



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

JUN 28 2005

(AE-17J)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Timothy Murphy, Plant Manager
The Premcor Refining Group
Lima Refinery
1150 South Metcalf Street
Lima, Ohio 45804-1199

Re: Notice of Violation/
Finding of Violation
The Premcor Refining
Group
Lima, Ohio

Dear Mr. Murphy:

The United States Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) and Finding of Violation (FOV) to The Premcor Refining Group ("Premcor" or "you") under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). We find that you are violating the New Source Performance Standards (NSPS), the National Emission Standards for Hazardous Air Pollutants (NESHAPs), the National Emission Standards for Organic Hazardous Air Pollutants (MACT) and the Ohio State Implementation Plan at your Lima, Ohio facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action. The options we select may depend on, among other things, the length of time you take to achieve and demonstrate continuous compliance with the rules cited in the NOV/FOV.

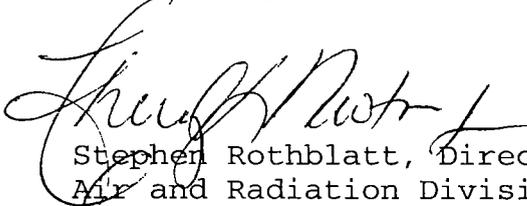
We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures

and commitments. .You may have an attorney represent you at this conference.

The EPA contact in this matter is Katherine Keith. You may call her at (312) 353-6956 to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely yours,



Stephen Rothblatt, Director
Air and Radiation Division

Enclosure

cc: Bob Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
122 South Front Street
Columbus, Ohio 43215

Don Waltermeyer, APC Supervisor
Northwest District Office
Ohio Environmental Protection Agency
347 North Dunbridge Road
Bowling Green, Ohio

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:)
)
The Premcor Refining Group) **NOTICE OF VIOLATION AND**
Lima, Ohio) **FINDING OF VIOLATION**
)
Proceedings Pursuant to) **EPA-5-05-OH-16**
Section 113(a)(1) of the)
Clean Air Act, 42 U.S.C.)
§ 7413(a)(1))
_____)

NOTICE AND FINDING OF VIOLATION

The United States Environmental Protection Agency (U.S. EPA) is issuing this Notice and Finding of Violation under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). U.S. EPA finds that The Premcor Refining Group (Premcor) is violating the New Source Performance Standards (NSPS), the National Emission Standards for Hazardous Air Pollutants (NESHAPs), National Emission Standards for Organic Hazardous Air Pollutants (MACT standards) and the Ohio State Implementation Plan (SIP), as follows:

Statutory and Regulatory Background¹

NSPS

1. Section 111(e) of the Act, 42 U.S.C. § 7411(e), provides that after the effective date of a standard of performance promulgated under this section, it is unlawful for any owner or operator of any new source to operate such source in violation of that standard.

NSPS Subpart Kb-Storage Vessels

2. On April 8, 1987, U.S. EPA promulgated the NSPS for Volatile Organic Liquid Storage Vessels for Which Construction,

¹Although the Clean Air Act does not require U.S. EPA to issue a FOV for purposed of alleging violations of Title V requirements, NSPS, NESHAP or MACT standards, U.S. EPA wants to ensure that the source is comprehensively notified of all significant Clean Air Act violations known to U.S. EPA at this time.

Reconstruction or Modification Commenced After July 23, 1984 (NSPS Subpart Kb). 52 FR 11429.

3. NSPS Subpart Kb applies to each storage vessel with a capacity of greater than or equal to 40 cubic meters that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification is commenced after July 23, 1984.
4. 40 C.F.R. § 60.112b(a) requires the owner or operator of each storage vessel that meets the design requirements of this paragraph, equip the storage vessel with one of the following: 1) a fixed roof with an internal floating roof that meets the specifications of 40 C.F.R. § 60.112b(a)(1); 2) an external floating roof meeting the specifications of 40 C.F.R. § 60.112b(a)(2); or 3) a closed vent system and control device meeting the specifications of 40 C.F.R. § 60.112b(a)(3).
5. For storage vessels that are complying with NSPS Subpart Kb through installation of an internal floating roof, 40 C.F.R. § 60.113b(a)(2) sets forth requirements for regular inspections of the roof and its seals. The internal floating roof and the primary seal or secondary seal must be inspected at least every 12 months. If the internal floating roof is not resting on the liquid, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, repairs must be made or the storage vessel removed from service within 45 days. A 30-day extension can be requested in the inspection report required under 40 C.F.R. § 60.115b(a)(3).
6. For storage vessels that are complying with NSPS Subpart Kb through installation of an external floating roof, 40 C.F.R. § 60.113b(b)(1) sets forth the frequency for determining gap areas and maximum gap widths between each of the seals and the wall of the storage vessel.
7. 40 C.F.R. § 60.113b(b)(1)(ii) requires that gaps on the secondary seal of an external floating roof be measured at least once every year. The procedures for determining the gap measurements are found at 40 C.F.R. § 60.113b(b)(2) and (3).
8. 40 C.F.R. § 60.113b(b)(4)(ii)(C) requires that for external floating roofs, repairs be made or the storage vessel emptied within 45 days if there are holes, tears, or other openings in the seal or seal fabric of the secondary seal.

NSPS Subpart VV-Equipment Leaks

9. On October 18, 1983, U.S. EPA promulgated the NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (NSPS Subpart VV). 48 FR 48335.
10. Under NSPS Subpart VV, the standards for pumps in light liquid service are found at 40 C.F.R. § 60.482-2.
11. 40 C.F.R. § 60.482-2(a)(1) requires that each pump in light liquid service be monitored monthly to detect leaks in accordance with 40 C.F.R. Part 60, Appendix A-7, Method 21 (Method 21).
12. The regulation at 40 C.F.R. § 60.482-2(c)(1) requires that when a leak is detected at a pump in light liquid service, it shall be repaired within 15 days unless it qualifies for delay of repair under 40 C.F.R. § 60.482-9.
13. 40 C.F.R. § 60.482-9(a) states that delay of repair of equipment found leaking is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
14. Under NSPS Subpart VV, the standards for valves in gas/vapor and light liquid service are found at 40 C.F.R. § 60.482-7.
15. 40 C.F.R. § 60.482-7(a) requires that each valve in gaseous/vapor or light liquid service be monitored monthly to detect leaks in accordance with EPA Method 21. 40 C.F.R. § 60.482-7(b) states that an instrument reading of 10,000 ppm or greater is considered a leak.
16. 40 C.F.R. § 60.482-7(d)(1) requires that when a leak is detected, it shall be repaired within 15 days, unless the component qualifies for delay of repair as provided for in 40 C.F.R. § 60.482-9.
17. The regulation at 40 C.F.R. § 60.482-6(a)(1) requires that all open-ended valves or lines be equipped with a cap, blind flange, plug, or a second valve.

Benzene Waste NESHAP

18. Pursuant to Section 112(d) of the Clean Air Act, on March 7, 1990, U.S. EPA promulgated the National Emission Standard for Benzene Waste Operations (Benzene Waste NESHAP). 55 FR

8292 (March 7, 1990). These regulations are codified at 40 C.F.R. Part 61, Subpart FF, §§ 61.340 - 61.359. On March 5, 1992, U.S. EPA issued a stay of effectiveness of Subpart FF and proposed clarifying amendments (57 FR 8012). On January 7, 1993, U.S. EPA promulgated the clarifying amendments to Subpart FF and affected facilities were given 90 days to come into compliance with the regulations (58 FR 3072).

19. The regulation at 40 C.F.R. § 61.05(c) prohibits any owner or operator from operating an existing source in violation of an applicable NESHAP 90 days after the effective date of the standard, unless a waiver was granted by the Administrator pursuant to § 61.11, or unless an exemption was granted by the President under Section 112(c)(2) of the CAA.
20. According to 40 C.F.R. § 61.340(a), the Benzene Waste NESHAP applies to owners and operators of, among other sources, petroleum refineries.
21. Facilities that are subject to the Benzene Waste NESHAP and have a total annual benzene quantity greater than or equal to 10 Mg/yr, as determined by the procedures outlined in 40 C.F.R. § 61.342(a), shall manage and treat facility waste in accordance with 40 C.F.R. § 61.342(c), (d), or (e).
22. Facilities that chose to comply with the compliance option at 40 C.F.R. § 61.342(e) (6 Mg option), are required to: 1) manage and treat all facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of 40 C.F.R. § 61.342(c)(1); and 2) manage and treat all facility waste with a flow-weighted annual average water content greater than or equal to 10 percent, and all wastes that are mixed with water or other wastes where the mixture has a flow-weighted annual average water content greater than or equal to 10 percent, such that the benzene quantity, as determined by the procedures in 40 C.F.R. § 61.355(k) is less than or equal to 6 Mg/yr.
23. 40 C.F.R. § 61.342(c)(1)(ii) requires that facilities comply with the standards specified in 40 C.F.R. §§ 61.343 through 61.347 for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream.

24. 40 C.F.R. § 61.349(a) sets forth the requirements for the design, installation, operation and maintenance of each closed-vent system and control device installed to comply with the standards at 40 C.F.R. §§ 61.343 through 61.347.
25. 40 C.F.R. § 61.349(a)(1)(i) requires that each closed vent system be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background. This determination must be made initially and then annually thereafter.
26. 40 C.F.R. § 61.349(g) requires that if detectable emissions are measured on a closed vent system or control device, a first attempt at repair must be made within 5 days and the repair shall be completed within 15 days.

Refinery MACT

27. In accordance with Section 112(d) of the Clean Air Act, on March 16, 1994, U.S. EPA promulgated the General Provisions for the Part 63 NESHAP standards. 40 C.F.R. Part 63, Subpart A, §§ 63.1 - 63.15.
28. In accordance with Section 112(d) of the Clean Air Act, on August 18, 1995, U.S. EPA promulgated the National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries (Refinery MACT) at 40 C.F.R. §§ 63.640 - 63.654. 60 FR 43244. These standards were first proposed on July 15, 1994. 59 FR 36130.
29. 40 C.F.R. § 63.2 defines "existing source" as one that is not new. "New source" is defined as any affected source, the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard.
30. The requirements of the Refinery MACT apply to petroleum refining process units and related emission points located at petroleum refineries that are major sources under Section 112(a) of the Clean Air Act, and emit or have equipment containing or contacting one or more of the hazardous air pollutants (HAP) listed in Table 1 of the Refinery MACT. This includes, but is not limited to, all storage vessels associated with petroleum refining process units, wastewater streams and treatment operations associated with petroleum refining process units, and all equipment leaks from

petroleum refining process units. 40 C.F.R. § 63.640(a), (c)(2), (c)(3) and (c)(4).

Refinery MACT-Storage Vessels

31. The regulations at 40 C.F.R. § 63.646 contain the storage vessel provisions under the Refinery MACT.
32. A "group 1 storage vessel" is defined for existing sources as a storage vessel that has a design capacity greater than or equal to 177 cubic meters, a stored-liquid maximum true vapor pressure greater than or equal to 10.4 kilopascals, a stored-liquid annual average true vapor pressure greater than or equal to 8.3 kilopascals, and annual average HAP liquid concentration greater than 4 percent by weight total organic HAP. 40 C.F.R. § 63.641.
33. 40 C.F.R. § 63.640(h)(4) requires that existing Group 1 floating roof storage vessels be in compliance with the storage vessel requirements at 40 C.F.R. § 63.646 at the first degassing and cleaning activity after August 18, 1998, or within 10 years after promulgation of the rule, whichever is first.
34. 40 C.F.R. § 63.646(a) states that each owner or operator of a Group 1 storage vessel subject to the Refinery MACT shall comply with the requirements of 40 C.F.R. §§ 63.119 through 63.121.
35. 40 C.F.R. § 63.119(a)(1) states that for each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic HAP in the liquid is less than 76.6 kilopascals, the owner or operator shall operate and maintain one of the following on the storage vessel: 1) a fixed roof and internal floating roof, 2) an external floating roof, 3) an external floating roof converted to an internal floating roof, 4) a closed vent system and control device, or 5) shall route the emissions to a process or a fuel gas system. The requirements for each of these options are set forth in 40 C.F.R. § 63.119(b), (c), (d), (e), and (f), respectively.
36. According to 40 C.F.R. § 63.119(b), an owner or operator that elects to comply with the storage vessel provisions by utilizing a fixed roof and an internal floating roof, must comply with the requirements of 40 C.F.R. § 63.119(b)(1) through (b)(6).

37. 40 C.F.R. § 63.119(b)(3) requires that each internal floating roof be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device shall be one of the following: 1) liquid-mounted seal (40 C.F.R. § 63.119(b)(3)(i)), 2) metallic shoe seal (40 C.F.R. § 63.119(b)(3)(ii)), or 3) two seals mounted one above the other so that each forms a continuous closure between the wall of the vessel and the roof (40 C.F.R. § 63.119(b)(3)(iii)).
38. 40 C.F.R. § 63.120(a) sets forth the requirements for demonstrating compliance for tanks equipped with an internal floating roof.
39. 40 C.F.R. § 63.120(a)(1) sets forth the schedule for inspections of the internal floating roof and its seal(s) depending on the type of seal used.
40. 40 C.F.R. § 63.120(a)(4) requires that if, during the inspections required under 40 C.F.R. § 63.120(a)(2), it is found that there is liquid floating on the roof, the seal is detached, or there are holes or tears in the seal fabric or if there are visible gaps between the seal and the wall of the storage vessel, repairs must be made within 45 calendar days. Extensions of this timeframe are available.
41. According to 40 C.F.R. § 63.119(c), an owner or operator that elects to comply with the storage vessel provisions by utilizing an external floating roof, must comply with the requirements of 40 C.F.R. § 63.119(c)(1) through (c)(4).
42. 40 C.F.R. § 63.119(c)(1) requires that each external floating roof be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of a primary and secondary seal (see 40 C.F.R. § 63.119(c)(1)(i)). The primary seal shall be either a metallic shoe seal or a liquid-mounted seal (40 C.F.R. § 63.119(c)(i)(ii)). Except during inspections, the primary seal and secondary seal are required to completely cover the annular space between the roof and the wall of the storage vessel (40 C.F.R. § 63.119(c)(1)(iii)).
43. 40 C.F.R. § 63.120(b) sets forth the requirements for demonstrating compliance at storage vessels equipped with external floating roofs.

44. 40 C.F.R. § 63.120(b)(1) states that the owner or operator shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in 40 C.F.R. § 63.120(b)(1)(i) through (iii).
45. 40 C.F.R. § 63.120(b)(1)(iii) requires that for storage vessels equipped with external floating roofs with primary and secondary seals, seal gap measurements between the vessel wall and the secondary seal shall take place annually. Seal gap measurements are to be made in accordance with the procedures set forth at 40 C.F.R. § 63.120(b)(2).
46. The regulation at 40 C.F.R. § 63.120(b)(4) requires that the accumulated area of gaps in the secondary seal of the external floating roof not exceed 21.2 cm²/m (1 in²/ft), and the width of any portion of any gap not exceed 1.27 cm (0.5 in).
47. 40 C.F.R. § 63.120(b)(5)(ii) requires that there be no holes, tears or other openings in the shoe, seal fabric, or seal envelope of the primary seal of the external floating roof. 40 C.F.R. § 63.120(b)(6)(ii) requires that there be no holes, tears or other openings in the seal or seal fabric of the secondary seal of the external floating roof.
48. The regulation at 40 C.F.R. § 63.120(b)(8) requires that if conditions are found that do not meet the requirements of 40 C.F.R. § 63.120(b)(3), (4), (5), or (6), repairs must be made to the seals within 45 days. If repairs cannot be made within 45 days and if the vessel cannot be emptied within 45 days, facilities may request up to two 30 day extensions.

Refinery MACT-Wastewater

49. The regulations at 40 C.F.R. § 63.647 contain the wastewater provisions under the Refinery MACT.
50. 40 C.F.R. § 63.641 defines "Group 1 wastewater stream" as a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 Mg/yr or greater, as calculated in accordance with the Benzene Waste NESHAP, that has a flow rate of 0.02 liters per minute or greater, a benzene concentration of 10 parts per million or greater, and is not

exempt from control requirements under the Benzene Waste NESHAP.

51. The regulations at 40 C.F.R. § 63.647(a) require that the owner or operator of a Group 1 wastewater stream comply with the requirements of the Benzene Waste NESHAP for each process wastewater stream that meets the definition in the Refinery MACT.
52. 40 C.F.R. § 63.647(c) states that operation of a process, treatment unit or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Also, failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in the Benzene Waste NESHAP shall constitute a violation of the standard.

Refinery MACT-Equipment Leak Standards

53. The regulations at 40 C.F.R. § 63.648 contain the equipment leak standards for the Refinery MACT.
54. 40 C.F.R. § 63.648(a) requires that an owner or operator of an existing source subject to the Refinery MACT comply with the provisions of 40 C.F.R. Part 60, Subpart VV (NSPS Subpart VV). For purposes of complying with the MACT, NSPS Subpart VV only applies to equipment in HAP service, and calculations of percentage leaking components may be done on a process unit or sourcewide basis.

Ohio SIP-Leaks From Petroleum Refinery Equipment

55. On March 23, 1995, U.S. EPA approved OAC 3745-21-09(T) and OAC 3745-21-09(DD) as part of the federally enforceable SIP for Ohio. 60 FR 15241. This rule became federally effective on May 22, 1995.
56. On May 9, 1994, U.S. EPA approved OAC 3745-21-10(F) as part of the federally enforceable SIP for Ohio. 59 FR 23799. This rule became federally effective on June 8, 1994.
57. OAC 3745-21-09(T)(1)(a) sets forth requirements for the owner or operator of a petroleum refinery to develop and implement a leak detection monitoring program.
58. The regulation at OAC 3745-21-09(T)(1)(a)(i) requires that a

petroleum refinery's leak detection monitoring program include annual monitoring of pump seals in accordance with the method specified in OAC 3745-21-10(F).

59. The regulation at OAC 3745-21-09(T)(1)(a)(ii) requires that a petroleum refinery's leak detection monitoring program include quarterly monitoring of, among other things, pipeline valves in gas service and pressure relief valves in gas service in accordance with the method specified in OAC 3745-21-10(F).
60. OAC 3745-21-09(T)(2) requires that components found leaking be repaired and retested as soon as possible but no later than fifteen days after the leak is found unless the leaking component cannot be repaired until a process unit turnaround occurs.
61. OAC 3745-21-10(F) sets for the method for detection of leaks of VOC from petroleum refinery equipment and organic chemical manufacturing equipment. The method specified is EPA Method 21. This regulation also includes requirements for calibrating the instruments that will be used for detecting equipment leaks.
62. The regulation at OAC 3745-21-09(T)(1)(e) requires that if a leak is identified as a result of the monitoring program required by OAC 3745-21-09(T)(1)(a), it should be immediately tagged as a leaker. OAC 3745-21-09(T)(2) requires that all leaks shall be repaired within 15 days unless the component cannot be repaired until a process unit turnaround.
63. OAC 3745-21(T)(1)(d) requires that all pipeline and pressure relief valves in gaseous service be marked and identified in such a manner that they will be obvious to both refinery personnel conducting the inspection and the director.
64. OAC 3745-21-09(T)(4) states that the director may accept an alternative monitoring, recordkeeping and reporting program in lieu of the one required by OAC 3745-21-09(T)(1). Specifically, any proposed alternative program that is comparable to the requirements of OAC 3745-21-09(DD)(12) or (DD)(13) shall be acceptable.
65. 3745-21-09(DD)(12) provides an alternative fugitive emission monitoring schedule based on skipped periods. Specifically, the owner or operator of a process unit may skip quarterly

monitoring periods provided the percentage of valves leaking is no more than 2.0.

66. OAC 3745-21-09(DD)(12)(b) requires that the owner or operator must notify the director prior to implementing this alternative monitoring schedule.
67. OAC 3745-21-09(DD)(12)(e) provides two alternative work practices that may be used to implement skip period monitoring. Specifically, OAC 3745-21-09(DD)(12)(e)(ii) states that after five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first three quarters of every four consecutive quarterly periods is skipped.
68. OAC 3745-21-09(DD)(12)(f) states that if, under the skip period monitoring program, the percentage of valves leaking is greater than 2.0, the owner or operator must revert back to monthly monitoring. The owner or operator can elect to use skip period monitoring again in the future.

Premcor's Facility

69. Premcor owns and operates a petroleum refinery at 1150 South Metcalf Street in Lima, Ohio ("Premcor facility" or "Premcor petroleum refinery").
70. U.S. EPA's National Enforcement Investigation Center (NEIC) conducted an on-site inspection of the Premcor petroleum refinery on October 29 - November 2, 2001, and November 12 - 16, 2001 (2001 NEIC inspection).
71. The Premcor petroleum refinery is a major source as defined in Section 112(a) of the Act and is therefore subject to the requirements of the Refinery MACT.

Storage Vessels

72. Premcor operates VOL storage vessels at its petroleum refinery that were constructed, reconstructed or modified after July 23, 1984, and have a capacity greater than or equal to 40 cubic meters. These storage vessels are subject to NSPS Subpart Kb.

73. Tank 38 is a storm water tank at the Premcor refinery. During the 2001 NEIC Inspection, Premcor identified Tank 38 as being subject to NSPS Subpart Kb. It is equipped with an external floating roof.
74. Tank 84 is a slop oil tank at the Premcor refinery. During the 2001 NEIC Inspection, Premcor identified Tank 84 as being subject to NSPS Subpart Kb. It is equipped with an internal floating roof.
75. Tank 172 is an Off Spec tank at the Premcor refinery. During the 2001 NEIC Inspection, Premcor identified Tank 172 as being subject to NSPS Subpart Kb. It is equipped with an internal floating roof.
76. Tank 173 is an Off Spec tank at the Premcor refinery. During the 2001 NEIC Inspection, Premcor identified Tank 173 as being subject to NSPS Subpart Kb. It is equipped with an internal floating roof.
77. Tank 25 is a slop oil storage vessel at the Premcor refinery. Premcor has classified this storage vessel as a Group 1 storage vessel under the Refinery MACT. It is equipped with an internal floating roof. As of the date of the 2001 NEIC Inspection, the internal floating roof had a flexible wiper seal.
78. Tank 26 is a slop oil storage vessel at the Premcor refinery. Premcor has classified this storage vessel as a Group 1 storage vessel under the Refinery MACT. It is equipped with an internal floating roof. As of the date of the 2001 NEIC Inspection, the internal floating roof had a flexible wiper seal.
79. Tank 253 is a slop oil storage vessel at the Premcor refinery. Premcor has classified this storage vessel as a Group 1 storage vessel under the Refinery MACT. It is equipped with an internal floating roof. As of the date of the 2001 NEIC Inspection, the internal floating roof had a flexible wiper seal.
80. Tank 255 is a slop oil storage vessel at the Premcor refinery. Premcor has classified this storage vessel as a Group 1 storage vessel under the Refinery MACT. It is equipped with an internal floating roof. As of the date of the 2001 NEIC Inspection, the internal floating roof had a flexible wiper seal.

81. At the time of the 2001 NEIC Inspection, Premcor personnel utilized a 2-page checklist in conducting tank inspections. A copy of the checklist can be found at Attachment A. Although the title of the checklist is "External Floating Roof Tank Seal Inspection Results," Premcor personnel reported that this checklist is used for both internal and external floating roof inspections.

Wastewater

82. Because the Premcor facility in Lima, Ohio is a petroleum refinery, it is subject to the requirements of the Benzene Waste NESHAP.
83. Premcor's total annual benzene quantity, calculated pursuant to 40 C.F.R. § 61.342(a) is greater than 10 Mg/yr. Therefore, Premcor is required to manage and treat facility waste in accordance with 40 C.F.R. § 61.342(c), (d), or (e).
84. Premcor has chosen to comply with the 6 Mg compliance option found at 40 C.F.R. § 61.342(e).
85. Premcor owns and operates an API Separator as part of its wastewater treatment system. The API Separator is equipped with a closed-vent system and control device that is subject to the requirements of 40 C.F.R. § 61.349.
86. Premcor's wastewater treatment plant also contains a Scaltech unit that centrifuges the sludge and recycles a small portion of it into the inlet of the wastewater treatment plant. The Scaltech unit is equipped with a closed-vent system and control device that is subject to the requirements of 40 C.F.R. § 61.349.

Equipment Leaks

87. At the time of the 2001 NEIC Inspection, Premcor was complying with the skip period monitoring program under the Refinery MACT. Premcor was calculating percent leaking components on a refinery-wide basis. At the time of the 2001 NEIC Inspection, Premcor was on an annual monitoring schedule refinery-wide.
88. Emissions from the Premcor petroleum refinery are subject to the VOC regulations in the Ohio SIP at OAC 3745-21-09 and OAC 3745-21-10.

89. Among the process units at the Premcor refinery that are subject to quarterly monitoring under the leak detection regulations of the Ohio SIP are Crude Unit II, Bender Treater, Saturated Gas Plant, HDS, MEA, Ultraformer and the C3 Splitter.
90. At the time of the 2001 NEIC Inspection, Premcor had assigned in its leak detection database process unit number 0210 to Crude Unit II, 0230 to the Bender Treater, 0250 to the Saturated Gas Plant, 0260 to HDS, 0270 to MEA, 0290 to the Ultraformer and 0320 to the C3 Splitter.

Violations

Storage Vessels

91. Premcor's tank inspection checklist does not contain all of the necessary questions/prompts to assess whether:
- a. For internal floating roof tanks-if the internal floating roof is resting on the liquid, if there is liquid accumulated on the internal floating roof, if the seal is detached, if there are holes or tears in the seal fabric, or if there are visible gaps between the seal and the wall of the storage vessel.
 - b. For external floating roof tanks-if there are holes, tears or other openings in the shoe, seal fabric or seal envelope of the primary seal, if there are holes, tears or other openings in the seal or seal fabric of the secondary seal, or if all openings in the external floating roof are in a closed position.

In addition, Premcor's tank inspection checklist contains erroneous information about the size of seal gap measurements that trigger repairs. Based on Premcor's tank inspection checklist, Premcor has not conducted complete tank inspections, which is a violation of 40 C.F.R. §§ 60.113b(a)(2), 60.113b(b)(1), 60.113b(b)(4)(i)(B), 60.113b(b)(4)(ii)(C), 63.646(a), 63.120(a)(1), 63.120(a)(4), 63.120(b)(1), 63.120(b)(5)(ii) and 63.120(b)(6)(ii).

92. On December 20, 2000, Premcor personnel conducted an inspection on the secondary seal of Tank 38 under the requirements of NSPS Subpart Kb. A "torn tip" of 6 - 8 inches was noted, however the inspection checklist

identifies the tank as being in compliance. Repairs of the torn tip seal were never initiated. This is a violation of 40 C.F.R. § 60.113b(b)(4)(ii)(C).

93. On September 26, 2001, Premcor personnel conducted an inspection on the secondary seal of Tank 38 under the requirements of NSPS Subpart Kb. A "torn tip seal" was noted, however the inspection checklist identifies the tank as being in compliance. Repairs of the torn tip seal were never initiated. This is a violation of 40 C.F.R. § 60.113b(b)(4)(ii)(C).
94. On August 28, 2001, Premcor personnel conducted an inspection on the primary seal of Tank 84 under the requirements of NSPS Subpart Kb. The inspection checklist noted that there was "lots of product on the roof," however, the inspection checklist identifies the tank as being in compliance. No repairs were initiated. This is a violation of 40 C.F.R. § 60.113b(a)(2).
95. On July 31, 2000, Premcor personnel conducted an inspection on the primary seal of Tank 172 under the requirements of NSPS Subpart Kb. The inspection checklist notes that 3 gaps, each measuring 0.75 inches x 15 feet, were identified, however the inspection checklist identifies the tank as being in compliance. Repairs were not initiated on this seal. This is a violation of 40 C.F.R. § 60.113b(a)(2).
96. On August 29, 2001, Premcor personnel conducted an inspection on the primary seal of Tank 172 under the requirements of NSPS Subpart Kb. The inspection checklist notes that 3 gaps were identified and there was "minor product on the roof." The gaps measured 2" x 96", 2" x 72" and 2" x 48". The inspection checklist identifies the tank as being in compliance. Repairs were not initiated on this seal. This is a violation of 40 C.F.R. § 60.113b(a)(2).
97. On August 29, 2001, Premcor personnel conducted an inspection on the primary seal of Tank 173 under the requirements of NSPS Subpart Kb. The inspection checklist notes that there was "minor product on the roof," however the inspection checklist identifies the tank as being in compliance. Repairs were not initiated on this seal. This is a violation of 40 C.F.R. § 60.113b(a)(2).
98. On June 7, 2001, Premcor personnel conducted an inspection on the secondary seal of Tank 222 under the requirements of the Refinery MACT. The inspection checklist notes that a

gap measuring 3 inches x 24 inches was found, however the inspection checklist identifies the tank as being in compliance. Repairs were not initiated on this seal. This is a violation of 40 C.F.R. § 63.120(b)(8).

99. Premcor emptied and degassed Tank 25 on November 23, 1999, but the seal on the internal floating roof was not changed to a liquid mounted seal, a metallic shoe seal, or a dual seal system. This is a violation of 40 C.F.R. §§ 63.646(a), 63.640(h)(4) and 63.119(b)(3).
100. Premcor emptied and degassed Tank 26 on November 24, 1999, but the seal on the internal floating roof was not changed to a liquid mounted seal, a metallic shoe seal, or a dual seal system. This is a violation of 40 C.F.R. §§ 63.646(a), 63.640(h)(4) and 63.119(b)(3).
101. Premcor emptied and degassed Tank 253 on February 10, 2000, but the seal on the internal floating roof was not changed to a liquid mounted seal, a metallic shoe seal, or a dual seal system. This is a violation of 40 C.F.R. §§ 63.646(a), 63.640(h)(4) and 63.119(b)(3).
102. Premcor emptied and degassed Tank 255 on April 8, 2000, but the seal on the internal floating roof was not changed to a liquid mounted seal, a metallic shoe seal, or a dual seal system. This is a violation of 40 C.F.R. §§ 63.646(a), 63.640(h)(4) and 63.119(b)(3).

Wastewater

103. In reviewing Premcor's electronic fugitive emission monitoring database, NEIC identified 11 monitoring events where the components were found leaking (i.e., greater than 500ppm, the leak definition in 40 C.F.R. § 61.349(a)(1)(i)) but were not flagged as leakers. There is no record in the electronic fugitive emissions database that these components were ever repaired. Failure to repair these components within 15 days is a violation of 40 C.F.R. §§ 61.05(c), 61.349(g), 63.647(a) and 63.647(c). A list of the 11 monitoring events can be found as Attachment B to this document.

Equipment Leaks

104. During the 2001 NEIC Inspection, NEIC identified 149 monitoring events where the component found leaking was not repaired within the 15 day timeframe and not put on the delay of repair list. Attachment C of this document contains a list of the 149 monitoring events, the date the leak was found and the date of eventual repair (where known). This table was compiled from the FEMS LDAR database software in use at Premcor at the time of the 2001 NEIC Inspection. Each of the 149 monitoring events represents a violation of 40 C.F.R. §§ 63.648(a) and 60.482-7(d). In addition, of the 149 monitoring events listed in Attachment C, those that occurred on the Trolumen unit, FCC, Boilerhouse, Coker, SRU, OM&S, LPG area, Crude II, Sat Gas Plant, MEA unit, Isocracker, Ultraformer, and the C3 Splitter are also violations of OAC 3745-21-09(T)(2).
105. Below is a list of four pumps on the C3 Splitter that Premcor personnel found leaking and put on the delay of repair list. A records review during the 2001 NEIC Inspection showed that each of these pumps has a back-up pump and therefore could have been repaired outside of a turnaround period. These pumps did not qualify for the delay of repair list and were not repaired within 15 days, which is a violation of OAC 3745-21-09(T)(2) and 40 C.F.R. §§ 63.648(a) and 60.482-2(c)(1).

Pump #	Date Leak was Found	Date Leak was Repaired
2200	10/27/99	not repaired as of 2001 NEIC Inspection
2204	1/26/00	not repaired as of 2001 NEIC Inspection
2311	8/26/99	not repaired as of 2001 NEIC Inspection
2324	7/26/99	not repaired as of 2001 NEIC Inspection

106. During the 2001 NEIC Inspection, representatives of NEIC monitored a sampling of 2900 valves total in 6 process units: the Boilerhouse, C3 Splitter, Coker, FCCU, LPG, and OM&S. During its most recent fugitive emission monitoring event prior to the inspection, Premcor monitored 8913 valves in these same 6 process units. NEIC found 118 valves out of

2900 to be leaking, where Premcor only identified 83 leaking out of the 8913 valves it monitored. This is evidence that Premcor failed to conduct its fugitive emission monitoring in accordance with EPA Method 21, which is a violation of 40 C.F.R. §§ 63.648(a) and 60.482-7(a), OAC 3745-21-09(T)(1)(a)(ii) and OAC 3745-21-10(F).

107. During the 2001 NEIC Inspection, representatives of NEIC identified 1 open-ended line in the FCC unit and 5 open-ended lines in the LPG storage tank farm that were not equipped with a secondary closure device, as required. The open-ended line in the FCC unit was identified with tag ID 011501 and the open-ended lines in the LPG storage tank farm were identified with tag ID numbers 7296, 7340, 7369, 7874, and 7878. Failure to equip these open-ended lines with secondary closure devices is a violation of 40 C.F.R. § 63.648(a) and § 60.482-6(a)(1).
108. During the third quarter of 2000, Premcor conducted fugitive emission monitoring on 1015 valves in Crude Unit II (unit 0210). Twenty-two valves, or 2.17% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on Crude Unit II occurred in the third quarter of 2001.
109. Premcor failed to conduct fugitive emission monitoring on Crude Unit II during the fourth quarter of 2000, the first quarter of 2001 and the second quarter of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
110. During the third quarter of 1999, Premcor conducted fugitive emission monitoring on 60 valves in the Bender Treater (unit 0230). 2 valves, or 3.33% of the valves, were found to be leaking. Subsequent fugitive emission monitoring events on the Bender Treater occurred in the fourth quarter of 1999, the third quarter of 2000, and the third quarter of 2001.
111. Premcor failed to conduct any quarterly fugitive emission monitoring on the Bender Treater during the first, second and fourth quarters of the year 2000. In addition, Premcor failed to conduct fugitive emission monitoring in the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
112. During the third quarter of 1999, Premcor conducted fugitive emission monitoring on 895 valves in the Saturated Gas Plant (unit 0250). Thirty-three valves, or 3.69% of the valves were found to be leaking. In addition, during the fourth

quarter of 1999, Premcor conducted fugitive emission monitoring on 685 valves in the Saturated Gas Plant. Twenty-four valves, or 3.50% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the Saturated Gas Plant occurred in the third quarter of 2001.

113. Premcor failed to conduct complete quarterly fugitive emission monitoring at the Saturated Gas Plant during the year 2000. In addition, Premcor failed to conduct fugitive emission monitoring in the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
114. During the fourth quarter of 1999, Premcor conducted fugitive emission monitoring on 232 valves in the HDS Unit (unit 0260). Seven valves, or 3.02% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the HDS Unit occurred during the third quarter of 2000, at which time 238 valves were monitored. Fifteen valves, or 6.30% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the HDS Unit occurred in the third quarter of 2001.
115. Premcor failed to conduct fugitive emission monitoring on the HDS Unit during the first, second and fourth quarters of the year 2000, and during the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
116. During the fourth quarter of 1999, Premcor conducted fugitive emission monitoring on 167 valves in the MEA Unit (unit 0270). Eight valves, or 4.79% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the MEA Unit occurred during the third quarter of 2000, at which time 159 valves were monitored. Less than 2.0% of the valves were found to be leaking. The next complete fugitive emission monitoring event on the MEA Unit occurred in the third quarter of 2001.
117. Premcor failed to conduct fugitive emission monitoring on the MEA Unit during the first, second and fourth quarters of the year 2000, and during the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
118. During the fourth quarter of 1999, Premcor conducted fugitive emission monitoring on 1099 valves in the Ultraformer Unit (unit 0290). Thirty-four valves, or 3.09% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the Ultraformer Unit

occurred during the third quarter of 2000, at which time 1073 valves were monitored. Forty-two valves, or 3.91%, were found to be leaking. The next complete fugitive emission monitoring event on the Ultraformer Unit occurred in the third quarter of 2001.

119. Premcor failed to conduct fugitive emission monitoring on the Ultraformer Unit during the first, second and fourth quarters of the year 2000, and during the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
120. During the fourth quarter of 1999, Premcor conducted fugitive emission monitoring on 387 valves in the C3 Splitter (unit 0320). Forty-eight valves, or 12.40% of the valves, were found to be leaking. The next complete fugitive emission monitoring event on the C3 Splitter occurred during the third quarter of 2000, at which time 364 valves were monitored. Fifty-one valves, or 14.01%, were found to be leaking. The next complete fugitive emission monitoring event on the C3 Splitter occurred in the third quarter of 2001.
121. Premcor failed to conduct fugitive emission monitoring on the C3 Splitter during the first, second and fourth quarters of the year 2000, and during the first and second quarters of 2001. This is a violation of OAC 3745-21-09(T)(1)(a)(ii).
122. During the 2001 NEIC Inspection, representatives of NEIC identified 123 valves in gaseous service that were not tagged. This is a violation of OAC 3745-21-09(T)(1)(d). A list containing the ID number of the closest tag number to each untagged valve is provided in Attachment D.

6/28/05
Date


Stephen Rothblatt, Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice of Violation/Finding of Violation, No. EPA-5-05-OH-16, by Certified Mail, Return Receipt Requested, to:

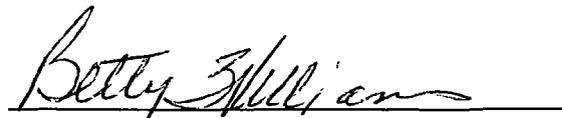
Timothy Murphy, Plant Manager
The Premcor Refining Group
Lima Refinery
1150 South Metcalf Street
Lima, Ohio 45804-1199

I also certify that I sent copies of the Notice of Violation by first class mail to:

Bob Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
122 South Front Street
Columbus, Ohio 43215

Don Waltermeyer, APC Supervisor
Northwest District Office
Ohio Environmental Protection Agency
347 North Dunbridge Road
Bowling Green, Ohio

on the 29th day of June, 2005.


Betty Williams, Secretary
AECAS, (IL/IN)
(312) 353-9299

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0295 3123

TANK PR-NUMBER 25

EXTERNAL FLOATING ROOF TANK SEAL INSPECTION RESULTS

INSPECTION DATE 2-5-2001

INSPECTION BY RON Beckley

SEAL INSPECTED (check one):

Primary

Secondary

TANK CONSTRUCTION (check one):

Welded

Riveted

CALCULATED SEAL GAP MEASUREMENT: _____

CALCULATED BY _____

EPA REGULATIONS

- (i) If the tank is of welded construction, the total seal gap areas must be < 10 0 square inches per foot of tank diameter for a primary seal and < 1.0 square inch per foot of tank diameter for a secondary seal.
- (ii) If the tank is of riveted construction, the total seal gap area must be < 2.5 square inches per foot of tank diameter for a primary seal and < 1.5 square inches per foot of tank diameter for a secondary seal

COMPLIANCE STATUS (check one):

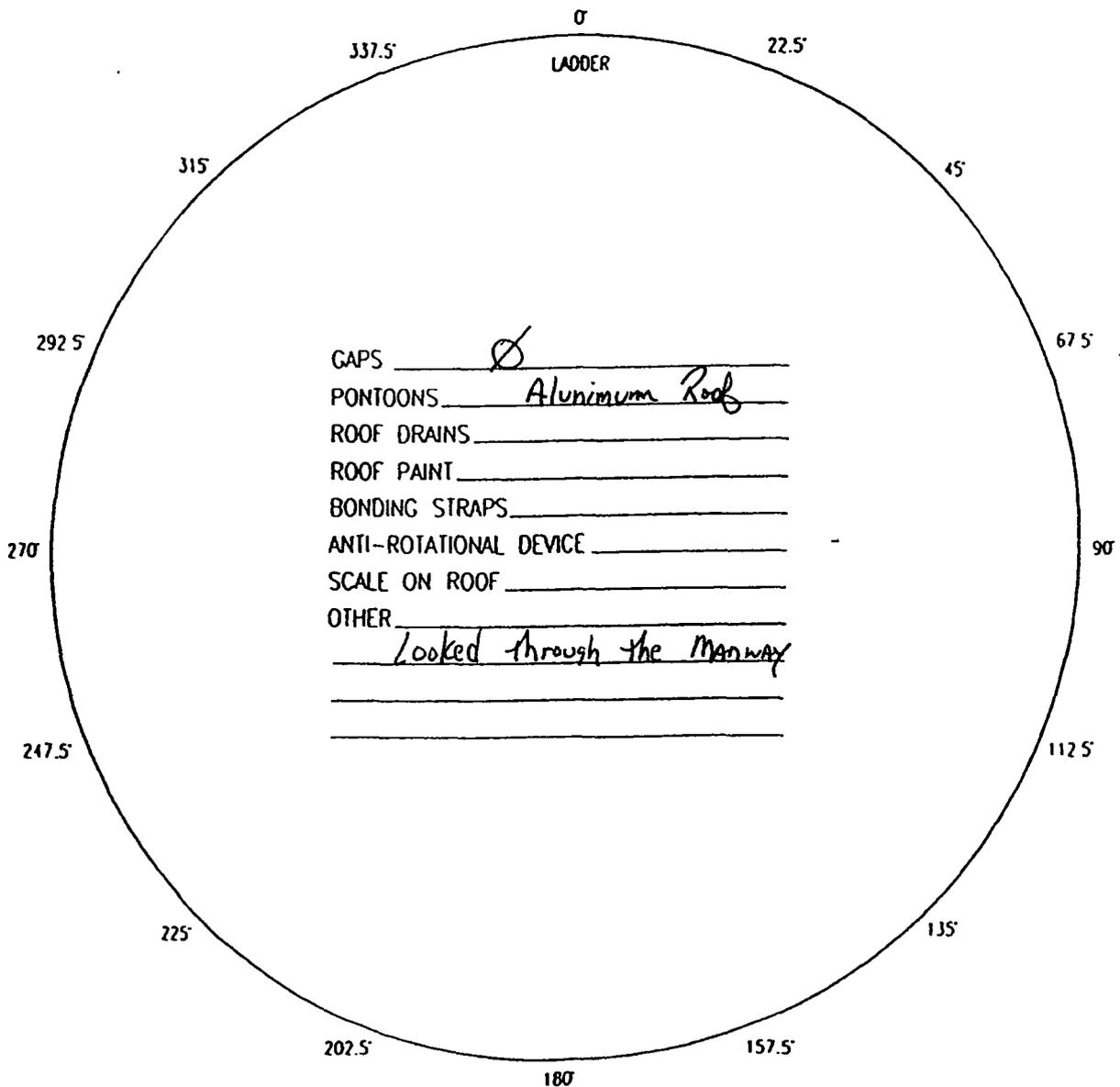
In compliance with EPA regulations.

Out of compliance with EPA regulations. Contact Inspection Department for repair recommendations. Initiate Job Order to complete necessary repairs.

ADDITIONAL COMMENTS:

TANK NO. 25
DATE 2-5-01
BY RAB
LEVEL 12 1/2'

ANNUAL INSPECTION FOR EXTERNAL FLOATING ROOF PRIMARY AND SECONDARY TANK SEALS



Attachment B

Unit	Component Number	Date of Monitoring	Reading
API	6001080057342115	9/28/01	500 ppm
Scaltech	15828	9/27/00	500 ppm
Scaltech	15833	9/27/00	2000 ppm
Scaltech	15851	10/8/99	500 ppm
Scaltech	20548	9/8/99	500 ppm
Scaltech	20551	8/26/99	1000 ppm
Scaltech	20560	10/8/99	500 ppm
Scaltech	20574	10/8/99	1000 ppm
Scaltech	20581	12/2/99	500 ppm
Scaltech	20608	12/27/00	1000 ppm
Scaltech	20668	10/8/99	500 ppm

Attachment C
Leakers Not Fixed within 15 Days

LAREA	MREFNO	MTAGID	LEQUIP	LeakDate	LeakReading	RepairDate
Scaltech	1501080057337949	15830	VLV	1/13/1998	10000	
Scaltech	1501080057337949	15830	VLV	4/24/1998	10000	
Scaltech	1501080057337966	15832	VLV	10/8/1998	10000	
Scaltech	1501080057337986	15834	VLV	4/24/1998	10000	
Scaltech	1501080057338078	15845	VLV	1/13/1998	10000	
Scaltech	1501080057338104	15848	VLV	5/15/1998	10000	
Scaltech	1501080057338224	15861	VLV	6/5/1998	10000	
Scaltech	2001080057338488	20579	VLV	1/13/1998	10000	
Scaltech	2001080057338488	20579	VLV	4/24/1998	10000	
Scaltech	2001080057338545	20585	VLV	4/24/1998	10000	
Scaltech	2001080057338781	20611	VLV	10/8/1998	10000	
Scaltech	2001080057338790	20612	VLV	5/15/1998	10000	
Trolumen	2001080057339965	20000066	VLV	8/8/2001	10000	8/30/2001
FCC	7001080057348545	700006054	VLV	11/12/1998	10000	8/15/2001
FCC	7001080057348670	700006068	VLV	11/12/1998	10000	
FCC	7001080057348900	700006092	VLV	11/12/1998	10000	
FCC	7001080057348987	700006101	VLV	11/12/1998	10000	
FCC	7001080057349185	700006124	VLV	8/12/1999	10000	
FCC	7001080057354579	700011555	PMP	12/27/1999	10000	1/25/2000
Boilerhouse	8001080057363274	800005158	VLV	7/13/2000	10000	
Coker	1001080057368081	1000002826	VLV	7/7/2000	10000	
Coker	1001080057368081	1000002826	VLV	8/29/2000	10000	
Coker	1001080057368081	1000002826	VLV	9/30/2000	10000	
Coker	1001080057368081	1000002826	VLV	10/27/2000	10000	
Coker	1001080057368081	1000002826	VLV	11/7/2000	10000	
Coker	1001080057369722	1000005007	VLV	7/7/2000	10000	
Coker	1001080057369722	1000005007	VLV	7/11/2000	10000	
Coker	1001080057369722	1000005007	VLV	9/6/2000	10000	
Coker	1001080057373579	1000009092	VLV	7/7/2000	10000	
Coker	1001080057373579	1000009092	VLV	7/10/2000	10000	
Coker	1001080057373579	1000009092	VLV	9/6/2000	10000	
SRU	1801080057381749	1800005063	VLV	5/14/1998	10000	
SRU	1801080057382947	1800012875	VLV	6/8/2000	10000	
OM&S	1901080057410639	1900005966	VLV	11/5/1998	10000	
LPG	2001080057422729	2000007703	VLV	9/1/1998	10000	8/19/2000
LPG	2001080057423227	2000007757	VLV	9/1/1998	10000	
LPG	2001080057434699	2000025246	VLV	9/1/1998	10000	
Crude II	2101080057435338	2100005053	VLV	5/7/1999	10000	
Crude II	2101080057441009	2100011755	VLV	5/11/1999	10000	
Crude II	2101080057443834	2100012073	VLV	8/4/1998	10000	
Crude II	2101080057443918	2100012082	VLV	8/4/1998	10000	
Crude II	2101080057444590	2100018825	VLV	11/7/2000	10000	
Crude II	2101080057444599	2100018826	VLV	11/7/2000	10000	
Crude II	2101080057444608	2100018827	VLV	11/7/2000	10000	
Sat Gas	2501080057463840	2500005074	VLV	8/27/1999	10000	7/27/2001
Sat Gas	2501080057464293	2500005134	VLV	8/28/1999	10000	
Sat Gas	2501080057464344	2500005140	VLV	8/8/1998	10000	
Sat Gas	2501080057464469	2500005155	VLV	8/28/1999	10000	
Sat Gas	2501080057465598	2500006386	VLV	7/15/1999	10000	
Sat Gas	2501080057466001	2500006432	VLV	7/15/1999	10000	
Sat Gas	2501080057466989	2500006553	VLV	5/14/1999	10000	

Attachment C
Leakers Not Fixed within 15 Days

Sat Gas	2501080057468030	2500006667	VLV	11/7/2000	10000	
Sat Gas	2501080057468445	2500006711	VLV	11/7/2000	10000	
HPU HYCA	2501080057473421	2510015726	VLV	12/10/1998	10000	
HPU HYCA	2501080057473636	2510015749	VLV	12/10/1998	10000	
HPU HYCA	2501080057473734	2510015759	VLV	7/9/2001	10000	8/8/2001
HPU HYCA	2501080057473866	2510015773	VLV	7/9/2001	10000	8/8/2001
HPU HYCA	2501080057473905	2510015777	VLV	7/9/2001	10000	8/9/2001
HPU HYCA	2501080057473955	2510015787	VLV	7/9/2001	10000	8/8/2001
HPU HYCA	2501080057474102	2510015803	VLV	7/9/2001	10000	8/8/2001
HPU HYCA	2501080057474167	2510015810	VLV	9/16/1998	10000	
HPU HYCA	2501080057474167	2510015810	VLV	12/10/1998	10000	
HPU HYCA	2501080057474222	2510015816	VLV	7/9/2001	10000	8/8/2001
HPU HYCA	2501080057474239	2510015818	VLV	7/10/2001	10000	
HPU HYCA	2501080057474239	2510015818	VLV	8/14/2001	10000	
HPU HYCA	2501080057474239	2510015818	VLV	9/21/2001	10000	
HPU HYCA	2501080057474248	2510015819	VLV	7/10/2001	10000	8/8/2001
HPU HYCA	2501080057474367	2510015836	VLV	7/10/2001	10000	8/8/2001
HPU HYCA	2501080057475157	2510015941	VLV	7/10/2001	10000	8/9/2001
HPU HYCA	2501080057475345	2510015962	VLV	7/10/2001	10000	8/9/2001
HPU HYCA	2501080057476228	2510016061	VLV	7/10/2001	10000	
HPU HYCA	2501080057476228	2510016061	VLV	8/14/2001	10000	
HPU HYCA	2501080057476228	2510016061	VLV	9/21/2001	10000	
HPU HYCA	2501080057476255	2510016064	VLV	7/7/2000	10000	
HPU HYCA	2501080057476322	2510016071	VLV	7/10/2001	10000	
HPU HYCA	2501080057476322	2510016071	VLV	8/14/2001	10000	
HPU HYCA	2501080057476322	2510016071	VLV	9/12/2001	10000	
HPU HYCA	2501080057476322	2510016071	VLV	9/21/2001	10000	
HPU HYCA	2501080057476389	2510016078	VLV	9/15/1998	10000	
HPU HYCA	2501080057476458	2510016085	VLV	7/10/2001	10000	8/9/2001
HPU HYCA	2501080057476495	2510016089	VLV	7/10/2001	10000	
HPU HYCA	2501080057476495	2510016089	VLV	8/14/2001	10000	
HPU HYCA	2501080057476495	2510016089	VLV	9/12/2001	10000	
HPU HYCA	2501080057476495	2510016089	VLV	9/21/2001	10000	
HPU HYCA	2501080057477100	2510016196	VLV	9/17/1998	10000	
HPU HYCA	2501080057477134	2510016203	VLV	7/11/2001	10000	
HPU HYCA	2501080057477134	2510016203	VLV	8/14/2001	10000	
HPU HYCA	2501080057477134	2510016203	VLV	9/12/2001	10000	
HPU HYCA	2501080057477134	2510016203	VLV	9/21/2001	10000	
HPU HYCA	2501080057477140	2510016204	VLV	6/2/1999	10000	
HPU HYCA	2501080057477201	2510016211	VLV	7/11/2001	10000	
HPU HYCA	2501080057477201	2510016211	VLV	8/14/2001	10000	
HPU HYCA	2501080057477201	2510016211	VLV	9/12/2001	10000	
HPU HYCA	2501080057477201	2510016211	VLV	9/21/2001	10000	
HPU HYCA	2501080057477210	2510016212	VLV	7/11/2001	10000	9/12/2001
HPU HYCA	2501080057477210	2510016212	VLV	8/14/2001	10000	9/12/2001
HPU HYCA	2501080057478284	2510016355	VLV	9/15/1998	10000	
HPU HYCA	2501080057479460	2510016483	VLV	9/15/1998	10000	
HPU HYCA	2501080057479470	2510016484	VLV	9/15/1998	10000	
HPU HYCA	2501080057479582	2510016497	VLV	9/15/1998	10000	
HPU HYCA	2501080057480131	2510016557	VLV	7/11/2001	10000	9/12/2001
HPU HYCA	2501080057481158	2510016678	VLV	7/11/2001	10000	8/9/2001
MEA	2701080057486840	2700000025	VLV	8/7/1998	10000	

Attachment C
Leakers Not Fixed within 15 Days

MEA	2701080057486978	2700005013	VLV	8/7/1998	10000	7/27/2001
Isocracker	2801080057489630	2800002230	VLV	7/27/2001	10000	9/12/2001
Isocracker	2801080057495425	2800005147	VLV	6/29/1998	10000	
Ultraformer	2901080057502383	2900002020	VLV	8/11/1998	10000	
Ultraformer	2901080057502502	2900002037	VLV	5/13/1999	10000	
Ultraformer	2901080057502857	2900002083	VLV	5/13/1999	10000	
Ultraformer	2901080057502965	2900002095	VLV	5/13/1999	10000	
Ultraformer	2901080057502965	2900002095	VLV	7/14/1999	10000	
Ultraformer	2901080057502987	2900002097	VLV	5/13/1999	10000	
Ultraformer	2901080057502987	2900002097	VLV	7/14/1999	10000	
Ultraformer	2901080057504929	2900005170	VLV	7/19/2001	10000	
Ultraformer	2901080057504929	2900005170	VLV	9/21/2001	10000	
Ultraformer	2901080057505371	2900005225	VLV	5/13/1999	10000	
Ultraformer	2901080057507101	2900005432	VLV	11/18/1998	10000	
Ultraformer	2901080057507137	2900005436	VLV	8/11/1998	10000	
Ultraformer	2901080057512747	2900020936	VLV	11/18/1998	10000	
Ultraformer	2901080059337760	2900024786	VLV	11/18/1998	10000	
C3 Splitter	3201080059339658	3200002287	VLV	9/29/1998	10000	
C3 Splitter	3201080059339658	3200002287	VLV	5/21/1999	10000	
C3 Splitter	3201080059339858	3200002319	VLV	9/29/1998	10000	
C3 Splitter	3201080059340143	3200005029	VLV	6/30/1998	10000	
C3 Splitter	3201080059340698	3200006893	VLV	9/29/1998	10000	
C3 Splitter	3201080059342127	3200025426	VLV	9/30/1998	10000	
Isom Unit	3301080059343591	3310011103	VLV	7/2/2001	10000	8/20/2001
Isom Unit	3301080059343653	3310011113	VLV	1/22/1998	10000	
Isom Unit	3301080059343653	3310011113	VLV	3/19/1998	10000	
Isom Unit	3301080059343673	3310011116	VLV	1/22/1998	10000	
Isom Unit	3301080059343673	3310011116	VLV	3/19/1998	10000	
Isom Unit	3301080059343919	3310016915	VLV	2/10/1998	10000	
Isom Unit	3301080059343919	3310016915	VLV	3/19/1998	10000	
Isom Unit	3301080059344905	3310017072	VLV	1/22/1998	10000	
Isom Unit	3301080059344905	3310017072	VLV	2/10/1998	10000	
Isom Unit	3301080059344905	3310017072	VLV	3/19/1998	10000	
Isom Unit	3301080059345771	3310017211	VLV	7/6/2001	10000	
Isom Unit	3301080059345771	3310017211	VLV	9/12/2001	10000	
Isom Unit	3301080059345771	3310017211	VLV	9/21/2001	10000	
Isom Unit	3301080059347748	3310017532	VLV	5/4/1999	10000	
Isom Unit	3301080059347748	3310017532	VLV	6/9/1999	10000	
Isom Unit	3301080059348690	3310017685	VLV	2/11/1998	10000	
Isom Unit	3301080059348690	3310017685	VLV	3/20/1998	10000	
Isom Unit	3301080059349211	3310017770	VLV	3/20/1998	10000	
HPU Benzene	4201080059362502	4210016186	VLV	9/17/1998	10000	
Reformate Benzene	4501080059362653	4510019187	VLV	12/29/1998	10000	9/12/2001
Reformate Benzene	4501080059362653	4510019187	VLV	12/31/1998	10000	9/12/2001
Reformate Benzene	4501080059362653	4510019187	VLV	6/28/1999	10000	9/12/2001
OffSite Benzene	4701080059363833	4710018081	VLV	9/23/1998	10000	9/7/2001

Attachment D

Number of Missing Tags on Gaseous Service Valves

ProcessUnit	LCSTATE	TotalNumberMissingTagsNearThisValve
Boilerhouse	V	33
C3 Splitter	V	14
Coker	V	26
FCC	V	43
LPG	V	7
Total		123

ProcessUnit	Tag	LCSTATE	NumberMissingTagsNearThisValve
Boilerhouse	5008	V	1
Boilerhouse	5026	V	2
Boilerhouse	5027	V	1
Boilerhouse	5065	V	1
Boilerhouse	5142	V	1
Boilerhouse	5163	V	2
Boilerhouse	5179	V	1
Boilerhouse	5187	V	2
Boilerhouse	5189	V	1
Boilerhouse	5202	V	4
Boilerhouse	5203	V	7
Boilerhouse	5206	V	6
Boilerhouse	5208	V	1
Boilerhouse	5222	V	2
Boilerhouse	5226	V	1
C3 Splitter	2098	V	1
C3 Splitter	5003	V	2
C3 Splitter	5004	V	2
C3 Splitter	5005	V	1
C3 Splitter	5012	V	1
C3 Splitter	5019	V	1
C3 Splitter	5024	V	1
C3 Splitter	5026	V	1
C3 Splitter	5038	V	3
C3 Splitter	5044	V	1
Coker	5140	V	1
Coker	5148	V	3
Coker	5185	V	1
Coker	9047	V	1
Coker	9082	V	1
Coker	9090	V	1
Coker	9093	V	1
Coker	9095	V	1
Coker	11052	V	1
Coker	11056	V	1
Coker	11100	V	2
Coker	19548	V	1
Coker	19551	V	1
Coker	19552	V	1
Coker	19557	V	1

Coker	19611	V	1
Coker	19757	V	2
Coker	21115	V	3
Coker	21116	V	2
FCC	5118	V	1
FCC	5196	V	1
FCC	5233	V	1
FCC	5382	V	2
FCC	5392	V	1
FCC	5400	V	2
FCC	5409	V	3
FCC	5421	V	3
FCC	5457	V	2
FCC	5505	V	1
FCC	5511	V	1
FCC	5513	V	1
FCC	5515	V	1
FCC	5519	V	1
FCC	5522	V	1
FCC	5524	V	1
FCC	5526	V	1
FCC	5527	V	1
FCC	5532	V	1
FCC	5534	V	1
FCC	5536	V	1
FCC	5538	V	1
FCC	5540	V	1
FCC	5541	V	1
FCC	11332	V	1
FCC	11337	V	1
FCC	11350	V	1
FCC	11359	V	4
FCC	11926	V	1
FCC	21071	V	1
FCC	25110	V	1
FCC	25117	V	1
FCC	25118	V	1
LPG	5012	V	2
LPG	5020	V	2
LPG	5050	V	1
LPG	5217	V	2