by the U.S. EPA, 40 CFR, Part 60. The application and enforcement ofthese standards are delegated to the Ohio EPA. The requirements of 40 CFR, Part 60 are also federally enforceable.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0104853]

(6) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the correctiveactions taken to achieve compliance. If no deviations occurred during a calendar year,the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104853]

(7) If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with a true vapor pressure greater than 11.1 psia, thepermittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104853]

(8) The permittee shall comply with the reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

63.640(n)(8)(iv) through 63.640(n)(8)(vi)	Reporting for Extensions of Repair Deadline; Alternative Reporting for Tanks Subject to 40 CFR, Part 60, Subpart Kb; and Applicability and Overlap Provisions for 40 CFR, Part 60, Subpart Kb Reports of Rim Seal Measurements

f) Testing Requirements

(1) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

8.49 tons VOC/yr

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the most recent version of the U.S. EPA TANKS program.

[OAC rule 3745-77-07(C)(1) and PTI No. P0104853]

g) Miscellaneous Requirements

(1) None.

78. Emissions Unit Group –Decanted Oil Group 2Vessels: T268, T269, T270

EU ID	Operations, Property and/or Equipment Description
T268	above ground,fixed roof decanted oil storage tank No. 100123 with a capacity of 348,600 gallons(group 2 storage vessel)
T269	above ground,fixed roof decanted oil storage tank No. 100124with a capacity of 348,600 gallons(group 2 storage vessel)
T270	above ground,fixed roof decanted oil storage tank No. 100125with a capacity of 348,600 gallons(group 2 storage vessel)

Operations, Property and/or Equipment Description:

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicableemissions limitations and/or control measures. Emissions from each unit shall notexceed the listed limitations, and the listed control measures shall be specified innarrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0105198, issued 10/5/09)	5.28 tons volatile organic compounds (VOC)/yr [See b)(2)a.]
b.	OAC rule 3745-21-09(L)	Exempt [See b)(2)b. and c)(1)]
c.	OAC rule 3745-21-09(T)(4)(a)	See b)(2)c. and b)(2)d.
d.	40 CFR, Part 60, Subpart Kb	See b)(2)b.
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, these emissions units are affected sources consisting of storage vessels associated with petroleum refining process units, subject to the emissionlimitations/controlmeasures specified in this section.]	Storage Vessel Provisions - See d)(2) Equipment Leak Standards - See b)(2)d.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. PTI No. P0105198 takes into account the following voluntary restriction as proposed by the permittee for the purpose of establishing practically and legallyenforceable limitations representing the potential to emit for VOC for eachstorage tank:

i. the use of submerged fill;

ii. an operational restriction limiting the vapor pressure of the material stored [see c)(1)]; and

iii. an operational restriction limiting the annual material throughput [see c)(2)].

b. Each storage tank has a design capacity greater than 151 m3 (39,900 gallons) andstores a liquid with a volatile organic liquid (VOL) with a maximum true vaporpressure less than 0.51 pounds per square inch absolute (psia); thereforepursuant to 40 CFR 60.110b(b), Subpart Kb is not applicable.Additionally, the maximum true vapor pressure is less than 1.52 psia andtherefore each storage tank is exempt from the control and record keeping requirements of OAC rule 3745-21-09(L).

c. It should be noted that the requirements of OAC rule 3745-21-09(T)(4)(a) contained in the facility's alternative leak detection and repair (LDAR) program [see b)(2)d. below] has not been incorporated into Ohio's State Implementation Plan (SIP) as of the issuance date of PTI No. P0105198.

d. The permittee has an approved [as indicated in OAC rule 3745-21-09(T)(4)(a)] alternative leak detection and repair (LDAR) monitoring, recordkeeping and reporting program entitled "Premcor LimaRefinery, LDAR Plan" dated November 19, 2002. The permittee's alternative LDAR monitoring planincludes regulations in 40 CFR, Part 60, Subparts VV and GGG; 40 CFR, Part 61, Subpart V; and 40CFR, Part 63, Subpart CC.

Any components associated with the emission units contained in PTI No. P0105198 that are applicable to state and federal LDAR requirements shall be included in the alternative LDAR monitoring, recordkeeping and reporting program.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in a fixed roof storage tank any petroleum liquid that, as stored, has a true vapor pressure greater than 0.51 pounds per squareinch absolute (psia).

[OAC rule 3745-77-07(A)(1) and PTI No. P0105198]

(2) The maximum annual material throughput for a single storage tank shall not exceed 166,440,000 gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. P0105198]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for each storage tank:

a. The volatile organic liquid (VOL) stored;

b. The maximum true vapor pressure, in psia of VOL stored;

c. The VOL throughput, in gallons per month;

d. The calculated VOC emissions, in tons per month (VOC emissions shall be calculated using the most recent version of the U.S. EPA TANKS program);

e. The annual VOC emissions, in tons per year [summation of d)(1)d. for each month, to date, for the calendar year]; and

f. The annual VOL throughput, in gallons per year [summation of d)(1)c. for each month, to date, for the calendar year].

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

(2) Each storage tank is a Group 2 storage vessel as defined in 40 CFR Part 63.641. Each permittee subject to the storage vessel provisions in 40 CFR Part 63.646 shall comply with the following record keeping requirements of 40 CFR 63.123:

a. readily accessible records showing the dimensions of the storage vessel; and

b. an analysis showing the capacity of the storage vessel.

The above records shall be kept as long as each storage vessel retains Group 2 status and is in operation.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. P0105198]

e) Reporting Requirements

(1) If the permittee places, stores, or holds, in a fixed roof storage tank, any petroleum liquid with a true vapor pressure that is greater than 0.51 psia, thepermittee shall notify the Director (the Ohio EPA, Northwest District Office) within 30 days of becoming aware of the occurrence. The date that suchpetroleum liquid was first stored in the tank, the date removed (if removed), the totalgallons throughput of each petroleum liquid exceeding this vapor pressure, and theproposed method of compliance shall be included in the report.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

(2) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the

correctiveactions taken to achieve compliance. If no deviations occurred during a calendar year,the permittee shall submit an annual report which states that no deviations occurredduring that year. These reports shall be submitted electronically through Ohio EPA Air Services by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5.28 tons VOC/yr

Applicable Compliance Method:

Compliance shall be determined by the monitoring and recordkeeping in d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0105198]

g) Miscellaneous Requirements

(1) None.

79. T271, Tank 100128

Operations, Property and/or Equipment Description:

above ground, internal floating roof sour water storage tank No. 100128 with a capacity of 1,445,300 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0107991, modification issued 4/19/11)	5.85 tons of volatile organic compounds (VOC)/yr [see b)(2)a.]
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii) as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-21-09(L)	See b)(2)d. through b)(2)f., d)(6), and e)(5) through e)(6)
d.	<u>40 CFR, Part 60, Subpart Kb</u> 40 CFR Part 60.112b 40 CFR Part 60.113b 40 CFR Part 60.115b 40 CFR Part 60.116b	 See b)(2)c. See d)(4) and e)(3) See d)(5) and e)(2) See d)(1), d)(3), and d)(7)
e.	40 CFR, Part 63, Subpart CC	<u>Storage Tank Provisions</u> See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP).

Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year taking into consideration practically and legally enforceable voluntary restrictions and federally enforceable requirements.

The potential to emit for this emissions unit is 5.85 tons of VOC/year and is based on a maximum annual throughput of 527,534,500 gallons of foul condensate, U.S EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

c. The fixed roof storage tank shall be equipped with an internal floating roof meeting the following specifications:

i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as readily as possible.

ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted but both must be continuous.

(c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or

weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports

vi. Rim space vents shall be equipped with a gasket and are set to be open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or gasketed sliding cover.

ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(i) – (ix)]

d. The automatic bleeder vents are to be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's setting. [OAC rule 3745-21-09(L)(b)]

e. All openings, except stub drains, are to be equipped with a cover, seal, or lid which is to be in a closed position at all times when in actual use for tank gauging or sampling. [OAC rule 3745-21-09(L)(c)]

f. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC and 40 CFR, Part 60, Subpart Kb.

g. This emissions unit is a Group 1 storage vessel as defined in 40 CFR, Part 63.641. After the compliance date specified in paragraph (h) of 40 CFR, Part 63.640, a Group 1 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

h. Each permittee of a Group 1 storage vessel subject to 40 CFR, Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 40 CFR 63.121 except as in provided in paragraphs (b) through (l) of 40 CFR 63.646. [40 CFR 63.646(a)]

c) Operational Restrictions

(1) The maximum throughput for this tank shall not exceed 527,534,500 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107991]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [40 CFR 60.116b(b)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(2) The permittee shall maintain monthly records of the amount of material throughput for this emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(3) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank;

b. The period of storage; and

c. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be determined by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API bulletin 2517 (incorporated by reference – see 40 CFR 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts; or

(b) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference – see 40 CFR 60.17); or

(c) Measured by an appropriate method approved by the Administrator; or

(d) Calculated by an appropriate method approved by the Administrator. [40 CFR 60.116b(c) and (e)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(4) After installing the internal floating roof, the permittee shall:

a. The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel. [40 CFR 60.113b(a)(1)]

b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (in one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be

requested from the Administrator in the inspection report required in e)(2)b. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2)]

c. For vessels equipped with a double-seal system as specified in b)(2)c.ii.(b):

i. Visually inspect the vessel as specified in d)(4)d. at least every 5 years; or

ii. Visually inspect the vessel as specified in d)(4)b. [40 CFR 60.113b(a)3)]

d. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(4)b. and d)(4)c.ii. and at intervals no greater than 5 years in the case of vessels specified in d)(4)c.i. [40 CFR 60.113b(a)(4)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(5) After installing the internal floating roof, the permittee shall keep a record of each inspection performed as required by d)(4)a. through d)(4)d. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(6) The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(7) The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in d)(3)c.

b. For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference – see 40 CFR 60.17); or

ii. ASTM Method D323-83 (incorporated by reference – see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator. [40 CFR 60.116b(f)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(2) After installing the internal floating roof, the permittee shall meet the following requirements:

a. Submit a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)c. and d)(4)a. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3). [40 CFR 60.115b(a)(1)]

b. If any of the conditions described in d)(4)b. are detected during the annual visual inspection required by d)(4)b., a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. [40 CFR 60.115b(a)(3)]

c. After each inspection required by d)(4)c. that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)c.ii., a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)c. and d)(4)c. and list each repair made. [40 CFR 60.115b(a)(4)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(3) The permittee shall provide written notification at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(4)a. and d)(4)d. If the inspection required by d)(4)d. is not planned and the permittee could not have known about the inspection 30 days in advance of filling the tank, the permittee shall

notify the Northwest District Office at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Northwest District Office at least 7 days prior to refilling. [40 CFR 60.113b(a)(5)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(4) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the recordkeeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR, Part 61, Subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and recordkeeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average. Recordkeeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs (f)(5) and (g)(8) of 40 CFR 63.654. [40 CFR 63.655(a)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. P0107991]

(5) The permittee shall notify the Northwest District Office within 30 days of the occurrence of any period in time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(6) If the permittee places, stores, or holds in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of OAC rule 3745-21-09(L)(1), the permittee shall so notify the director within 30 days of becoming aware of the occurrence. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined to be in accordance with the following method:

a. <u>Emission Limitation:</u>

5.85 tons of VOC/yr

<u>Applicable Compliance Method:</u>

Compliance with the annual VOC limit is based on a maximum annual throughput of 527,534,500 gallons of foul condensate, U.S. EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

g) Miscellaneous Requirements

(1) None

80. T272, Tank 100129

Operations, Property and/or Equipment Description:

above ground, internal floating roof sour water storage tank No. 100129 with a capacity of 1,445,300 gallons (group 1 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI No. P0107991, issued 4/19/11)	5.85 tons of volatile organic compounds (VOC)/yr [see b)(2)a.]
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii) as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-21-09(L)	See b)(2)d. through b)(2)f., d)(6), and e)(5) through e)(6)
d.	<u>40 CFR, Part 60, Subpart Kb</u> 40 CFR Part 60.112b 40 CFR Part 60.113b 40 CFR Part 60.115b 40 CFR Part 60.116b	 See b)(2)c. See d)(4) and e)(3) See d)(5) and e)(2) See d)(1), d)(3), and d)(7)
e.	40 CFR, Part 63, Subpart CC	<u>Storage Tank Provisions</u> See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP).

Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the

federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year taking into consideration practically and legally enforceable voluntary restrictions and federally enforceable requirements.

The potential to emit for this emissions unit is 5.85 tons of VOC/year and is based on a maximum annual throughput of 527,534,500 gallons of foul condensate, U.S. EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

c. The fixed roof storage tank shall be equipped with an internal floating roof meeting the following specifications:

i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as readily as possible.

ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted but both must be continuous.

(c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A

flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports

vi. Rim space vents shall be equipped with a gasket and are set to be open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or gasketed sliding cover.

ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(i) – (ix)]

d. The automatic bleeder vents are to be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's setting. [OAC rule 3745-21-09(L)(b)]

e. All openings, except stub drains, are to be equipped with a cover, seal, or lid which is to be in a closed position at all times when in actual use for tank gauging or sampling. [OAC rule 3745-21-09(L)(c)]

f. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC and 40 CFR, Part 60, Subpart Kb.

g. This emissions unit is a Group 1 storage vessel as defined in 40 CFR, Part 63.641. After the compliance date specified in paragraph (h) of 40 CFR, Part

63.640, a Group 1 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only with the requirements of 40 CFR, Part 60, Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

h. Each permittee of a Group 1 storage vessel subject to 40 CFR, Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 40 CFR 63.121 except as in provided in paragraphs (b) through (l) of 40 CFR 63.646. [40 CFR 63.646(a)]

c) Operational Restrictions

(1) The maximum throughput for this tank shall not exceed 527,534,500 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI No. P0107991]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [40 CFR 60.116b(b)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(2) The permittee shall maintain monthly records of the amount of material throughput for this emissions unit, in gallons per month and total gallons, to date, for the calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(3) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank;

b. The period of storage; and

c. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be determined by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API bulletin 2517 (incorporated by reference – see 40 CFR 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts; or

(b) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference – see 40 CFR 60.17); or

(c) Measured by an appropriate method approved by the Administrator; or

(d) Calculated by an appropriate method approved by the Administrator. [40 CFR 60.116b(c) and (e)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(4) After installing the internal floating roof, the permittee shall:

a. The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel. [40 CFR 60.113b(a)(1)]

b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (in one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be

requested from the Administrator in the inspection report required in e)(2)b. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2)]

c. For vessels equipped with a double-seal system as specified in b)(2)c.ii.(b):

i. Visually inspect the vessel as specified in d)(4)d. at least every 5 years; or

ii. Visually inspect the vessel as specified in d)(4)b. [40 CFR 60.113b(a)3)]

d. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(4)b. and d)(4)c.ii. and at intervals no greater than 5 years in the case of vessels specified in d)(4)c.i. [40 CFR 60.113b(a)(4)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(5) After installing the internal floating roof, the permittee shall keep a record of each inspection performed as required by d)(4)a. through d)(4)d. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(6) The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(7) The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in d)(3)c.

b. For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference – see 40 CFR 60.17); or

ii. ASTM Method D323-83 (incorporated by reference – see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator. [40 CFR 60.116b(f)

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(2) After installing the internal floating roof, the permittee shall meet the following requirements:

a. Submit a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)c. and d)(4)a. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3). [40 CFR 60.115b(a)(1)]

b. If any of the conditions described in d)(4)b. are detected during the annual visual inspection required by d)(4)b., a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. [40 CFR 60.115b(a)(3)]

c. After each inspection required by d)(4)c. that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)c.ii., a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)c. and d)(4)c. and list each repair made. [40 CFR 60.115b(a)(4)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(3) The permittee shall provide written notification at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(4)a. and d)(4)d. If the inspection required by d)(4)d. is not planned and the permittee could not have known about the inspection 30 days in advance of filling the tank, the permittee shall

notify the Northwest District Office at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Northwest District Office at least 7 days prior to refilling. [40 CFR 60.113b(a)(5)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart Kb and PTI No. P0107991]

(4) Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the recordkeeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR, Part 61, Subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and recordkeeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average. Recordkeeping and reporting for emissions averages are specified in 40 CFR 63.653 and in paragraphs (f)(5) and (g)(8) of 40 CFR 63.654. [40 CFR 63.655(a)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart CC and PTI No. P0107991]

(5) The permittee shall notify the Northwest District Office within 30 days of the occurrence of any period in time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

(6) If the permittee places, stores, or holds in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of OAC rule 3745-21-09(L)(1), the permittee shall so notify the director within 30 days of becoming aware of the occurrence. [OAC rule 3745-21-09(L)]

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined to be in accordance with the following method:

a. <u>Emission Limitation:</u>

5.85 tons of VOC/yr

<u>Applicable Compliance Method:</u>

Compliance with the annual VOC limit is based on a maximum annual throughput of 527,534,500 gallons of foul condensate, U.S. EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

[OAC rule 3745-77-07(C)(1) and PTI No. P0107991]

g) Miscellaneous Requirements

(1) None

81. T273, Tank 100120

Operations, Property and/or Equipment Description:

Above ground, vertical fixed roof amine storage tank No. 100120 with a capacity of 25,381 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3475-31-05(A)(3), as effective 11/30/01 (PTI No. 0106332, issued 5/12/10)	3.03 tons volatile organic compounds (VOC)/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-21-09(L)	See b)(2)d.
d.	40 CFR, Part 60, Subpart Kb	See b)(2)e.
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656]	See b)(2)f.
f.	40 CFR 63.1 through 63.15 [40 CFR 63.642]	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements for this emission unit have been determined to be the use of submerged fill and compliance with the requirements of 40 CFR, Part 63, Subpart CC.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265

changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year.

However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than 10 tons/yr.

The potential to emit for VOC emissions for this emissions unit is 3.03 tons per year and was determined by the use of the TANKS 4.09 program and a maximum throughput of 10,035,263gallons per year.

d. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

e. Pursuant to 40 CFR 60.110b(b), this rule is not applicable to this emission unit because it has a capacity of greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum vapor pressure less than 15.0 kPa.

f. This emissions unit is a Group 2 storage vessel which is not subject to control, monitoring, record keeping, or reporting requirements under 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not exceed a maximum annual material throughput rate of 10,035,263gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. P0106332]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount (in gallons per month and total gallons, to date for the calendar year) of material throughput for this emission unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. exceedances of the maximum annual material throughput rate of 10,035,263gallons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

3.03 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance through calculations of tank working and breathing losses as determined by U.S. EPA TANKS 4.09 program and records of actual material throughput as required in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

g) Miscellaneous Requirements

(1) None.

82. T274, Tank 100121

Operations, Property and/or Equipment Description:

Above ground, vertical fixed roof amine storage tank No. 100121 with a capacity of 36,097 gallons (group 2 storage vessel)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3475-31-05(A)(3), as effective 11/30/01 (PTI No. 0106332, issued 5/12/10)	3.98 tons volatile organic compounds (VOC)/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-21-09(L)	See b)(2)d.
d.	40 CFR, Part 60, Subpart Kb	See b)(2)e.
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656]	See b)(2)f.
f.	40 CFR 63.1 through 63.15 [40 CFR 63.642]	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements for this emission unit have been determined to be the use of submerged fill and compliance with the requirements of 40 CFR, Part 63, Subpart CC.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265

changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year.

However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than 10 tons/yr.

The potential to emit for VOC emissions for this emissions unit is 3.98 tons per year and was determined by the use of the TANKS 4.09 program and a maximum throughput of 13,175,405 gallons per year.

d. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

e. Pursuant to 40 CFR 60.110b(b), this rule is not applicable to this emission unit because it has a capacity of greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum vapor pressure less than 15.0 kPa.

f. This emissions unit is a Group 2 storage vessel which is not subject to control, monitoring, record keeping, or reporting requirements under 40 CFR, Part 63, Subpart CC.

c) Operational Restrictions

(1) The permittee shall not exceed a maximum annual material throughput rate of 13,175,405gallons.

[OAC rule 3745-77-07(A)(1) and PTI No. P0106332]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount (in gallons per month and total gallons, to date for the calendar year) of material throughput for this emission unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. exceedances of the maximum annual material throughput rate of 13,175,405gallons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

3.98 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance through calculations of tank working and breathing losses as determined by U.S. EPA TANKS 4.09 program and records of actual material throughput as required in section d)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0106332]

g) Miscellaneous Requirements

(1) None.

83. T280, VAC Bottoms Tank

Operations, Property and/or Equipment Description:

4,060,929 Gallon Fixed Roof Vacuum Bottoms Storage Tank (storing organic liquid with a vapor pressure less than 0.754 psia)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T) (PTI No. P0109927, issued 6/1/12)	39.1 tons of volatile organic compounds (VOC)/rolling 12-month period See b)(2)a.
b.	OAC rule 3745-21-09(L)	See b)(2)b., c)(1), d)(6), and e)(2)
c.	<u>40 CFR, Part 60, Subpart Kb:</u> 40 CFR, Part 60.116b(a) – (d)	 See b)(2)c. See d)(2) through d)(5)
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 63, Subpart CC [40 CFR 63.640 – 63.656] [In accordance with 40 CFR 63.640, this emissions unit is an affected source consisting of a storage vessel associated with petroleum refining process units, subject to the emission limitations/control measures specified in this section.]	See b)(2)d.
f.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirement for this emissions unit has been determined to be an emission limitation of 39.1 tons of VOC per rolling 12-month period.

b. The requirements of OAC rule 3745-21-09(L) are equivalent to or less stringent than the requirements of 40 CFR, Part 63, Subpart CC and 40 CFR, Part 60, Subpart Kb.

c. This emissions unit is exempt from the control requirements specified in 40 CFR, Part 60, Subpart Kb because the maximum true vapor pressure of the stored organic liquid is less than 5.2 kPa (0.754 psia).

d. This emissions unit is a Group 2 storage vessel as defined in 40 CFR, Part 63.641. After the compliance date specified in paragraph (h) of 40 CFR, Part 63.640, a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR, Part 60, Subpart Kb is required to comply only with the requirements of 40 CFR, Part 60 Subpart Kb, except as provided in paragraph (n)(8) of 40 CFR 63.640. [40 CFR 63.640(n)(1)]

c) Operational Restrictions

(1) No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute unless such tank is designed or equipped in accordance with OAC rule 3745-21-09(L)(1)(a) – (d).

[OAC rule 3745-77-07(A)(1) and PTI No. P0109927]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records each month for this emissions unit:

a. the amount of material throughput, in gallons per month;

b. the VOC emissions, in tons per month, as calculated using U.S EPA's TANKS version 4.09D, and landing losses calculated in accordance with AP-42 Section 7.1.3.2.2 (11/06).

c. the rolling 12-month emissions of VOC, in tons [summation of d)(1)b.].

[OAC rule 3745-77-07(A)(1) and PTI No. P0109927]

(2) The permittee shall keep copies of all records required under 40 CFR 60.116b for at least 2 years.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(a) and PTI No.P0109927]

(3) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(b) and PTI No. P0109927]

(4) The permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(c) and PTI No. P0109927]

(5) The permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Northwest District Office within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure for each volume range.

[OAC rule 3745-77-07(C)(1), 40 CFR 60.116b(d) and PTI No. P0109927]

(6) The permittee shall maintain records of the following information in a readily accessible location for at least 5 years and shall make copies of the records available to the Northwest District Office upon verbal or written request:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109927]

e) Reporting Requirements

(1) The permittee shall submit annual reports that summarize the total annual material throughput, in gallons, for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109927]

(2) If the permittee places, stores, or holds in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of OAC rule 3745-21-09(L)(1), the permittee shall so notify the director within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI No. P0109927

f) Testing Requirements

(1) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined to be in accordance with the following method:

a. Emission Limitation

39.1 tons of VOC/rolling 12-month period

Applicable Compliance Method

Compliance with the rolling 12-month VOC limitation is based on a record keeping requirements specified in condition d)(1).

g) Miscellaneous Requirements

(1) None.