

 **VALERO
REFINING COMPANY-CALIFORNIA**

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VIA AIRBORNE EXPRESS NO. 2545828556

April 13, 2004

Mr. Jack Broadbent, Executive Officer / Air Pollution Control Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Attn.: Ms. Brenda Cabral
Permit Services Division

Re: Valero Refining Company – California
Benicia Asphalt Plant (Plant No. A0901)
Comments on Draft Title V Permit, Revision 1

Dear Ms. Cabral:

Enclosed are Valero Refining Company – California's comments on the draft Major Facility Review ("Title V") Permit, Revision 1, for the Benicia Asphalt Unit (Application No. 17468, Plant No. A0901). Valero's comments are based on a review of the draft Title V Permit, Revision 1 that was released by the District on February 24, 2004, for public review. Valero understands that the public comment period, which includes a 14-day extension granted by the District, closes on April 14, 2004.

Valero appreciates the District's earlier consideration of the written comments submitted on August 11, 2003, regarding the initial draft permit, and where appropriate, those comments are restated here. Valero has conducted a similar, comprehensive review of this latest draft Title V Permit and is submitting additional comments to further improve the quality and accuracy of the document. Valero's comments are provided in three sections, Attachments A through C, to facilitate the District's review and analysis. In addition, each of the Attachments includes subsections, which support the proposed language changes or further clarify Valero's position.

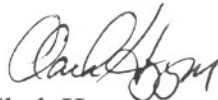
Most of Valero's comments are given in Attachments A and B. These attachments are organized as "rationale" tables that provide a line-by-line explanation of each proposed change. Comments are sorted by date, so that the new comments dated April 14, 2004 are listed at the front of each attachment and comments from previous review periods are located at the back of each attachment.

Mr. Jack Broadbent, Executive Director
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Due to the many changes made to Condition #20617, the "NOx Box" condition, a separate Attachment C has been prepared to address these changes. The comments shown in Attachment C include proposed changes that are specific to Valero as well as proposed changes as submitted by the Western States Petroleum Association (WSPA).

Valero appreciates this opportunity to comment on the draft Revision 1 Title V Permit for the Benicia Asphalt. If you have any questions concerning Valero's comments, please contact Ms. K. Sky Bellanca, Environmental Engineer, at (707) 745-7807.

Sincerely,
VALERO REFINING COMPANY – CALIFORNIA



Clark Hopper
Environmental Manager, Benicia Refinery

Attachments

cc (w/o attachments): Mr. Steve Hill – Permit Services, BAAQMD
cc (w/ attachments): Ms. Sky Bellanca – Valero

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
1.	4/14/04	NEW COMMENT	II A	S29	NA	Delete S29	Source (Naphtha Merox Treater) is permanently out of service and is being dismantled.
2.	4/14/04	NEW COMMENT	III	All	SIP Regulation 8, Rule 3 SIP Regulation 8, Rule 4	Modify Table III to delete SIP Regulation 8, Rule 3 SIP Regulation 8, Rule 4	Update permit. The current version of BAAQMD 8-4 (10/16/2002) was incorporated into the SIP on 8/26/2003 (68 FR 51187) and the current version of BAAQMD 8-3 (11/21/2001) was incorporated into the SIP on 1/2/2004 (69 FR 34-40).
3.	4/14/04	NEW COMMENT	III	All	BAAQMD Regulation 8, Rule 3 BAAQMD Regulation 8, Rule 4	Change federal enforceability of both BAAQMD Regulation 8, Rule 3 and BAAQMD Regulation 8, Rule 4 to "Y".	Update permit. The current version of BAAQMD 8-4 (10/16/2002) was incorporated into the SIP on 8/26/2003 (68 FR 51187) and the current version of BAAQMD 8-3 (11/21/2001) was incorporated into the SIP on 1/2/2004 (69 FR 34-40).
4.	4/14/04	NEW COMMENT	IV-A	All sources	BAAQMD 8-28-302	Change federal enforceability from "N" to "Y"	BAAQMD 8-28-302 is included in the SIP approved version of Regulation 8, Rule 28 and therefore, is a federally enforceable requirement.
5.	4/14/04	NEW COMMENT	IV-L	S18	BAAQMD 8-10	Change effective date to January 21, 2004 and make the changes shown in Attachment A.1 to revise BAAQMD 8-10 applicability and add new SIP Reg 8, Rule 10 applicability to Table IV-L, S18 Crude Unit. Delete BAAQMD 8-10-301 if the permit is expected to be issued after July 1, 2004.	BAAQMD recently adopted new version of Regulation 8, Rule 10 Process Vessel Depressurization. On July 1, 2004 BAAQMD 8-10-301 will be superceded by 8-10-302 and therefore will no longer be an applicable requirement if the permit is issued after July 1, 2004.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
6.	4/14/04	NEW COMMENT	IV-B	S1, S2, S4, S23	40 CFR 60 Subpart Kb	Delete 60.116b(e)(2)(iii)	Citation does not exist in regulation. Correct error.
7.	4/14/04 8/11/03	Partial. Complete in IV-B. Not done in IV-E.	IV-B, E	S1, S2, S4, S23, S9	40 CFR 60 Subpart Kb	Delete the following citations: 60.116b(e)(3)(i) 60.116b(e)(3)(ii) 60.116b(e)(3)(iii) 60.116b(e)(3)(iv)	Delete citations for determining true vapor pressure for other liquids because tanks are subject to 60.116b(e)(2) for crude oil and refined petroleum products instead of these citations.
8.	4/14/04	NEW COMMENT	IV-M, P	S19 S24	1-523.5 SIP	Delete citation	There is no SIP approved version of this citation. It is included in the BAAQMD version of Regulation 1 dated May 2, 2001, but has not been SIP approved (i.e., is not included in the SIP-approved version of Regulation 1, dated October 7, 1998).
9.	4/14/04	NEW COMMENT	IV-M, N	S19 S20	9-10-502.1	Delete citation	There is no SIP approved version of this citation. It is included in the BAAQMD version of Regulation 9-10 dated July 17, 2002, but has not been SIP approved (i.e., is not included in the SIP-approved version of Regulation 9-10, dated January 5, 1994).
10.	4/14/04	NEW COMMENT	IV-N IV-O	S20 S21	1-523 1-523.1 1-523.2 1-523.3 1-523.4 1-523.5 1-523 SIP 1-523.3 SIP	Add citations	The sources have fuel flow parametric monitors for Reg 9, Rule 10 and therefore are subject to Reg 1-523 requirements.
11.	4/14/04	NEW COMMENT	IV-O	S21	2-9-502	Add citation number.	Typographical error.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
12.	4/14/04	NEW COMMENT	IV-P	S24	BAAQMD Condition 1240, Part I.10	Delete permit condition Part I.10 and replace with Part II.10.	Correct this typographical error by replacing Part I.10 with Part II.10. Note that the permit condition title/description is correct and only the part number needs to be changed and moved into numerical order.
13.	4/14/04	NEW COMMENT	IV-U	S29	NA	Delete Table IV-U for S29 (Naphtha Merox Treater)	Source (Naphtha Merox Treater) is permanently out of service and is being dismantled.
14.	4/14/04	NEW COMMENT	IV-X	S34	Condition 1240, Part III.3	Add permit condition.	This condition applies to all combustion devices except emergency firewater pump S68.
15.	4/14/04	NEW COMMENT	IV-AM	S29	NA	<p>Change the 7th row in Table IV-AM Fugitive Sources: Applicable Requirements, to eliminate S29 as follows: “S18 Crude Unit, including Atmospheric Tower (T-1), crude charge circuit, overhead off-gas system, caustic scrubbers, and naphtha piping to S29 Naphtha Merox Treater and excluding vacuum tower.”</p> <p>Delete the following (9th) row in Table IV-AM Fugitive Sources: Applicable Requirements, to eliminate S29: S29 Naphtha Merox Treater, including rundown piping to S9 Naphtha Tank.</p>	Source (Naphtha Merox Treater) is permanently out of service and is being dismantled.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
16.	4/14/04 8/11/03	No	IV-AM and VI		BAAQMD Condition 1240	Change Table IV-AM Table Title from " S16, Loading Racks - Kerosene or Distillate Oil" to " S16, Truck Loading Rack - Heavy Vacuum Gas Oil". Change source description in Section VI, Condition 1240, prior to Part II.90 from "S16 Kerosene and Heavy Vacuum Gas Oil Loading Rack" to "S16, Truck Loading Rack – Heavy Vacuum Gas Oil".	Correct name of source.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
17.	4/14/04	NEW COMMENT	IV-AN	Components	BAAQMD 8-18	<p>Change effective date to January 21, 2004</p> <p>Change FE of following citations to “N”</p> <p>8-18-110 8-18-302 8-18-303 8-18-304 8-18-304.2 – also add “and leak discovered by APCO” to description 8-18-306 8-18-306.1 8-18-306.2 – also add future date of 7/1/2004 8-18-401 8-18-502 8-18-603</p> <p>Add the following citations with FE “N” unless noted: 8-18-304.1 Connection leak discovered by Valero. FE “Y” 8-18-304.3 Connections subject to 8-18-306. 8-18-306.3 Non-repairable connections count as two valves 8-18-306.4 Requirements for valves with major leaks ($\geq 10,000$ ppm) Future effective date 7/1/2004 8-18-503 Reports 8-18-604 Determination of Mass Emissions</p>	BAAQMD recently adopted new version of Regulation 8, Rule 18 Organic Compounds – Equipment Leaks

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
18.	4/14/04	NEW COMMENT	IV-AN	Components	SIP Regulation 8 Rule 18	<p>Add new header row for SIP Regulation 8, Rule 18 Organic Compounds, Equipment Leaks (6/5/2003)</p> <p>Add the following citations with FE “Y” (copy from existing list for BAAQMD 8-18)</p> <p>8-18-110 8-18-302 8-18-303 8-18-304 8-18-304.2 8-18-306 8-18-306.1 8-18-306.2 8-18-401 8-18-502 8-18-603 8-18-604 Determination of Mass Emissions</p>	BAAQMD recently adopted new version of Regulation 8, Rule 18 Organic Compounds – Equipment Leaks. SIP version of 8-18 is now different than BAAQMD version, therefore both should be incorporated into permit.
19.	4/14/04	NEW COMMENT	IV-AO	A4	Condition 1240 Part II.62	Delete “Part II.62” from the Future Effective Date column.	Typographical error.
20.	4/14/04	NEW COMMENT	IV-AP	A31	Condition 1240, Part II.10	Delete duplicate permit condition.	Typographical error.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
21.	4/14/04	NEW COMMENT	VI	S19	Condition 1240, Part I.16a	<p>Condition 1240, Part I.16.a should be modified as shown below to delete language referring to source testing to demonstrate compliance with the NOx and CO limits of Regulation 9, Rule 10 and to increase the source test reporting period from 30 to 45 days:</p> <p>16a. The permit holder shall perform a source test at S19, Vacuum Heater, every 6 months to determine compliance with the NOx and CO standards in Regulation 9, Rule 10 the NOx limit in part I.8 of this condition, and the CO limit in parts I.5b and I.5c of this condition. The source test shall be performed at a minimum of 85% of the maximum capacity of 40 MMBtu/hr (34 to 40 MMBtu/hr). All source testing shall be done in accordance with the District's Manual of Procedures. The facility shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 30 45 days from the date of the source test. (Regulation 9-10-301, 9-10-305; Cumulative Increase, BACT)</p>	<p>This permit condition language is redundant with Condition 20617, Part 7.a.2. The source test submittal requirement of 30 days for Condition 1240, Part I.16a conflicts with the 45-day submittal period for Condition 20617, Part 7.a.2.</p> <p>In addition, the 45-day period allows the source test contractor one month to prepare the report and two weeks for Valero to review the report.</p>

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
22.	4/14/04	NEW COMMENT	VI	S19	Condition 1240, Part I.16b	Modify Condition 1240, Part I.16b to increase the source test reporting period from 30 to 45 days.	Part I.16b conflicts with the 45-day submittal period for Condition 20617, Part 7.a.2. The 45-day period allows the source test contractor one month to prepare the report and two weeks for Valero to review the report.
23.	4/14/04 8/11/03	No.	VI	S19	1240.I.16a	Delete “a minimum of 85% of the maximum capacity of 40 MMBtu/hr (34 to 40 MMBtu/hr)”; and replace with “highest duty possible for the prevailing process conditions”	It is very difficult to run this source at the upper end of its limit. The normal operating duty for S19 is approximately 30 MMBTU/hr. It will be difficult to adjust the operating parameters for this device to reach the upper duty range for frequent (semi-annual) source tests.
24.	4/14/04 12/1/03	NEW	VI IV-P, AP	S24 A31	Condition 1240.II.58b	Modify the permit to include a provision to allow for an averaging period for the temperature limit. Add the following language as Condition 1240, Part II.58b: <i>“For S-24, the minimum combustion zone temperature shall be 1,100 F, averaged over any consecutive 2.2 hour period. For A-31, the minimum combustion zone temperature shall be 1,400 F, averaged over any consecutive 3.4 hour period.”</i>	S24 and A31 abate organic emissions from wastewater equipment subject to 40 CFR 61 Subpart FF, an existing applicable requirement in the Title V permit. Per 40 CFR 61.355(i)(3), compliance of a control device and parameter to be monitored (i.e., temperature) is based on an averaging period determined by source test.

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
25.	4/14/04 8/11/03	Partial. Added header row and a duplicate row for 40 CFR 60.104(a)(1) but did not change test methods as requested	VIII		40 CFR 60.104(a)(1)	<p>NEW COMMENT: Delete duplicate 60.104(a)(1) row.</p> <p>Add header row as follows:</p> <p>NSPS Part 60 Subpart J, Standards of Performance for Petroleum Refineries (7/1/00)</p> <p>Replace the Acceptable Test Methods with the following:</p> <p>40 CFR 60, Appendix A, EPA Method 11, Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries and 40 CFR 60, Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring Systems in Stationary Sources</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.
26.	4/14/04	NEW	VIII		40 CFR 60.112b(a)	<p>Add new header row above 60.112b(a).</p> <p>See Attachment A.2</p>	Editorial correction.
27.	12/1/03 8/11/03	Partial. Complete in IV-B. Not done in IV-E.	IV-B, E	S1, S2, S4, S23, S9	40 CFR 60 Subpart Kb	<p>Add the following citations:</p> <p>60.116b(e)(2) 60.116b(e)(2)(i) 60.116b(e)(2)(ii)</p>	Add citations for determining true vapor pressure for crude oil and refined petroleum products because tanks contain crude oil (IV-B) and refined petroleum products (IV-E).

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
28.	12/1/03	No	VI IV– C, D, F, G, W, AA, AB, AC, AD, AE, AF, AG, AH, AI, AL, AP)	A31 S24 Sources controlle d by A31 and S24	Condition 1240.II.58b	Modify Basis for Condition No. 1240.II.58b, in order to clarify that the basis for the Condition is to monitor compliance through performance testing and not engineering calculations, to read as follows: “Basis: 40 CFR 60.113b(c)(1)(ii) and 60.113b(c)(2); 40 CFR 60.473(c); 40 CFR 61.354(c)(1) and 61.354(c)(4); Regulation 2-6-409.2.2, 2-6-414).”	Condition No. 1240.II.58b, applicable to S24 and A31, should reference in the “basis” for the condition citations to the performance test compliance measures instead of to the engineering calculations.
29.	12/1/03	No	IV-P	S24	40 CFR 61 Subpart FF	Modify Table IV-P to delete references to: 40 CFR § 61.356(f)(2) 40 CFR § 61.356(f)(2)(i) 40 CFR § 61.356(f)(2)(i)(A) 40 CFR § 61.356(f)(2)(i)(C)	S24 is not subject to § 61.356(f)(2) recordkeeping for engineering calculations because it is monitored by performance tests prescribed by § 61.349(c)(2) rather than the engineering calculations described in § 61.349(c)(1). 40 CFR Part 61 Subpart FF § 61.349(c) allows the facility to demonstrate compliance either by performance tests or through engineering calculations. The Asphalt Plant has elected to comply through performance tests for S24. Indeed, specific Permit conditions for this source require the Plant to demonstrate compliance by performance tests.
30.	12/1/03	No	IV-P	S24	40 CFR 61 Subpart FF	Modify Table IV-P to delete references to: 40 CFR § 61.356(j)(4) 40 CFR § 61.357(d)(7)(iv)(A) Modify Table IV-P to add references to: 40 CFR § 61.356(j)(3)(i) 40 CFR § 61.356(j)(6) 40 CFR § 61.357(d)(7)(iv)(C)	S24 is a process heater, subject to §§ 61.356(j)(6), 61.356(j)(3)(i) and 61.356(d)(7)(iv)(C). Sections 61.356(j)(4) and 61.356(d)(7)(iv)(A), applicable to a thermal oxidizer, are not applicable to a process heater.

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
31.	12/1/03	No	IV-AH	S66	40 CFR 61 Subpart FF	Modify Table IV-AH to delete reference to 40 CFR § 61.349(c)(1) (engineering calculations) and add reference to § 61.349(c)(2) (performance test).	S66 is an oil-water separator, controlled by S24 and A31. S66 is not subject to 61.349(c)(1) (recordkeeping for engineering calculations) because its control devices are monitored by performance tests prescribed by § 61.349(c)(2). 40 CFR Part 61 Subpart FF § 61.349(c) allows the facility to demonstrate compliance either by performance tests or through engineering calculations. The Asphalt Plant has elected to comply through performance tests for S24 and A31. Indeed, specific Permit conditions for these sources require the Plant to demonstrate compliance by performance tests.
32.	12/1/03	No	IV-AN	Components	40 CFR 61 Subpart FF	Modify Table IV-AN to delete references to 40 CFR § 61.347(b) and § 61.349(f)	The bases cited for these requirements are neither factually nor legally correct. The Permit erroneously includes the requirements for quarterly visual equipment inspections for oil-water separators and closed vent systems and control devices as part of the fugitive monitoring program. Visual equipment inspections are required for these sources, but these inspections have no reasonable relationship to detecting fugitive emissions and, more importantly, the District has no legal basis for including fugitive emissions limits as the basis for the visual equipment inspections.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
33.	12/1/03	No	IV-AP	A31	40 CFR 61 Subpart FF	Modify Table IV-AP to delete reference to 40 CFR § 61.356(f)(2)(A) (recordkeeping for engineering calculations).	A31 is not subject to §§ 61.356(f)(2) (recordkeeping for engineering calculations) because its control devices are monitored by performance tests prescribed by § 61.349(c)(2).
34.	12/1/03	Partial. Part 1 changes made in all sections. Part 2 changes made in all sections. Part 5 and Part 6b changes not made.	VI	S69 S70	Condition 20278, Parts 1, 2, 5, and 6b	In accordance with Application No. 7471, revise Condition No. 20278 in the Permit as follows: For Part 1, increase asphalt throughput for S70 from 17,591 to 400,000 tpy. For Part 2, increase additive throughput for S69 from 2,650 to 20,000 tpy. For Part 5, delete operating hours limit for S70. For Part 6b, delete recordkeeping requirements for S70 operating hours. See Attachment 4, pages 36-38, for the requested modification.	The District approved Application No. 7471 on October 11, 2003, which allowed the Plant to increase throughput limits for Polymer Modified Asphalt production at S69 and S70. These permit conditions fail to incorporate the throughput changes approved by Application No. 7471.
35.	12/1/03	No	VIII	NA	40 CFR 61.349(a)(2)(i)	Change acceptable test method to “40 CFR Part 61 Subpart FF, § 61.355 Test Methods, Procedures, and Compliance Provisions” as required under § 61.349(a)(2)(i) (A).	40 CFR Part 61 Subpart FF § 61.349(a)(2)(i) allows the facility to demonstrate compliance with that section either by § 61.349(a)(2)(i)(A) (>95% reduction) or § 61.349(a)(2)(i)(B) (< 20 ppm VOC outlet). The Plant has elected to comply in accordance with the standard to achieve >95% reduction. The test method specified in the Permit is applicable to § 61.349(a)(2)(i)(B). It may not be possible for the Plant to comply with the method required by § 61.349(a)(2)(i)(B).

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
36.	8/11/03	No	IIA	S16	None	Change Description to “Truck Loading Racks – Heavy Vacuum Gas Oil”	Correct name and clarify function of source
37.	8/11/03	Partial. Made all requested changes except did not add S66 to A31.	IIB	A31, S24	40 CFR 61.349(a)(2)(i)(A)	Consolidate all rows for 40 CFR 61.349(a)(2)(i)(A) into one row as follows: Sources Controlled: S12, S25-S28, S41, S66, S67 Applicable Requirement: 40 CFR 61.349(a)(2)(i)(A) Operating Parameter: Temperature Limit or Efficiency: 95% control of inlet VOC Delete all other rows with Applicable Requirement 40 CFR 61.349(a)(2)(i)(A)	Consolidate sources with same requirement. Add sources S26 and S27 to reflect new applicability added to Section IV.
38.	8/11/03	No.	IIB	S19	N/A	Change Description to “Vacuum Heater (natural gas, Asphalt Plant fuel gas)”	Distinguish between Valero Benicia Asphalt Plant and Valero Benicia Refinery fuel gas systems
39.	8/11/03	No	IIB	S19	BAAQMD Condition #1240, Part I.14	Delete S32 from Sources Controlled	S32 no longer exists and has been physically removed from the Asphalt Plant.
40.	8/11/03	Partial. Deleted A6, but did not add S54.	IIB	S24	BAAQMD Condition #1240, Part I.14	Delete A6 from Sources Controlled and add S54 to Sources Controlled	Correct errors and omissions
41.	8/11/03	No	IV- A	All Sources	SIP Regulation 8, Rule 28 8-28-302	Delete SIP Regulation 8, Rule 28 and citation 8-28-302.	This citation does not exist in the current SIP version of 8-28.
42.	8/11/03	No.	IV-A	All Sources	40 CFR 61 Subpart FF	Delete the following citations: 61.356(d) through 61.356(j) 61.357(e) 61.357(f)	Delete citations that are included in the individual equipment tables from 40 CFR 61 Subpart FF Benzene Waste Operations. Delete non-applicable citations.

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
43.	8/11/03	<p>Partial. Made requested changes except: Did not add: 63.1(a)(6), and 63.8(f)(4)(iv).</p> <p>Did not delete: 63.5(a), and 63.5(b)(5).</p> <p>Did not change description of: 63.5(f)(1) from “local pre-construction review” to “prior state pre-construction review”.</p> <p>Added 63.8(f)(5)(ii) “Administrator may establish procedures and criteria”, but incorrectly numbered it 63.8(f)(4)(ii) so that there are now two paragraphs 63.8(f)(4)(ii).</p>	IV-A	All Sources	40 CFR 63 Subpart A	Make changes to 40 CFR 63 Subpart A citations as shown on Attachment D	Incorporate recent revisions to 40 CFR 63 Subpart A.
44.	8/11/03	<p>Partial. Added “asphalt plant” but added it twice so description is incorrect. However, permit condition in VI is correct.</p>	IV-A	All Sources	BAAQMD Condition 1240, Part I.15	Change “refinery” to “Asphalt Plant”	Distinguish between Valero Benicia Asphalt Plant and Valero Benicia Refinery

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Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
45.	8/11/03	Partial. Changed FE to “Y” for all 8-5 citations except all instances of 8-5-117, which are incorrectly FE=“N” (tables IV-C, D, F, Q, R, T, Y, Z, AB, AE, AG, and AL.)	IV-B-G, P-S, Y, Z, AB, AD-AG, AI, AL, AP	Tanks and associated abatement devices	All BAAQMD 8-5 citations	Change Federally Enforceable (Y/N) to “Y”	Current version of BAAQMD 8-5 is SIP approved and all citations are federally enforceable.
46.	8/11/03	No	IV-B, E, G, AD, AF	S1, S2, S4, S23, S9, S13, S59, S63	BAAQMD 8-5	Add the following Citation with FE of “Y”: 8-5-328.1 Tank degassing requirements; Tanks > 75 cubic meters	Citation is applicable to sources and should be added
47.	8/11/03	No. This is an editorial comment.	IV-E	S9	BAAQMD 8-5	Delete the following citations: 8-5-320.4.1, 8-5-320.4.2, and 8-5-320.4.3 8-5-405.1, 8-5-405.2, and 8-5-405.3	For consistency in approach, these subparagraphs all apply, therefore only the rolled up citations 8-5-320.4 and 8-5-405 should be included in the table.
48.	8/11/03	No	IV-E	S9	BAAQMD 8-5	Add the following citation: 8-5-322.6	Correct omission. Add applicable citation.
49.	8/11/03	No. This is an editorial comment.	IV-E	S9	40 CFR 60 Subpart Kb 60.112b(a)(1)	Change Regulation Title column to: “Standards for Volatile Organic Compounds (VOC); internal floating roof option”	Correct error
50.	8/11/03	Partial. Did not add 61.356(f)(3) Requirements for Performance Tests to IV-F and IV-Q or IV-T.	IV-F, Q, T, AI	S12, S25, S28, S67	40 CFR 61 Subpart FF	Add the following citations: 61.340(a) 61.349(c)(2) 61.355(i) 61.356(f)(3)	Complete the applicability path for these Benzene Waste NESHAP tanks abated by a thermal oxidizer or process heater.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
51.	8/11/03	Partial. Did not delete 61.356(a) or 61.356(h). Valero's position was that these two citations should be sitewide rather than at the individual source level. BAAQMD added 61.356(a) to IV-A (sitewide) and has included 61.356(h) in both IV-A (sitewide) and IV-AN (Fugitive components), but has not agreed to delete the requirements from the sources.	IV-F, Q, T, AI	S12, S25, S28, S67	40 CFR 61 Subpart FF	Delete the following citations: 61.349(c)(1) 61.356(a) 61.356(d) 61.356(f)(2) 61.356(f)(2)(i) 61.356(f)(2)(i)(A) 61.356(f)(2)(i)(C) 61.356(h) 61.357(d)(7) 61.357(d)(7)(iv) 61.357(d)(7)(iv)(A) 61.357(d)(7)(iv)(C) 61.357(d)(7)(iv)(G)	Delete citations that are applicable only to the control devices and not to the tanks (61.356(d)). Delete 61.356(h) and move it to the components table. Delete 61.356(f)(2) because site does not use this method. Delete all reporting as reporting is site wide rather than source-specific and the 61.357 citations are in Table IV-A (Site wide).
52.	8/11/03	Partial. Added II.31a, but did not add II.64a.	IV-G, AD, AF	S13, S59, S63	BAAQMD Condition 1240	Add permit conditions as follows: Part II.31a, Annual Vapor Pressure Analysis, Y Part II.64a, Limitations on material transferred to S15, Y	Permit conditions are applicable to sources and should be added. Part II.31a is called out in associated Section VII tables.
53.	8/11/03	Partial. Did not add 8-6-601.	IV-H, I, V (note: Table IV-V changed to IV-W)	S14, S15, S31	BAAQMD 8-6	Add the following citations with FE="Y": 8-6-502 Portable Hydrocarbon detector 8-6-601 Efficiency rate determination	Add portable hydrocarbon detector and efficiency rate determination method requirements because sources are subject to emission measurement requirements of 8-6-301 and 304.
54.	8/11/03	No	IV-H, I, K	S14, S15, S17	BAAQMD Condition 1240, Parts I.19a, I.19b, I.19c	Delete listed permit conditions from the controlled sources (loading racks).	These permit conditions are related to temperature excursions in the abatement device (A4). They apply only to the abatement device and not the controlled sources.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
55.	8/11/03	No	IV-J	S16	N/A	Change Title of Table from "S16, TRUCK LOADING RACKS, KEROSENE OR DISTILLATE OIL" to "S16, TRUCK LOADING RACK, HEAVY VACUUM GAS OIL"	Correct name of source
56.	8/11/03	No	IV-J, K	S16, S17	BAAQMD 8-6	Add header row for BAAQMD Regulation 8, Rule 6 Organic Compounds – Organic Liquid Bulk Terminals and Bulk Plants (2/2/94) And Add the following citations with FE = Y: 8-6-110 Exemption, Low Vapor Pressure Organic Liquids 8-6-503 Burden of Proof 8-6-604 Determination of Applicability	Add Regulation 8, Rule 6 and applicable citations because sources fall under the exemption for loading of low vapor pressure materials. Included citations for burden of proof recordkeeping and appropriate method for determining vapor pressure of organic materials.
57.	8/11/03	No	IV-M, N, O	S19, S20, S21	BAAQMD Condition #19329, Part 1	Change “Regulation 9, Rule 10” to “Regulation 2-9-303.4”	Correct to correspond with permit condition basis in Section VI. Correct error
58.	8/11/03	Partial. Added 9-10-504.1 to S19, but not to S20 and S21. Should be added since these sources are not subject to 9-10-504.2 (implied by rolled-up 9-10-504 citation). NA on SIP comment - SIP approval rescinded.	IV-M, N, O	S19, S20, S21	BAAQMD Regulation 9, Rule 10	Change the following: For all BAAQMD 9-10 citations, change Federally Enforceable (Y/N) to “Y” Add the following BAAQMD 9-10 citation: 9-10-504.1 Recordkeeping (FE=“Y”)	BAAQMD 9-10 is fully SIP approved (10/07/02) per 67 FR 62385. In 9-10-504, only subparagraph 9-10-504.1 is applicable to these sources. Subparagraph 9-10-504.2 is not applicable, therefore, it is not appropriate to list only the rolled up citation to 9-10-504.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
59.	8/11/03	Partial. Did not add 61.355(i), 61.356(j)(3)(i), and 61.356(j)(6).	IV-P	S24	40 CFR 61, Subpart FF	<p>Add “Y” to Federally Enforceable (Y/N) for all citations</p> <p>Add the following citations: 61.340(a) 61.343(a)(1)(ii) 61.349(a) 61.349(a)(1) 61.349(b) 61.349(c) 61.349(c)(2) 61.349(e) 61.349(f) 61.349(g) 61.349(h) 61.355(i) 61.356(d) 61.356(f)(1) 61.356(f)(3) 61.356(g) 61.356(j) 61.356(j)(1) 61.356(j)(2) 61.356(j)(3) 61.356(j)(3)(i) 61.356(j)(6)</p>	<p>Correct omission.</p> <p>Add 40 CFR 61 Subpart FF Benzene Wastewater NESHAP and all citations applicable to the S24 process heater abatement device for wastewater tanks and oil-water separators. Added for consistency in approach for abatement device applicability</p>
60.	8/11/03	No	IV- P	S24	BAAQMD 8-6	<p>Add header row for BAAQMD Regulation 8, Rule 6 Organic Liquid Bulk Terminals and Bulk Plants (2/2/94)</p> <p>And</p> <p>Add the following citation: 8-6-301 Bulk Terminal Limitations</p>	Add control requirements to abatement devices to make permit consistent.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
61.	8/11/03	No. Did not add recordkeeping and reporting requirements for 9-10-306.2 sources. NA on SIP comments. SIP approval.	IV- P	S24	BAAQMD Regulation 9, Rule 10	For all BAAQMD 9-10 citations, change Federally Enforceable (Y/N) to “Y” Add the following citations (all with FE = “Y”): 9-10-504 Recordkeeping Requirements 9-10-504.2 Annual tune-up records for 9-10-306.2 sources 9-10-505 Reporting Requirements 9-10-505.1 Report any violation of 9-10-306.2 within 96 hours	BAAQMD 9-10 is fully SIP approved (10/07/02) per 67 FR 62385. Add all applicable citations from BAAQMD 9-10.
62.	8/11/03	Partial. Did not add Part II.10.	IV-P	S24	BAAQMD Condition 1240	Add the following permit conditions: Part II.10 Requirement for control of S25 (Cumulative Increase) Part II.67 Requirement for control of S54 (Cumulative Increase) Part II.70 Requirement for control of S54 and destruction efficiency (Cumulative Increase, BACT)	S24 is one of the control sources listed in permit conditions. Correct omission.
63.	8/11/03	Partial. Only made requested change to Part II.43.	IV-P	S24	BAAQMD Condition 1240	Make the following changes: Part II.43, Add “for S3” prior to parentheses Part II.44, Add “for S3” prior to parentheses Part II.55, Add “for S5-8, S37, S38, S70” prior to parentheses Part II.56, Add “for S51-53, S60, S65” prior to parentheses Part II.57, Add “for S61, S62” prior to parentheses Part II.85, Add “for S66” prior to parentheses	Clarify controlled sources associated with each permit condition.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
64.	8/11/03	No, but also did not add combustion device citations from Subpart FF, so these sources can not be abated by combustion devices per the permit.	IV-R, S	S26, S27	NA	Change titles of tables as follows: Table IV-R: S26, Wastewater Tank, Abated by Carbon or Thermal Oxidizer or Process Heater Table IV-S: S27, Recovered Oil Tank – TK-12A, Abated by Carbon or Thermal Oxidizer or Process Heater	Consistency and clarification
65.	8/11/03	Partial. Did not add 61.349(a)(2)(i) or 61.349(a)(2)(i)(A) to IV-R. Did not add combustion device citations 61.354(c)(1), 61.354(c)(4), 61.356(j)(4), or 61.356(j)(6) to IV-R or IV-S.	IV-R, S	S26, S27	40 CFR 61 Subpart FF	Add the following citations: 61.340(a) 61.349(a)(2)(i) 61.349(a)(2)(i)(A) 61.349(c)(2) 61.354(c)(1) 61.354(c)(4) 61.355(i) 61.356(f)(3) 61.356(j)(4) 61.356(j)(6)	Complete the applicability path for these Benzene Waste NESHAP tanks abated by carbon or thermal oxidizer or process heater.
66.	8/11/03	No	IV-R, S	S26, S27	40 CFR 61 Subpart FF	Delete the following citations: 61.356(a) 61.356(d) 61.356(h) 61.357(d)(7) 61.357(d)(7)(iv) 61.357(d)(7)(iv)(I)	Delete citation 61.356(d) because it is applicable only to the control device and not the tank. Delete 61.356(h) and moved it to the components table (IV-AN). Delete all 61.357 citations because reports are all submitted on a site wide basis and these citations are in Table IV-A rather than individual source tables.
67.	8/11/03	No	IV-U (renumbered as IV-V)	S30	BAAQMD Condition 1240, Parts III.7, III.8	Change “(Synthetic minor condition)” to “(Cumulative Increase)” See comment at VI for these permit conditions to change permit condition language.	Correct error.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
68.	8/11/03	No.	IV-Y, Z	S39, S40	40 CFR 63 Subpart CC	<p>Add a header row for: 40 CFR 63 Subpart CC, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries (06/12/1996)</p> <p>Add the following citations, all with FE = "Y": 40 CFR 63.640(c)(2) Applicability and Designation of Storage Vessels 40 CFR 63.646(b)(1) Storage Vessel Provisions--Determine stored liquid % OHAP for group determination 40 CFR 63.646(b)(2) Storage Vessel Provisions--Determine stored liquid % OHAP-method 18 to resolve disputes 40 CFR 63.654(h)(6) Reporting and Recordkeeping Requirements--Other reports--Determination of Applicability 40 CFR 63.654(h)(6)(ii) Reporting and Recordkeeping Requirements--Other reports--Determination of Applicability 40 CFR 63.654(i)(1) Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels 40 CFR 63.654(i)(1)(i) Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels 40 CFR 63.654(i)(1)(iv) Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels</p>	These tanks are MACT Group 2 storage vessels and are subject to MACT recordkeeping requirements. Correct omission
69.	8/11/03	No	IV-AA	S41	BAAQMD 8-8	<p>Add the following citation with FE="Y": 8-8-602 Determination of Emissions</p>	Add method for determination of emissions because source is subject to 8-8-307.2, which is referenced in 8-8-602.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
70.	8/11/03	Partial. Changes made to AA (S41). Partial changes made to AH (S66). Did not add 61.349(c)(2) "Demonstrate control device compliance with performance tests" and delete 61.349(c)(1) "Demonstrate control device compliance with engineering calculations". Also deleted 61.354(c)(1) "Temperature monitoring requirements for thermal oxidizer".	IV-AA, AH	S41, S66	40 CFR 61 Subpart FF	Add the following citations: 61.340(a) 61.349(c)(2) 61.354(c)(4) 61.355(i) 61.356(f) 61.356(f)(1) 61.356(f)(3) 61.356(g) 61.356(j) 61.356(j)(1) 61.356(j)(2) 61.356(j)(3) 61.356(j)(3)(i) 61.356(j)(4) 61.356(j)(6)	Add 40 CFR 61 Subpart FF Benzene Wastewater NESHAP citations applicable to the S41 Wemco Hydrotreater and S66 Oil Water Separator
71.	8/11/03	Partial. Same comments as previous comment for 61FF comments on IV-AA and AH.	IV-AA, AH	S41, S66	40 CFR 61 Subpart FF	Delete the following citations: 61.349(c)(1) 61.356(d)	Delete 61.356(d) because it applies only to the control device and not to the source. Delete other non-applicable citations

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
72.	8/11/03	Partial. Did not delete 61.356(a) or 61.356(h). Valero's position was that these two citations should be sitewide rather than at the individual source level. BAAQMD added 61.356(a) to IV-A (sitewide) and has included 61.356(h) in both IV-A (sitewide) and IV-AN (Fugitive components), but has not agreed to delete the requirements from the sources.	IV-AI	S67	40 CFR 61 Subpart FF	Delete the following citations: 61.349(c)(1) 61.356(a) 61.356(d) 61.356(f)(2) 61.356(f)(2)(i) 61.356(f)(2)(i)(A) 61.356(h) 61.357(d)(7) 61.357(d)(7)(iv) 61.357(d)(7)(iv)(A) 61.357(d)(7)(iv)(C)	Delete citations that are applicable only to the control devices and not to the tanks (61.356(d)). Delete other non-applicable citations.
73.	8/11/03	No	IV-AO	A4	BAAQMD Condition 1240	Modify the following permit conditions: Part II.6, Add "for S18" prior to parentheses Part II.60, Add "for S14" prior to parentheses Part II.63, Change "Requirement for vapor recovery and abatement" to "Destruction efficiency requirements for S15" Part II.68, Add "for S17" prior to parentheses	Clarify applicability of each citation to associated controlled source. Correct inconsistency in descriptions.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
74.	8/11/03	Partial. Did not delete incorrect 61.356(f)(2)(A) NOTE: this was an error in the table and should have been 61.356(f)(2)(i)(A). Did not delete sitewide applicable citations 61.357(d)(7), 61.357(d)(7)(iv), 61.357(d)(7)(iv)(A)	IV-AP	A31	40 CFR 61 Subpart FF	Delete only the following citations: 61.349(c)(1) 61.356(f)(2) 61.356(f)(2)(i) 61.356(f)(2)(i)(A) 61.356(f)(2)(i)(C) 61.357(d)(7) 61.357(d)(7)(iv) 61.357(d)(7)(iv)(A)	Delete non-applicable citations and update Statement of Basis
75.	8/11/03	Partial. Part II.10 was added twice in two separate locations. Delete the incorrect duplicate located after Part I.6.	IV-AP	A31	BAAQMD Condition 1240	Add the following permit conditions: Part II.10 Requirement for control of S25 (Cumulative Increase) Part II.66 Requirement for control of S31 (Cumulative Increase) Part II.67 Requirement for control of S54 (Cumulative Increase)	A31 is one of the control sources listed in permit conditions. Add for consistency with other permit conditions in permit.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
76.	8/11/03	Partial. Did not delete “refinery” in Parts I.11, I.12, I.13, or III.3. Added “and” to Part I.15 indicating limit on use of both refinery and asphalt plant wastewater for dust control (also inconsistent with Table IV-A). Added “used at the asphalt plant” after “refinery fuel gas” in Part III.9.d.	VI	N/A	1240.I.5, 1240.I.6, 1240.I.11, 1240.I.12, 1240.I.13, 1240.I.14, 1240.I.15, 1240.III.2, <u>1240.III.3.</u> 1240.III.9.d.	Change “refinery” to “Asphalt Plant” each time it occurs in each paragraph	To distinguish Valero Benicia Asphalt Plant from Valero Refinery. <u>This change is particularly important to distinguish between the Asphalt Plant and Refinery fuel gas systems in Part III.3.</u>
77.	8/11/03	No	VI	S16	Source description before 1240.II.90	Change name of S16 from "Kerosene and Heavy Vacuum Gas Oil Loading Rack" to "Heavy Vacuum Gas Oil Loading Rack"	Correct name and clarify function of source S16
78.	8/11/03	No	VI	S30	1240.III.7, 1240.III.8	Change “(Basis: Synthetic minor condition)” to “(Basis: Cumulative Increase)”	Correct error.
79.	8/11/03	No	VIII		BAAQMD 1-522	Add the following Applicable Requirement: BAAQMD 1-522 Description of Requirement: Continuous Emission monitoring Acceptable Test Methods: Manual of Procedures, Volume V	Add applicable test methods. Update for permit modifications.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
80.	8/11/03	No	VIII		BAAQMD 8-5-306	<p>Replace the Description of Requirement with the following:</p> <p>Abatement efficiency of 95% by weight of Approved Emission Control System</p> <p>Replace the Acceptable Test Methods with the following:</p> <p>Manual of Procedures, Volume IV, ST-4, Bulk Gasoline Loading Terminals. * NOTE: This source test has been deleted without replacement from the MOP, but is still called out in the regulation.</p> <p>See Attachment A.2</p>	Correct the requirement and test methods for 8-5-306. Correct for current version of BAAQMD 8-5
81.	8/11/03	Partial. Added separate row for 8-5-303.2. Did not add 8-5-306 row with fugitive method. Did not add 8-5-307 (OK – no affected sources)	VIII		BAAQMD 8-5-320.3	<p>Replace the Applicable Requirement with the following:</p> <p>BAAQMD 8-5-303.2, 8-5-306, 8-5-307</p> <p>Replace the Description of Requirement with the following:</p> <p>Organic compound leak concentration</p> <p>See Attachment A.2.</p>	<p>Correct the applicable requirement (8-5-320.3 was the paragraph reference in the previous version of BAAQMD 8-5 for PV valves. It is now 8-5-303.2).</p> <p>Add other BAAQMD 8-5 citations with gas tight (fugitive) requirements. Correct for current version of BAAQMD 8-5</p>

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
82.	8/11/03	No.	VIII		BAAQMD 8-5-328.1.2	Add "8-5-603.2" to the Applicable Requirement and delete 8-5-603.2 line a few rows down. Replace the Description of Requirement with the following: Abatement efficiency of 90% by weight of Approved Emission Control System See Attachment A.2.	Consolidate citations with the same test method.
83.	8/11/03	No.	VIII		NEW ROW	Add the following new row: Applicable Requirement: BAAQMD 8-5-328.1.2 Description of Requirement: Organic concentration in tank < 10,000 ppm as methane after degassing Acceptable Test Methods: EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks See Attachment A.2	Paragraph 8-5-328.1.2 has two test methods. The first test method for 8-5-328.1.2 is the source test to verify the 90% abatement efficiency requirement. This new row is the second test method for 8-5-328.1.2, which is the Method 21 portable hydrocarbon detector used during each degassing to verify that the tank has been degassed to <10,000 ppm. Section VIII needs to include both test methods.
84.	8/11/03	No. See previous comments on 8-5-328.1.2	VIII		BAAQMD 8-5-603.2	Delete this row See Attachment A.2	Delete duplicate information (calls out source test for 8-5-328.1.2 abatement efficiency)
85.	8/11/03	No.	VIII		BAAQMD 8-6-603	Delete this row	Permit changed by replacing 8-6-603 with 8-6-604 because method specified in 8-6-603 does not give accurate values for asphalt materials. The appropriate test method has been added for 8-6-604.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
86.	8/11/03	No	VIII		BAAQMD 8-6-604	<p>Add the following:</p> <p>Applicable Requirement: BAAQMD 8-6-604</p> <p>Description of Requirement: Determination of TVP</p> <p>Acceptable Test Methods: EPA-450/3-87-026 (Exhibit A-2 in Appendix A or Appendix D)</p> <p>Or</p> <p>Standard reference texts</p> <p>Or</p> <p>Raoult's Law of Partial Pressures (for liquid mixtures) as defined in 8-6-205 or ASTM Method D 2879-83</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.
87.	8/11/03	No, but added this method to Section VII	VIII		BAAQMD 9-1-301, 9-2-301	<p>Add the following:</p> <p>Applicable Requirement: BAAQMD 9-1-301, 9-2-301</p> <p>Description of Requirement: Ground Level Monitoring</p> <p>Acceptable Test Methods: Manual of Procedures, Volume VI, Section 1, Area Monitoring</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
88.	8/11/03	No	VIII		BAAQMD 9-1-501, 9-2-501	Add the following: Applicable Requirement: BAAQMD 9-1-501, 9-2-501 Description of Requirement: Continuous Monitoring Acceptable Test Methods: Manual of Procedures, Volume V, Continuous Monitoring See Attachment A.2	Add applicable test methods. Update for permit modifications.
89.	8/11/03	No	VIII		BAAQMD 9-10-306.2	Add the following: Applicable Requirement: BAAQMD 9-10-306.2 Description of Requirement: Small unit tune-up requirements Acceptable Test Methods: Manual of Procedures, Volume 1, Chapter 5, Boiler, Steam Generator, and Process Heater Tuning Procedure See Attachment A.2	Add applicable test methods. Update for permit modifications.
90.	8/11/03	No	VIII		40 CFR 60.112b(a)(3)(ii)	Add the following: Applicable Requirement: 40 CFR 60.112b(a)(3)(ii) Description of Requirement: NSPS Subpart Kb Closed Vent System Performance (95% efficiency) Acceptable Test Methods: 40 CFR 60 Subpart Kb 60.113b(c) Testing and Procedures See Attachment A.2	Add applicable test methods. Update for permit modifications.

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Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
91.	8/11/03	No	VIII		40 CFR 60.113b(b)(4)(i)	Add the following: Applicable Requirement: 40 CFR 60.113b(b)(4)(i) Description of Requirement: NSPS Subpart Kb External Floating Roof Tank primary rim seal gap measurement Acceptable Test Methods: 40 CFR 60 Subpart Kb 60.113b(b)(1) through 60.113b(b)(3) Testing and Procedures See Attachment A.2	Add applicable test methods. Update for permit modifications.
92.	8/11/03	No	VIII		40 CFR 60.113b(b)(4)(ii)	Add the following: Applicable Requirement: 40 CFR 60.113b(b)(4)(ii) Description of Requirement: NSPS Subpart Kb External Floating Roof Tank secondary rim seal gap measurement Acceptable Test Methods: 40 CFR 60 Subpart Kb 60.113b(b)(1) through 60.113b(b)(3) Testing and Procedures See Attachment A.2	Add applicable test methods. Update for permit modifications.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
93.	8/11/03	No	VIII		40 CFR 60.485(d)	<p>Add the following:</p> <p>Applicable Requirement: 40 CFR 60.485(d) Description of Requirement: Determine % VOC content in process fluid Acceptable Test Methods: ASTM E260-73, 91, or 96 OR ASTM E168-67, 77, or 92 OR ASTM E169-63, 77, or 93</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.
94.	8/11/03	No	VIII		40 CFR 60.485(e)	<p>Add the following:</p> <p>Applicable Requirement: 40 CFR 60.485(e) Description of Requirement: Demonstrate equipment is in light liquid service Acceptable Test Methods: ASTM D2879-83, 96, or 97 (Vapor pressure)</p> <p>Or</p> <p>Standard reference texts</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
95.	8/11/03	No, but added 61.349(a)(2)(i) and the test method for 61.349(a)(2)(i)(B). APU uses 61.349(a)(2)(i)(A) instead	VIII		40 CFR 61.349(a)(2)(i)(A)	Add the following: Applicable Requirement: 40 CFR 61.349(a)(2)(i)(A) Description of Requirement: Enclosed Combustion Control Device Requirements, > 95% reduction Acceptable Test Methods: 40 CFR 61 Subpart FF 61.355 Test Methods, Procedures, and Compliance Provisions	Add applicable test methods. Update for permit modifications.
96.	8/11/03	No	VIII		40 CFR 61.342(e)(2)(i)	Add the following: Applicable Requirement: 40 CFR 61.342(e)(2)(i) Description of Requirement: Uncontrolled Benzene Wastewater Limit Acceptable Test Methods: 40 CFR 61 Subpart FF 61.355 Test Methods, Procedures, and Compliance Provisions See Attachment A.2	Add applicable test methods. Update for permit modifications.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
97.	8/11/03	No	VIII		40 CFR 61.355(c)(3)	<p>Add the following:</p> <p>Applicable Requirement: 40 CFR 61.355(c)(3) Description of Requirement: Measure benzene concentration in waste streams Acceptable Test Methods: From “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846: (1) Method 8020, Aromatic Volatile Organics, (2) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series (3) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics (4) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
98.	8/11/03	Partial. Did not add all requested test methods; just added Method 18	VIII		40 CFR 61.355(i)	<p>Add the following:</p> <p>Applicable Requirement: 40 CFR 61.355(i) Description of Requirement: Demonstrate compliance of a control device with a performance test Acceptable Test Methods: 40 CFR 60, Appendix A, Method 1 or 1A; 40 CFR 60, Appendix A, Method 2, 2A, 2C, or 2D; 40 CFR 60, Appendix A, Method 18</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.
99.	8/11/03	Complete, but missing some descriptions.	VIII		BAAQMD Condition #1240, Parts II.44, II.53, II.86	<p>Add the following:</p> <p>Applicable Requirement: BAAQMD Condition #1240, Parts II, II.44, II.53, II.86 Description of Requirement: No detectable fugitive organic emissions > 100 ppmv measured as total organic compounds at vapor recovery system (S24 and A31) Acceptable Test Methods: EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks</p> <p>See Attachment A.2</p>	Add applicable test methods. Update for permit modifications.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
100.	8/11/03	No	IX B-1	S1, S2, S4, S23		<p>Reinstate the permit shield for BAAQMD 8-5 inspections of primary and zero-gap secondary seals in external floating roof tanks except change as follows to make it applicable to the 10/27/02 version of BAAQMD 8-5:</p> <p>Subsumed Requirement Citation: BAAQMD 8-5-401.1, 8-5-401.2</p> <p>Title or Description: Inspection of entire circumference of each primary and secondary seal for compliance with 8-5-321 and 8-5-322 twice per calendar year at 4 to 8 month intervals and any time a seal is installed or repaired (8-5-401.1). Inspection of tank fittings for compliance with 8-5-320 twice per calendar year at 4 to 8 month intervals (8-5-401.2).</p> <p>Streamlined Requirements: BAAQMD Condition #1240, Part II.13</p> <p>Title or Description: Quarterly inspection of the primary seals, secondary seals, and fittings including all items required by Regulation 8-5.</p>	Deleted Permit Shield of BAAQMD Condition 1240.II.13 for BAAQMD 8-5 inspections of primary and zero-gap secondary seals because the permit condition referenced the shielded citations (as documented in the Statement of Basis). However, the permit condition has now been changed so that the shielded citations are not referenced.

Attachment A
Comments on Permit for Facility A0901 – Sections II, III, IV, VI, VIII, and IX (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
101.	8/11/03	No	IX-B	Several	Several	Add new Table IX-B Permit Shields for Subsumed Requirements as shown in Attachment G.	Add permit shields for test methods subsumed by the continuous temperature monitoring requirements of BAAQMD Condition 1240.II.58b for S24 and A31 and Condition 1240.I.19 for A4.

Attachment A.1
Table IV-L Regulation 8, Rule 10 Revisions – Facility A0901

Table IV - L
Source-specific Applicable Requirements
S18, CRUDE UNIT

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 10	Organic Compound – Process Vessel Depressurization (1/21/2004)		
8-10-301	Process Vessel Depressurizing.	N	
8-10-302	Opening of Process Vessels	N	
8-10-302.1	organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere	N	7/1/2004
8-10-302.2	Organic compound concentration of a refinery process vessel may exceed 10,000 ppm prior to release to atmosphere provided total number of such vessels during 5-year period does not exceed 10%	N	7/1/2004
8-10-401	Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004.	N	
8-10-501	Monitoring prior to and during process vessel opening	N	
8-10-502	Concentration measurement using EPA Method 21	N	
8-10-503	Recordkeeping	N	
8-10-601	Monitoring Procedures	N	
SIP Regulation 8, Rule 10	Organic Compound – Process Vessel Depressurization (7/20/83)		
8-10-301	Process Vessel Depressurizing.	Y	
8-10-301.1	recovery to the fuel gas system	Y	
8-10-301.2	combustion at a firebox or incinerator	Y	
8-10-301.3	combustion at a flare	Y	
8-10-301.4	containment such that emissions to atmosphere do not occur	Y	
8-10-401	Turnaround Records.	Y	
8-10-401.1	date of depressurization event	Y	
8-10-401.2	approximate vessel hydrocarbon concentration when emissions to atmosphere begin	Y	
8-10-401.3	approximate quantity of POC emissions to atmosphere	Y	
40 CFR 63	National Emission Standards for Hazardous Pollutants for		

Attachment A.1
Table IV-L Regulation 8, Rule 10 Revisions – Facility A0901 (continued)

Table IV - L
Source-specific Applicable Requirements
S18, CRUDE UNIT

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Subpart CC	Petroleum Refining (8/18/95)		
63.643(a)	Miscellaneous Process Vent Provisions	Y	
63.643(a)(2)	Control device requirements	Y	
63.643(b)	Boiler or process heater requirements	Y	
63.644(a)	Monitoring Provisions for Miscellaneous Process Vents	Y	
63.644(a)(3)	boiler or process heater in which vent streams are introduced into the flame zone	Y	
63.645(a)	Demonstrations of compliance	Y	
63.645(d)	Replacement of 63.116(b)(2) with 63.645(d)(2)	Y	
63.645(d)(2)	Boiler or process heater in which all vent streams introduced into flame zone	Y	
63.645(i)	Test Methods and Procedures for Miscellaneous Process-- Compliance determination for visible emissions	Y	
BAAQMD Condition #1240			
Part I.1	Annual Throughput Limit (Cumulative Increase, Toxics, Offsets)	Y	
Part I.2	Daily Throughput Limit (Cumulative Increase, Toxics)	Y	
Part I.3	Control Requirement (Cumulative Increase, Toxics)	Y	
Part I.4	Recordkeeping (Cumulative Increase)	Y	
Part I.7	Mechanical seals, packing, and compressor seals (Cumulative Increase)	Y	
Part I.14	Facility Limits (Cumulative Increase)	Y	
Part I.16b	Source Test Requirements for POC destruction (Cumulative Increase, Toxics)	Y	
Part I.17	Source Test Requirement (BACT, Cumulative Increase, Toxics)	Y	
Part I.18	Cumulative Increase Monitoring (Cumulative Increase)	Y	
Part I.18a	NMHC and NOx estimates (Cumulative Increase)	Y	
Part I.18b	Estimates of NMHC emissions from sources of fugitive emissions (Cumulative Increase)	Y	
Part I.18j	Summary of emissions estimates and reports of non-compliance (Cumulative Increase)	Y	
Part II.6	Safety Relief System (Cumulative Increase)	Y	

**Attachment A.2
Table VIII Test Methods Revisions – Facility A0901**

**Table VIII
Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-303.1	Ringelmann No. 2 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling or EPA Reference Method 5 (40 CFR 60, Appendix A), Determination of Particulate Emissions from Stationary Sources
BAAQMD 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling or EPA Reference Method 5 (40 CFR 60, Appendix A), Determination of Particulate Emissions from Stationary Sources
BAAQMD 8-5-117	Exemption, Low Vapor Pressure	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks, if organic compound is not listed in Table I
BAAQMD 8-5-301	Storage Tanks Control Requirements	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks, if organic compound is not listed in Table I
BAAQMD 8-5-303.2	Pressure vacuum leak concentration	EPA Reference Method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-5-306	Abatement efficiency of 95% by weight of Approved Emission Control System	Manual of Procedures, Volume IV, ST-4, Bulk Gasoline Distribution Facility * NOTE: This source test has been deleted without replacement from the MOP, but is still called out in the regulation.
BAAQMD 8-5-306	Organic compound leak concentration	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-5-307	Organic compound leak concentration	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-5-328.1.2 8-5-603.2	Abatement efficiency of 90% by weight of Approved Emission Control System	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling
BAAQMD 8-5-328.1.2	Organic concentration in tank < 10,000 ppm as methane after degassing	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-5-501.1	Records	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks, if organic compound is not listed in Table I

Attachment A.2
Table VIII Test Methods Revisions – Facility A0901 (continued)

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 8-5-605	Pressure-Vacuum Valve Gas Tight Determination	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-6-301	Bulk Terminal Limitations	Manual of Procedures, Volume IV, ST-3, Bulk Gasoline Transfer Plants or ST-34, Bulk and Marine Loading Terminals, Vapor Recovery Units Refrigeration Unit or Carbon Adsorption Unit
BAAQMD 8-6-604	Determination of TVP	EPA-450/3-87-026 (Exhibit A-2 in Appendix A or Appendix D) Or Standard reference texts Or Raoult's Law of Partial Pressures (for liquid mixtures) as defined in 8-6-205 or ASTM Method D 2879-83
BAAQMD 8-8-114	Exemption, Bypassed Oil-Water Separator or Air Flotation Influent	Manual of Procedures, Volume III, ST-3, Lab Method 33, Determination of Dissolved Critical Volatile Organic Compounds in Wastewater Separators
BAAQMD 8-8-301.3	95% combined collection and destruction efficiency requirement	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling, or Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, or Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
BAAQMD 8-8-303	Gauging and Sampling Devices	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-8-307.2	70% combined collection and destruction efficiency requirement	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling, or Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, or Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
BAAQMD 8-8-601	Wastewater Analysis for Critical OCs	Manual of Procedures, Volume III, ST-3, Lab Method 33, Determination of Dissolved Critical Volatile Organic Compounds in Wastewater Separators
BAAQMD 8-15-305	Prohibition of Manufacture and Sale	ASTM Distillation Method D402, or ASTM Distillation Method D244

Attachment A.2
Table VIII Test Methods Revisions – Facility A0901 (continued)

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 8-18-301, 8-18-302, 8-18-303, 8-18-304, 8-18-305	Leak inspection procedures	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD 8-18-306	Determination of mass emissions	EPA Protocol for equipment leak emission estimates, Chapter 4, Mass Emission Sampling, (EPA-453/R-95-017) November 1995
BAAQMD 8-28-304.2	95% control requirement	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling, or Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, or Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
BAAQMD 9-1-301, 9-2-301	Ground Level Monitoring	Manual of Procedures, Volume VI, Section 1, Area Monitoring
BAAQMD 9-1-304	Fuel Sulfur Content	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oil
BAAQMD 9-1-313.2	Sulfur Removal and Recovery System	Manual of Procedures, Volume III, Method 25, Determination of Sulfur in Effluents or equivalent method approved by APCO
SIP 9-1-313.2	Sulfur Removal and Recovery System	Manual of Procedures, Volume III, Method 25, Determination of Sulfur in Effluents or equivalent method approved by APCO
BAAQMD 9-1-501, 9-2-501	Continuous Monitoring	Manual of Procedures, Volume V, Continuous Monitoring
BAAQMD 9-10-301	Emission Limit for Facility, NOx: 0.033 lb NOx/MMBTU	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-10-303	Emission Limit For Facility (Federal Requirements)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-10-305	CO emission limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-10-306.2	Small unit tune-up requirements	Manual of Procedures, Volume I, Chapter 5, Boiler, Steam Generator, and Process Heater Tuning Procedure
BAAQMD 9-10-601	Determination of Nitrogen Oxides	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-10-602	Determination of Carbon Monoxide and Stack-Gas Oxygen	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
40 CFR 60 Subpart Kb	NSPS Subpart Kb for Tables (08/11/1989)	
40 CFR 60.112b(a)	Vapor Pressure	ASTM Method D2879-83, 96, or 97. Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.
40 CFR 60.112b(a)(3) (i)	Standard for Volatile Organic Compounds (VOC); Closed vent system and control device no detectable emissions	EPA Reference Method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks

Attachment A.2
Table VIII Test Methods Revisions – Facility A0901 (continued)

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 60.112b(a)(3)(ii)	NSPS Subpart Kb Closed Vent System Performance (95% efficiency)	40 CFR 60 Subpart Kb 60.113b(c) Testing and Procedures
40 CFR 60.113b(b)(4)(i)	NSPS Subpart Kb External Floating Roof Tank primary rim seal gap measurement	40 CFR 60 Subpart Kb 60.113b(b)(1) through 60.113b(b)(3) Testing and Procedures
40 CFR 60.113b(b)(4)(ii)	NSPS Subpart Kb External Floating Roof Tank secondary rim seal gap measurement	40 CFR 60 Subpart Kb 60.113b(b)(1) through 60.113b(b)(3) Testing and Procedures
40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries	
40 CFR 60.104(a)(1)	fuel gas H ₂ S concentration limited to 230 mg/dscm (0.10 gr/dscf), some exceptions	EPA Method 11, Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries and 40 CFR 60 Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring Systems in Stationary Sources.
40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks (Fugitive Emission Sources) (10/18/83)	
Subpart VV 40 CFR 60.482-2(b)(1), 60.482-7(b), 60.482-8(b), 60.482-10 (g)	Leak inspection procedures	60 Subpart VV, 40 CFR 60.485(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
Subpart VV 40 CFR 60.482-2(b)(2), 60.482-8(a)	Visual inspection	60 Subpart VV, 40 CFR 60.485(b)
Subpart VV 40 CFR 60.482-2(e), 60.482-4(a), 60.482-4(b), 60.482-7(f)	Leak inspection procedures	60 Subpart VV, 40 CFR 60.485(c): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
40 CFR 60.485(d)	Determine % VOC content in process fluid	ASTM E260-73, 91, or 96 OR ASTM E168-67, 77, or 92 OR ASTM E169-63, 77, or 93
40 CFR 60.485(e)	Demonstrate equipment is in light liquid service	ASTM D2879-83, 96, or 97 (Vapor pressure) Or Standard reference texts
Subpart VV 40 CFR 60.483 and BAAQMD 8-18-404.1	Leak inspection procedures	60 Subpart VV, 40 CFR 60.485(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
40 CFR 6 Subpart FF	National Emission Standards for Benzene Waste Operations	

Attachment A.2
Table VIII Test Methods Revisions – Facility A0901 (continued)

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 61.342(e)(2)(i)	Uncontrolled Benzene Wastewater Limit	40 CFR 61 Subpart FF 61.355 Test Methods, Procedures, and Compliance Provisions
40 CFR 61.343(a)(1)(i)(A)	Standards: Tanks; Fixed Roof—Fugitive emissions less than 500 ppmv	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
61.345(a)(1)(i)	Standards: Containers--Covers and Openings, no detectable emissions	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
61.347(a)(1)(i)(A)	Standards: Oil Water Separators	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
61.349(a)(1)(i)	Standards: Closed-vent systems and Control Devices—Closed vent system-no detectable emission \geq 500 ppmv, annual inspection	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
61.349(a)(2)(i)	Standards: Closed-Vent Systems and Control Devices; Enclosed combustion device requirements	EPA reference method 18 (40 CFR 60, Appendix A), Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
61.349(a)(2)(i)(A)	Enclosed combustion Control Device Requirements, $>95\%$ Reduction	40 CFR 61, Subpart FF 61.355 Test Methods, Procedures, and Compliance Provisions
61.349(a)(2)(ii)	Controlled by vapor recovery: 95% VOC or 98% benzene control efficiency.	EPA reference method 18 (40 CFR 60, Appendix A), Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
40 CFR 61.355(c)(3)	Measure benzene concentration in waste streams	“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846: (1) Method 8020, Aromatic Volatile Organics, (2) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series (3) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique
40 CFR 61.355(i)	Demonstrate compliance of a control device with a performance test	40 CFR 60, Appendix A, Method 1 or 1A; 40 CFR 60, Appendix A, Method 2, 2A, 2C, or 2D; 40 CFR 60, Appendix A, Method 18
61.355(h)	Compliance-no detectable emissions	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
61.355(i)	Performance test procedures	EPA reference method 18 (40 CFR 60, Appendix A), Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
BAAQMD Condition 1240, part II.31a	1.5 psia requirement	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks
BAAQMD Condition 1240, part II.32d	No detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks

**Attachment A.2
Table VIII Test Methods Revisions – Facility A0901 (continued)**

**Table VIII
Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition 1240, part II.44	No detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD Condition 1240, part II.53	No detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
BAAQMD Condition 1240, part II.86	No detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks

Attachment B
Comments on Permit for Facility A0901 – Section VII

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
1.	4/14/04	NEW COMMENT	VII-E	S9	VOC	BAAQMD 8-5-322.1	<p>Make the following changes in this monitoring requirement for the IFR semiannual visual inspection through the viewports:</p> <p>Citation of Limit: BAAQMD 8-5-305.2, 8-5-305.3, 8-5-320.3.2, 8-5-322.1</p> <p>Limit: No visual gaps in outermost seal, or inaccessible tank fittings, or viewports. No holes, tears or openings in outermost seal fabric.</p> <p>Monitoring Type: Visual inspection</p>	<p>Because this is an internal floating roof tank, the outermost seal which is the secondary seal, as well as any inaccessible tank fittings are to be inspected semi-annually by a visual inspection in accordance with 8-5-402.2. There is no semiannual requirement for a “secondary seal inspection” as stated in the Permit for this monitoring requirement.</p>
2.	4/14/04	NEW COMMENT	VII-E	S9	VOC	BAAQMD 8-5-320.4.3	<p>Make the following changes in this monitoring requirement for adding tank fitting gaps to the secondary seal gaps:</p> <p>Monitoring Requirement Citation: 8-5-402.1</p> <p>Monitoring Frequency: P/every 10 years</p> <p>Monitoring Type: Secondary seal inspection</p>	<p>Secondary seal gaps are only measured every 10 years, so this requirement to add fitting gaps is only done every 10 years.</p>

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
3.	4/14/04	NEW COMMENT	VII-F, Q, R, S, AH	S12, S25, S28, S26, S27, S67	VOC	40 CFR 61.343(a)(1)(B)	<p>Make the following corrections:</p> <p>Change Citation of Limit from 40 CFR 61.343(a)(1)(B) to 40 CFR 61.343(a)(1)(i)(B)</p> <p>Change Monitoring Requirement Citation from 40 CFR 61.353(c) to 40 CFR 61.343(c)</p>	Correct errors made when incorporating previous requested change.
4.	4/14/04 8/11/03	Partial. Conditions were added but not numbered correctly in all places: In Table VII-H, change Parts 1240 Part I.59a and b to Part II.59a and b. In Table VII-I, change Parts 1240 Part I.62a and b to Part II.62a and b.	VII-H, I, V	S14, S15, S31		Condition 1240, Parts II.59a and b, Parts II.62a and b, Parts 72a and b	<p>Add the following limit:</p> <p>Type of Limit: VOC Citation of Limit: BAAQMD 8-6-306 FE Y/N: Y Limit: Vapor tight organic liquid delivery and loading equipment Monitoring Requirement Citation: BAAQMD 8-6-502 Monitoring Frequency: P/E Monitoring Type: Portable hydrocarbon detector (EPA Method 21)</p>	Add applicable requirements. Correct omission
5.	4/14/04	NEW COMMENT	VII-L	S18	VOC	Reg 8, Rule 10	Make the changes shown in Attachment B.1 to modify Regulation 8, Rule 10 applicability and add SIP 8-10 applicability in Table VII-L, S18 Crude Unit.	BAAQMD recently adopted new version of Regulation 8, Rule 10 Process Vessel Depressurization.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
6.	4/14/04	NEW COMMENT	VII-M, N, O	S19 S20 S21	NOx, CO, and O2	Condition 20617	Replace Condition “20617” with “21233”. Note that the remainder of these comments continues to refer to Condition 20617 only for clarity in incorporating accepted revisions.	Assign the NOx Box permit conditions in the Valero refinery and asphalt plant Title V permits the same number, Condition 21233. Consistent with the numbering approach used for the ACP permit condition, which is Condition 19329 in both facility permits.
7.	4/14/04	NEW COMMENT	VII-M	S19	NOx and CO	Condition 1240, 20617 and BAAQMD 9-10-502	Replace “every six months” with SA as monitoring frequency.	Consistency with Section VII instructions for monitoring frequency abbreviations
8.	4/14/04	NEW COMMENT	VII-M	S19	NOx	BAAQMD 9-10-301	Add Part “7.a.2” to Condition 20617 for the SA source testing requirement.	Clarifies that this subpart of Condition 20617 applies to this source.
9.	4/14/04	NEW COMMENT	VII-M	S19	NOx	BAAQMD 9-10-301	Add Part “1” to Condition 20617 for the daily emission calculations requirement.	Clarifies that this part of Condition 20617 is the part that requires daily emission calculations.
10.	4/14/04	NEW COMMENT	VII-M	S19	O2	Condition 20617, Part 12	Change Part 12 to Part 5. Change future effective date from 6/1/04 to 9/1/04. Change monitoring frequency from P/H to C.	Condition parts have been renumbered in the Rev 1 version of Condition 20617. Correct for consistency with Section VI permit condition language. Correction for consistency with continuous O2 monitor requirements of Conditions 1240 Part I.10 and 20617, Part 2.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
11.	4/14/04	NEW COMMENT	VII-M	S19	CO	BAAQMD 9-10-305	Change Condition 1240, Part 1.16a to Condition 20617, Part 7.a.2.	Condition 1240, Part I.16.a should be modified to delete the language referring to source testing to demonstrate compliance with the NOx and CO limits of Regulation 9, Rule 10. This language is redundant with Condition 20617, Part 7.a.2. This change is consistent with the Regulation 9, Rule 10 NOx testing requirements in Table VII-M. Condition 1240, Part I.16.a is not referenced as the Monitoring Requirement Citation, 9-10-502 and Condition 20617.
12.	4/14/04	NEW COMMENT	VII-M	S19	SO2	Condition 1240, Part III.3	Delete this row.	The fuel gas H2S concentration of 163 ppmv is not associated with this permit condition. Condition 1240, Part III.3 has a 10 ppmv fuel gas H2S limit.
13.	4/14/04	NEW COMMENT	VII-M	S19	SO2	Condition 1240, Part I.12 (second row, when any vessel is in port)	Change the Citation of Limit from Condition 1240 Part I.12 to Part III.3.	This is the correct citation for the 10 ppmv H2S fuel gas limit while vessels are in port for loading operations.
14.	4/14/04	NEW COMMENT	VII-N, O	S20 S21	NOx	BAAQMD 9-10-301	Add Part “7.a.1” to Condition 20617 for the SA source testing requirement.	Clarifies that this subpart of Condition 20617 applies to this source.
15.	4/14/04	NEW COMMENT	VII-N, O	S20 S21	NOx	BAAQMD 9-10-301	Replace Condition 20617 Parts 1, 2, and 3” with “Condition 20617, Part 1” for the daily emission calculations requirement.	Clarifies that this part of Condition 20617 is the only part that requires daily emission calculations.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
16.	4/14/04	NEW COMMENT	VII-N, O	S20 S21	O2	None	Delete BAAQMD 9-10-502 and BAAQMD Condition 20617, Part 2 (condition effective 6/1/04).	Consistent with the request to delete the O2 monitor requirement for small sources (because there is no minimum or maximum O2 limit for sources with a maximum firing rate less than 25 MM Btu/hr), the BAAQMD Regulation 9, Rule 10 and Condition 20617 O2 monitor requirement should also be deleted for these two small sources.
17.	4/14/04	NEW COMMENT	VII-N, O	S20 S21	CO	BAAQMD 9-10-305	Add Condition 20617, Part 7.a.1.	This permit condition requires source testing to demonstrate compliance with the 9-10-305 CO limit.
18.	4/14/04	NEW COMMENT	VII-N, O	S20 S21	CO	BAAQMD Condition 20617, Part 8 (condition effective 6/1/04)	Delete this entire row.	Consistent with the request to modify Condition 20617, Part 8 (to be renumbered as Part 9) to not require a CEM on sources with a maximum firing rate less than 25 MM Btu/hr, the inclusion of this row is no longer necessary. CO emissions from small sources are insignificant and do not warrant CO CEMS (consistent with previous NOx Box guidance.)
19.	4/14/04	NEW COMMENT	VII-P, AE, AN	S24, S63, A31	VOC	BAAQMD Condition 1240, part II.32d	Change Monitoring Requirement Citation to "BAAQMD 8-18-401 and 8-18-404" Change Monitoring Frequency to "P/Q or A (footnote A at end of Table VII-AL)"	Correct monitoring requirement citations and monitoring frequency.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
20.	4/14/04	NEW COMMENT	VII-P, AG, AN,	S24, S66, A31,	VOC	BAAQMD Condition 1240, part II.86 (first row)	Change Limit to “no detectable fugitive organic emissions in excess of 100 ppmv in vapor recovery system except for valves and connectors , measured as total organic compounds” Change Monitoring Requirement Citation to “BAAQMD 8-18-401” ”	Add connectors to reflect January 2004 revision to BAAQMD 8-18 and addition of 8-18-306 provisions for connectors. Correct monitoring requirement citation. BAAQMD 8-18-404 does not apply to this row because it is only applicable to valves (and connectors that are counted as valves per 8-18-306).
21.	4/14/04	NEW COMMENT	VII-P, AG, AN	S24, S66, A31	VOC	BAAQMD Condition 1240, part II.86 (second row)	Change Limit to “no detectable fugitive organic emissions in excess of 100 ppmv at valves or connectors in vapor recovery system, measured as total organic compounds” Change Monitoring Requirement Citation to “BAAQMD 8-18-401 and 8-18-404” Change Monitoring Frequency to “P/Q or A (footnote A at end of Table VII-AL)” ”	Add connectors to reflect January 2004 revision to BAAQMD 8-18 and addition of 8-18-306 provisions for connectors. Correct monitoring requirement citation and monitoring frequency.
22.	4/14/04	NEW COMMENT	VII-P	S24	Temperature Limit	40 CFR 60.113b(c)(1)(ii) 60.113b(c)(2) 60.473(c) 61.356(f)(2)(i)(A)	Change Limit in stack from 850 to 1,100 degrees averaged over a 2.2-hour period.	Consistent with proposed revisions for Condition 1240, II.58b for S24 and A31.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
23.	4/14/04	NEW COMMENT	VII-P	S24	Temperature Limit	40 CFR 61.356(f)(2)(i)(A)	Change Citation of Limit to: 40 CFR 61.349(c)(2) Change Monitoring Requirement Citation to: 40 CFR 61.354(c)(4)	This control device is monitored by the performance test prescribed by 61.349(c)(2) rather than by engineering calculations in 61.356(f)(2)(i)(A). The correct monitoring requirement citation for a process heater is 40 CFR 61.354(c)(4) rather than 40 CFR 61.354(c)(1), which is the citation for a thermal oxidizer.
24.	4/14/04	NEW COMMENT	VII-T	S29	All	All	Delete Table VII-T for S29 (Naphtha Merox Treater)	Source (Naphtha Merox Treater) is permanently out of service and is being dismantled.
25.	4/14/04	NEW COMMENT	VII-AL	Components	VOC	BAAQMD Regulation 8, Rule 18 and SIP Regulation 8, Rule 18	Modify monitoring requirements for BAAQMD Reg 8, Rule 18 and add monitoring requirements for new SIP 8-18 as shown in Attachment B.2.	BAAQMD recently adopted new version of Regulation 8, Rule 18 Organic Compounds – Equipment Leaks with new monitoring requirements. SIP version of 8-18 is now different than BAAQMD version, therefore both should be incorporated into permit.
26.	4/14/04	NEW COMMENT	VII-AL	Components	VOC	BAAQMD Condition 1240, part II.32d Condition 1240, part II.53 Condition 1240, part II.86	Change Monitoring Requirement Citation to “BAAQMD 8-18-401 and 8-18-404” Change Monitoring Frequency to “P/Q or A (footnote A)”	Correct monitoring requirement citations and monitoring frequency.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
27.	4/14/04	NEW COMMENT	VII-AN	A31	Temperature Limit	40 CFR 60.113b(c)(1)(ii) 60.113b(c)(2) 60.473(c) 61.356(f)(2)(i)(A)	Change Limit in stack from 1350 to 1400 degrees averaged over a 3.4-hour period.	Consistent with proposed revisions for Condition 1240, II.58b for S24 and A31.
28.	4/14/04	NEW COMMENT	VII-AN	A31	Temperature Limit	40 CFR 61.356(f)(2)(i)(C)	Change Citation of Limit to: 40 CFR 61.349(c)(2)	This control device is monitored by the performance test prescribed by 61.349(c)(2) rather than by engineering calculations in 61.356(f)(2)(i)(C).
29.	12/1/03 8/11/03	No	VII-F, P, Q, R, S, Z, AG, AH, AN	S12, S24, S25, S28, S26, S27, S41, S66, S67, A31	VOC	40 CFR 61.349(a)(1)(i)	Change Citation of Limit to: “40 CFR 61.349(f)” Change Limit to “No loose connections or visible holes in ductwork or piping.”	The bases cited for these requirements are neither factually nor legally correct. The Permit erroneously cites to inapplicable federal regulatory limits for monitoring fugitive emissions from oil water separators and closed vent systems and control devices. The methods for measuring fugitive emissions are explicitly described in the legally applicable federal regulations (which cite to EPA Method 21 annual inspections). Visual equipment inspections are required for these sources, but these inspections have no reasonable relationship to detecting fugitive emissions and, more importantly, the District has no legal basis for including fugitive emissions limits as the basis for the visual equipment inspections.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
30.	12/1/03 8/11/03	No	VII-Z, AG	S41, S66	VOC	40 CFR 61.347(a)(1)(i)(A)	<p>Make the following changes in this monitoring requirement for the quarterly visual inspections:</p> <p>Citation of Limit: 40 CFR 61.347(a)(1)(i)(B)</p> <p>Limit: OWS openings maintained in closed and sealed position</p>	<p>The bases cited for these requirements are neither factually nor legally correct.</p> <p>The Permit erroneously cites to inapplicable federal regulatory limits for monitoring fugitive emissions from oil water separators and closed vent systems and control devices.</p> <p>The methods for measuring fugitive emissions are explicitly described in the legally applicable federal regulations (which cite to EPA Method 21 annual inspections). Visual equipment inspections are required for these sources, but these inspections have no reasonable relationship to detecting fugitive emissions and, more importantly, the District has no legal basis for including fugitive emissions limits as the basis for the visual equipment inspections.</p>

**Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)**

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
31.	12/1/03	No	VII-AL	Components	VOC	61.347(a)(1)(i)(A) 40 CFR 61.349(a)(1)(i)	Delete 61.347(a)(1)(i)(A) monitoring requirement for visual inspections. Delete 40 CFR 61.349(a)(1)(i) monitoring requirement with Limit of “Operation with Fugitive emissions < 500 ppmv”	The bases cited for these requirements are neither factually nor legally correct. The Permit erroneously cites to inapplicable federal regulatory limits for monitoring fugitive emissions from oil water separators and closed vent systems and control devices. The methods for measuring fugitive emissions are explicitly described in the legally applicable federal regulations (which cite to EPA Method 21 annual inspections). Visual equipment inspections are required for these sources, but these inspections have no reasonable relationship to detecting fugitive emissions and, more importantly, the District has no legal basis for including fugitive emissions limits as the basis for the visual equipment inspections.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
32.	12/1/03	Partial. Part 1 changes made in all sections. Part 2 changes made in all sections. Part 5 and Part 6b changes not made.	VII-AJ, AK	S69 S70			<p>In accordance with Application No. 7471, revise Condition No. 20278 in the Permit as follows: For Part 1, increase asphalt throughput for S70 from 17,591 to 400,000 tpy.</p> <p>For Part 2, increase additive throughput for S69 from 2,650 to 20,000 tpy.</p> <p>For Part 5, delete operating hours limit for S70.</p> <p>For Part 6b, delete recordkeeping requirements for S70 operating hours.</p> <p>See Attachment 4, pages 36-38, for the requested modification.</p>	<p>The District approved Application No. 7471 on October 11, 2003, which allowed the Plant to increase throughput limits for Polymer Modified Asphalt production at S69 and S70.</p> <p>These permit conditions fail to incorporate the throughput changes approved by Application No. 7471. The Tables in Section VII, which should incorporate the condition, should be updated to incorporate the new throughput levels and the elimination of the Hours of Operation Limit, Parts 5 and 6 of the condition in the December 1, 2003 Major Facility Review Permit.</p>
33.	8/11/03	Partial.	VII – all tables	All			<p>Renumber tables in Section VII to correspond to Section IV.</p>	<p>The current table numbering in Section VII is confusing because the tables do not correspond to the Section IV tables for the same sources. In addition, there are three different tables in Section VII that are numbered “AI”. Renumbering will correct these problems.</p>

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
34.	8/11/03	No	VII-A (was VII-Refinery)	Sitewide			Add the following: Type of Limit: VOC Emission Limit Citation: [None] FE Y/N: Y Emission Limit: Determination of applicability Monitoring Requirement Citation: BAAQMD 8-5-604 Monitoring Frequency: P/E Monitoring Type: Table or sample analysis	Add applicable requirement. Correct omission. Citation is in corresponding Table IV-A Sitewide
35.	8/11/03	No	VII-J	S16			Change title of Table from "S16, TRUCK LOADING RACKS, KEROSENE OR DISTILLATE OIL" to "S16, TRUCK LOADING RACK, HEAVY VACUUM GAS OIL"	Correct title and clarify function of source
36.	8/11/03	No	VII-J, VII-K	S16, S17			Add the following: Type of Limit: VOC Citation of Limit: BAAQMD 8-6-110 FE Y/N: Y Limit: TVP < 0.5 psia to qualify for 8-6-110 loading and delivery exemption for low vapor pressure organic liquids Monitoring Requirement Citation: BAAQMD 8-6-503 and 8-6-604 Monitoring Frequency: P/E Monitoring Type: TVP Analysis	Add BAAQMD 8-6 exemption and monitoring requirement to correspond to same change in Section IV. Correct omission

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
37.	8/11/03	Partial. Did not change monitoring frequency.	VII-L	S18	Through put	BAAQMD Condition #1240, part I.2	Add “Y” to FE Y/N Change Monitoring Frequency from “P/M” to “P/D”	Correct errors and omissions.
38.	8/11/03	No. The wrong citation is shown as the monitoring requirement.	VII-M	S19	SO2	BAAQMD Condition 1240, part I.12 (second row with Limit of “fuel gas H2S concentration limited to 10 ppmv, dry, when any vessel is in port”	Correct Citation of Limit: to "BAAQMD Condition 1240, Part III.3"	Correct error. The text of the Limit is from 1240.III.3, not 1240.I.12 as stated in the table.
39.	8/11/03	No (did not add list of controlled sources) – Editorial comment	VII-O, AL	S24, A31	VOC	BAAQMD 8-5-306	Change Limit to “95% control of organic vapors (from S13, S27, S59, S63, S67)”	Clarify limit and abated sources
40.	8/11/03	No (did not add list of controlled sources) – Editorial comment	VII-P, AN	S24, A31	VOC	40 CFR 60.112b(a)(3)(ii)	Change Limit to “95% control of organic vapors (from S13, S59, S63)”	Clarify limit and abated sources
41.	8/11/03	No (did not add list of controlled sources) – Editorial comment	VII-P, AN	S24, A31	VOC	40 CFR 61.349(a)(2)(i)(A)	Change Limit to “95% reduction of organic vapors (from S12, S25-S28, S41, S66, S67)”	Clarify limit and abated sources
42.	8/11/03	No (did not add list of controlled sources) – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.32a, b, c	Change Limit to “98.5% destruction of vapors by weight (from S13, S59, S63)”	Clarify limit and abated sources
43.	8/11/03	No (did not add list of controlled sources) – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.43	Change Limit to “98.5% destruction of vapors by weight (from S3)”	Clarify limit and abated sources

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
44.	8/11/03	No – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.55	Change Limit to “98.5% destruction of vapors by weight (from S5-8, S37, S38, S70)”	Clarify limit and abated sources
45.	8/11/03	No – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.56	Change Limit to “98.5% destruction of vapors by weight (from S51-53, S60, S65)”	Clarify limit and abated sources
46.	8/11/03	No – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.57	Change Limit to “98.5% destruction of vapors by weight (from S61, S62)”	Clarify limit and abated sources
47.	8/11/03	No – Editorial comment	VII-P, AN	S24, A31	VOC	BAAQMD Condition 1240, part II.85	Change Limit to “98.5% destruction of vapors by weight (from S66)”	Clarify limit and abated sources
48.	8/11/03	No.	VII-Q, R	S26, S27	N/A	N/A	Change Title of tables to correspond with Section IV as follows: Table VII-Q S26, Wastewater Tank, Abated by Carbon or Thermal Oxidizer or Process Heater Table VII-R S27, Recovered Oil Tank – TK-12A, Abated by Carbon or Thermal Oxidizer or Process Heater	Consistency and clarification

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
49.	8/11/03	No.	VII-Q, R	S26, S27			Add the following limits: Type of Limit: VOC Citation of Limit: 40 CFR 61.349(a)(2)(i)(A) FE Y/N: Y Limit: 95% control (by A31 or S24) Monitoring Requirement Citation: 40 CFR 61.354(c)(1) 40 CFR 61.354(c)(4) Monitoring Frequency: C Monitoring Type: Temperature measurement	Add 40 CFR 61 Subpart FF monitoring requirements for tanks and for A31 and S24 control. Correct omission
50.	8/11/03	No	VII-R	S27	VOC	40 CFR 61.349(a)(1)(i)	Delete VOC limit for 40 CFR 61.349(a)(1)(i)	Limit is in fugitive components table (VII-AJ). All other fugitive emissions limits removed from source Table VII's because the limits are in the fugitives table. Correct error
51.	8/11/03	Partial. Changed Part II.32 to Part 69 instead of Part 66, which is OK. However, this created a duplicate row for Part 69, which should be deleted.	VII-V	S31	VOC	BAAQMD Condition 1240, Part II.32	Change Citation of Limit from "BAAQMD Condition 1240, Part II.32" to "BAAQMD Condition 1240, Part II.66"	Correct error

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
52.	8/11/03	No.	VII-X, Y	S39, S40	HAP		Add the following row: Type of Limit: HAP Citation of Limit: 40 CFR 63.641 FE: Y Limit: Retain weight percent total organic HAP in liquid stored for Group 2 determination Monitoring Requirement Citation: 40 CFR 63.654(i)(1)(iv) Monitoring Frequency: P/E Monitoring Type: Records	Tanks are MACT Group 2 storage vessels and are subject to MACT Recordkeeping requirements. Correct omission
53.	8/11/03	No – Editorial error	VII-Z	S41	VOC	BAAQMD 8-8-307.2	Add “(by S24 or A31)” at the end of the Limit statement	Identify abatement device and make limit statement consistent with other limits.
54.	8/11/03	No	VII-Z, AH	S41, S67	VOC	40 CFR 61.349(a)(2)(i)(A)	Add the following citation to the Monitoring Requirement Citation: “61.354(c)(4)”	Add the citation calling for monitoring of the thermal oxidizer A31. Correct omission.

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
55.	8/11/03	No	VII-Z, AG	S41, S66			Add the following limit: Type of Limit: VOC Citation of Limit: BAAQMD 8-8-114 FE Y/N: Y Exemption for Bypassed Oil-Water Separator or Air Flotation Unit Influent Monitoring Requirement Citation: BAAQMD 8-8-501, and 8-8-601 Monitoring Frequency: P/E Monitoring Type: Records and sample analysis	Add records and critical OC analysis requirements for BAAQMD 8-8-114 OWS and Air Flotation influent bypass exemption. Correct omission
56.	8/11/03	Partial, did not add for S59	VII-AC, AE	S59, S63	Through put	BAAQMD Condition #1240, part I.33a	Add "Y" to FE Y/N	Correct errors and omissions.
57.	8/11/03	Partial. Changed Limit citation, but did not add 61.354(c)(4)	VII-AG	S66	VOC	40 CFR 61.349(a)	Change Citation of Limit to "40 CFR 61.349(a)(2)(i)(A)" Add the following citation to the Monitoring Requirement Citation: 61.354(c)(4)	Correct error Add the citation calling for monitoring of the thermal oxidizer A31. Correct omission.
58.	8/11/03	No	VII-AG	S66	VOC	BAAQMD Condition 1240, part II.85	Add "(control by A31 or S24)" to Limit	Correct error
59.	8/11/03	No	VII-AJ	Components	VOC	BAAQMD 8-28-304.2	Change the following: Monitoring Requirement Citation: BAAQMD 8-28-602 Monitoring Frequency: P/A Monitoring Type: Source test	Add applicable monitoring requirement citation for 95% control efficiency of vapor recovery system required by 8-28-304.2. Correct omission

Attachment B
Comments on Permit for Facility A0901 – Section VII (continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Limit Type	Limit Citation	Proposed Change	Rationale
60.	8/11/03	No	VII-AJ	Components	NMHC	BAAQMD Condition 1240, part I.14	Change Type of Limit to "VOC" Insert header row above this limit as follows: BAAQMD Permit Conditions	Change Type of Limit for consistency with rest of permit Insert header row for clarity
61.	8/11/03	Partial Changed title of table, but not wording of footnotes	VII-AL	Components	N/A	Footnotes	Change title to "Footnotes to Table VII-AL" (or correct title after renumbering tables) In footnotes b and c, change "refinery" to "Asphalt Plant"	Correct table number error. Distinguish between Valero Benicia Asphalt Plant and Valero Benicia Refinery
62.	8/11/03	No	VII-AM	A4	VOC	BAAQMD Condition #1240, Part II.60	Add "(from S14)" to limit	Clarify source to be abated
63.	8/11/03	No	VII-AM	A4	VOC	BAAQMD Condition #1240, Part II.63	Delete "by" and Add "(from S15)" to limit	Clarify source to be abated
64.	8/11/03	No	VII-AM	A4	VOC	BAAQMD Condition #1240, Part II.68	Add "(from S17)" to limit	Clarify source to be abated
65.	8/11/03	No	VII-AN	A31	VOC	BAAQMD Condition 1240, part II.69	Change Limit to "98.5% destruction of vapors by weight (from S31)"	Clarify limit and abated sources
66.	8/11/03	No	VII-AN	A31	VOC	BAAQMD Condition 1240, part II.70	Change Limit to "98.5% destruction of vapors by weight (from S54)"	Clarify limit and abated sources

**Attachment B.1
Table VII-L Regulation 8, Rule 10 Revisions – Facility A0901**

**Table VII – L
Applicable Limits and Compliance Monitoring Requirements
S18, CRUDE UNIT**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	SIP 8-10-301	Y		Abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg	SIP 8-10-401	P/E	Records of hydrocarbon concentration and emissions
VOC	BAAQMD 8-10-302	N	7/1/2004	No process vessel may be opened to atmosphere unless organic compounds have been reduced to less than 10,000 ppm (methane). A refinery vessel may exceed this limit provided total number of such vessels does not exceed 10% of total vessel population over 5-consecutive year period and total mass organic compound emissions are less than 15 lb/day.	BAAQMD 8-10-501 and 8-10-503	P/E (prior to opening vessel and daily during time vessel is open to atmosphere)	Method 21 and records of measured hydrocarbon concentration emissions and mass emission calculations.
	BAAQMD Condition 1240, part I.14	Y		Emissions of NMHC < 49.345 tons per year excluding marine emissions	BAAQMD Condition 1240, parts 18a, I.18b and I.18j	P/SA	Calculations
	BAAQMD Condition #1240, part I.3	Y		98.5% destruction of vapors by weight	BAAQMD Condition 1240, part I.16b	P/every 2 years	Source test
HAP	40 CFR 63 63.643(a) (2)	Y		Reduce HAPs by 98% or to 20 ppm @ 3% oxygen	40 CFR 63 63.644(a)(3)	N	Exempt from monitoring
Through-put limit	BAAQMD Condition #1240, part I.1	Y		5,292,000 barrels/any consecutive 12 months	BAAQMD Condition #1240, part I.4	P/M	Records

Attachment B.1

Table VII-L Regulation 8, Rule 10 Revisions – Facility A0901 (continued)

**Table VII – L
Applicable Limits and Compliance Monitoring Requirements
S18, CRUDE UNIT**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition #1240, part I.2	Y		18,000 barrels/any calendar day	BAAQMD Condition #1240, part I.4	P/M	Records

**Attachment B.2
Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901**

**Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-18-301	Y		General equipment leak < 100 ppm or minimize in 24 hours, repair in 7 days	None	N	N/A
VOC	BAAQMD 8-18-302.1 8-18-302.2	N		Valve leak < 100 ppm or minimize in 24 hours, repair in 7 days	BAAQMD 8-18-401.2 or 8-18-404	P/Q (footnote A)	Method 21 Inspection
VOC	BAAQMD 8-18-302.1 8-18-302.2	N		Inaccessible valve leak < 100 ppm or minimize in 24 hours, repair in 7 days	BAAQMD 8-18-401.3	P/A	Method 21 Inspection
VOC	BAAQMD 8-18-302.3 8-18-306.2 8-18-306.3 8-18-306.4	N	7/1/04	Inspect non-repairable valves	BAAQMD 8-18-401.9	P/Q	Method 21 inspection
VOC	BAAQMD 8-18-302.3 8-18-306.4	N	7/1/04	Mass emission rate <= 15 lb/day for valve with major leak (>= 10,000 ppm)	BAAQMD 8-18-306.4 8-18-604	P/E within 45 days of leak discovery	Mass Emission Sampling
VOC	BAAQMD 8-18-302.3 8-18-306.4	N	7/1/04	Mass emission rate <= 15 lb/day for valve with major leak (>= 10,000 ppm)	BAAQMD 8-18-401.10 8-18-604	P/A	Mass Emission Sampling
VOC	BAAQMD 8-18-303.1 8-18-303.2	N		Pump and compressor leak < 500 ppm or minimize in 24 hours, repair in 7 days	BAAQMD 8-18-401.2	P/Q	Method 21 Inspection
VOC	BAAQMD 8-18-304.1 8-18-304.2	N		Connection leak < 100 ppm or minimize in 24 hours, repair in 7 days	BAAQMD 8-18-401.6	P/every 5 years (see footnote B)	Method 21 Inspection
VOC	BAAQMD 8-18-304.1 8-18-304.2	N		Connection leak < 100 ppm or minimize in 24 hours, repair in 7 days (for connectors opened during turnaround)	BAAQMD 8-18-401.1	P/E (within 90 days of turnaround)	Method 21 Inspection

Attachment B.2

Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

**Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-18-305	Y		Pressure relief valve leak < 500 ppm or minimize in 24 hours, repair in 15 days	BAAQMD 8-18-401.2 and 8-18-401.7	P/Q	Method 21 Inspection
VOC	BAAQMD 8-18-305	Y		Inaccessible pressure relief valve leak < 500 ppm or minimize in 24 hours, repair in 15 days	BAAQMD 8-18-401.3	P/A	Method 21 Inspection
VOC	BAAQMD 8-18-305	Y		Pressure relief valve leak ≤ 500 ppm or minimize in 24 hours, repair in 15 days	BAAQMD 8-18-401.8	P/E (5 working days after release)	Method 21 Inspection
VOC	BAAQMD 8-18-305	Y		Pressure Relief Device with reportable releases ≤ 500 ppm	BAAQMD 8-28-402 & 8-18-401.8	P/E (5 working days after release)	Method 21 Inspection w/Report
VOC	BAAQMD 8-18-306.1	N		Valve, connector, pressure relief, pump or compressor must be repaired within 5 years or at the next scheduled turnaround	BAAQMD 8-18-502.4	P/Q	Records

Attachment B.2
Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-18-306.2 8-18-306.3 8-18-306.4	N	7/1/04	Maximum percentage awaiting repair: Components % Valves (including with major leaks) and connectors per 8-18-306.3 0.30 Valves with major leaks per 8-18-306.4 0.025 Pressure Reliefs 1.0 Pumps and Compressors 1.0	BAAQMD 8-18-502.4	P/Q	Records
VOC	BAAQMD 8-18-307	Y		Pumps and Compressors Evidence of Leak	BAAQMD 8-18-403	P/D	Visual Inspection
VOC	SIP 8-18-302	Y		Valve leak < 100 ppm or minimize in 24 hours, repair in 7 days	SIP 8-18-401.2 or 8-18-404	P/Q (footnote A)	Method 21 Inspection
VOC	SIP 8-18-302	Y		Inaccessible valve leak < 100 ppm or minimize in 24 hours, repair in 7 days	SIP 8-18-401.3	P/A	Method 21 Inspection
VOC	SIP 8-18-303	Y		Pump and compressor leak < 500 ppm or minimize in 24 hours, repair in 7 days	SIP 8-18-401.2	P/Q	Method 21 Inspection
VOC	SIP 8-18-304.2	Y		Connection leak < 100 ppm or minimize in 24 hours, repair in 7 days	SIP 8-18-401.6	P/every 5 years (see footnote B)	Method 21 Inspection
VOC	SIP 8-18-304.2	Y		Connection leak < 100 ppm or minimize in 24 hours, repair in 7 days (for connectors opened during turnaround)	SIP 8-18-401.1	P/E (within 90 days of turnaround)	Method 21 Inspection

Attachment B.2
Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	SIP 8-18-306.1	Y		Valve, pressure relief, pump or compressor must be repaired within 5 years or at the next scheduled turnaround	SIP 8-18-502.4	P/Q	Records
VOC	SIP 8-18-306.2	Y		Awaiting repair Valves < 0.5% Pressure Relief < 1% Pump and Connector < 1%	SIP 8-18-502.4	P/Q	Records
VOC	SIP 8-28-301	Y		10,000 ppm (pressure relief devices)	SIP 8-28-402	P/Q	Method 21 Inspection
VOC	BAAQMD 8-28-303.2	N		Pressure Relief Devices to meet Prevention Measures Procedures	BAAQMD 8-28-405	P/turn-around	Prevention Measures Procedures
VOC	BAAQMD 8-28-304	N		PHA within 90 days and meet Prevention Measures Procedures. After 2 nd release Vent Pressure Relief Devices to an Abatement Device with at least 95% by weight control efficiency. (pressure relief devices)	BAAQMD 8-28-405	P/release per 5 calendar year	PHA and Prevention Measures Procedures
VOC	BAAQMD 8-28-304.1	N		Pressure Relief Device with reportable releases in 5-year period.	BAAQMD 8-28-304.1 & 8-28-405	P/E (90 day after release) P/E (120 day after release)	PHA & PMP Report Install tamper-proof indicators
VOC	BAAQMD 8-28-304.2	N		After 2 nd release in 5 years; Vent Pressure Relief Devices to an Abatement Device with 95% destruction efficiency	None	N	N/A

Attachment B.2

Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

**Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	40 CFR 60.482-2 (b)(1)	Y		LL Pump leak < 10,000 ppm	40 CFR 60.482-2 (a)(1)	P/M	Method 21 Inspection
VOC	40 CFR 60.482-2 (b)(2)	Y		Pump leak Indicated by dripping liquid	40 CFR 60.482-2 (a)(2)	P/W	Visual Inspection
VOC	40 CFR 60.482-2(e)	Y		Pump designated for “No detectable emissions” pursuant to 40 CFR 60.486(e), < 500 ppm	40 CFR 60.482-2(e)(3)	P/A	Method 21 Inspection
	40 CFR 60.482-3(d)	Y		Compressor shall have a sensor to detect failure of seal system, barrier fluid system, or both	40 CFR 60.482-3 (e)(1)	C or P/D	Sensor with audible alarm or checked daily
	40 CFR 60.482-3(i)	Y		Compressor designated for “No detectable emissions” pursuant to 40 CFR 60.486(e), < 500 ppm	40 CFR 60.482-3(i)(2)	P/A	Method 21 Inspection
VOC	40 CFR 60.482-4(a)	Y		Pressure relief valve (gas/vapor) not vented to abatement < 500 ppm	None	N	N/A
	40 CFR 60.482-4(b)(1)	Y		Pressure relief valve (gas/vapor) not vented to abatement < 500 ppm after a pressure release event	40 CFR 60.482-4(b)(2)	P/E (5 days)	Method 21 Inspection
	40 CFR 60.482-7(b)	Y		Valve leak < 10,000 ppm	40 CFR 60.482-7(a)	P/M	Method 21 Inspection
VOC	40 CFR 60.482-7(b)	Y		Valve leak < 10,000 ppm; 2 successive months	40 CFR 60.482-7(e)(i)	P/Q	Method 21 Inspection
	40 CFR 60.482-7(f)	Y		Valve designated “No detectable emissions” leak < 500 ppm	40 CFR 60.482-7 (f)(3)	P/A	Method 21 Inspection

Attachment B.2

Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

**Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	40 CFR 60.482-8(a)	Y		Pumps and valves in heavy liquid service, Pressure Relief devices (light or heavy liquid), Flanges, Connectors leak shall be measured for leak in 5 days if detected by inspection	40 CFR 60.482-8(a)	P/E	Visible, Audible, or olfactory Inspection
VOC	40 CFR 60.482-8 (b)	Y		Pumps and Valves (heavy liquid), Pressure Relief Devices (liquid), Flanges, Connectors leak < 10,000 ppm	40 CFR 60.482-8(a)	P/(5 days after leak noted by visual, audible, or olfactory inspection)	Visual, audible, olfactory Inspection; Measure for leaks
VOC	40 CFR 60.482-9 (d)	Y		Pumps under “Delay of repair” repaired within 6 months	None	N	N/A
VOC	40 CFR 60.482-10 (g)	Y		Closed-vent systems leak ≤ 500 ppm or visible leak indication, or 1 st repair attempt 5 day, repaired 15 days, or turnaround list	40 CFR 60.482-10 (f)	P/A	Method 21 inspection; Visual Inspection
VOC		Y		Individual valve that measures <10,000 ppm for 5 consecutive quarters may be monitored annually, if in a process unit with 5 consecutive quarters <2% valves leaking > 10,000 ppm.	40 CFR 60.483-2(b)(3) (See footnote c)	P/A (if criteria are met)	Method 21 inspection

Attachment B.2
Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)

Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC		Y		Individual valve that measures <10,000 ppm for 2 consecutive quarters may be monitored semiannually, if in a process unit with 2 consecutive quarters <2% valves leaking ≥10,000 ppm.	40 CFR 60.483-2(b)(2) (footnote c)	SA (if criteria are met)	Method 21 Inspection
VOC	61.343 (a)(1)(i)(A)	Y		Tanks fittings leak ≤ 500 ppm	61.343 (a)(1)(i)(A)	P/A	Method 21 Inspection
VOC	61.345 (a)(1)(i)	Y		Container fittings leak ≤ to 500 ppm	61.345 (a)(1)(i)	P/A	Method 21 Inspection
VOC	61.347 (a)(1)(i)(A)	Y		O/W Separator fittings leak ≤ 500 ppm	61.347 (a)(1)(i)(A)	P/A	Method 21 Inspection
	61.347 (a)(1)(i)(A)	Y		O/W Separator fittings leak ≤ 500 ppm	40 CFR 61.347(b)	P/Q	Visual inspection
VOC	61.349 (a)(1)(i)	Y		Closed-vent systems <500 ppm above background	61.349 (a)(1)(i)	P/A	Method 21 Inspection
VOC	40 CFR 61.349(a)(1)(i)	Y		Operation with Fugitive emissions < 500 ppmv	40 CFR 61.349(f)	P/Q	Visual inspection
NMHC	BAAQMD Condition 1240, part I.14	Y		Emissions of NMHC < 49.345 tons per year excluding marine emissions	BAAQMD Condition 1240, parts I.18a, I.18b and I.18j	P/M	Calculations
VOC	BAAQMD Condition 1240, part I.32d	Y		no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	BAAQMD 8-18-401 or 8-18-404	P/Q or A (footnote A)	Method 21 Inspection
VOC	BAAQMD Condition 1240, part II.53	Y		no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	BAAQMD 8-18-401 or 8-18-404	P/Q or A (footnote A)	Method 21 Inspection

**Attachment B.2
Table VII-AL Regulation 8, Rule 18 Revisions – Facility A0901 (continued)**

**Table VII – AL
Applicable Limits and Compliance Monitoring Requirements
COMPONENTS**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition 1240, part II.86	Y		no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds	BAAQMD 8-18-401 or 8-18-404	P/Q or A (footnote A)	Method 21 Inspection

Footnotes to Table VII-AL above:

^a Valves are inspected pursuant to BAAQMD-approved Alternative Inspection Schedule that satisfies the requirements of 8-18-404. Valves that have not been found to be leaking for the five prior quarters are placed on the annual inspection schedule.

^b Connectors are inspected pursuant to a BAAQMD-approved Connector Inspection Program that satisfies the requirements of 8-18-401.6. Under this program, 20% of all of the refinery’s connectors are inspected each year.

^c The 40 CFR 60.483-2 (Subpart VV) alternative screening schedule for valves is analogous to the Valero Alternative Inspection Schedule (see footnote “a”) with two exceptions: 40 CFR 60.483-2 uses a leak definition of 10,000 ppm VOC rather than 100 ppm TOC, and 40 CFR 60.483-2 requires that the percentage of valves leaking facility-wide (at 10,000 ppm) must have been less than 2% for the five-quarter time period. For process units covered by refinery MACT, 63.648(a)(2) allows the percentage leaking to be determined on a refinery-wide basis. This applies to all process units except NSPS process units except Dimersol, which is not subject to MACT. Finally, any valve subject to Subpart VV must *individually* comply with BAAQMD Rule 8-18-404 (5 quarters with no leaks at 100 ppm) in order to be allowed to be screened less frequently than quarterly. As a practical matter, Subpart VV is effectively less stringent than the Valero Alternative Inspection Schedule.

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901
 (Note: Section VII comments on NOx Box located in Attachment B)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
1.	4/14/04	NEW COMMENT	VI IV-M, N, O	S19 S20 S21	Condition 20617	Change number from 20617 to 21233.	Assign the NOx Box permit conditions in the Valero refinery and asphalt plant Title V permits the same number, Condition 21233. Consistent with the numbering approach used for the ACP permit condition, which is Condition 19329 in both facility permits.
2.	4/14/04	NEW COMMENT	VI IV – M, N, O	S19 S20 S21	Condition 20617, Part 1	<p>Add list of refinery sources shown in the refinery NOx Box Condition 21233.</p> <p>Add Parts 1.A and 1.B from the refinery NOx Box Condition 21233.</p> <p>Change Facility number for the Refinery from 12626 to B2626 and for the Asphalt Plant from 13193 to A0901.</p> <p>Change CEM Y/N column for Asphalt Plant sources from “N” to “No”.</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	<p>Make the NOx Box Conditions in the Valero refinery and asphalt plant Title V permits consistent. Consistent with the approach used for the ACP permit condition, Condition 19239, which is the same in both facility permits.</p> <p>Part 1, as currently written, states that any exceedance of the NOx limit is a violation and does not allow for use of the IERCs under the District-approved ACP. Part 1 should be replaced by Condition 21233 Parts 1A and 1B language, which allows use of the ACP IERCs to ensure compliance with the refinery-wide NOx emission limit.</p> <p>Editorial comment.</p>
3.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 1, Part 2, Part 3, Part 4 and 4.e, Part 5 and 5.c, Part 6 and 6.b, Part 7, Part 9, Part 10	<p>Place the statement of basis at the end of the numbered paragraph rather than in a subparagraph and use the format “(Basis: Regulation X-X-XXX)” for the statement of basis.</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	Editorial comments

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901 (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
4.	4/14/04	NEW COMMENT	VI IV – M, N, O	S19 S20 S21	Condition 20617, Part 2	Modify condition language to require O2 monitors only on sources with maximum firing rate greater than 25 MM Btu/hr. Delete Part 2 from Tables IV-N and O for S20 and S21 (< 25 MM Btu/hr). See Attachment C.1 for proposed revisions to Condition 20617.	The requirement to install O2 monitors on small (<25 MM Btu/hr) sources is not necessary since there is no minimum or maximum O2 requirement for these sources per Condition 20617, Part 3.b.
5.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 3.b	Delete language that specifies low fire is at 20% of the maximum rated capacity. See Attachment C.1 for proposed revisions to Condition 20617.	Emissions from small sources are insignificant. This requirement is not discussed in the Statement of Basis.
6.	4/14/04	NEW COMMENT	VI	S7 S20 S34 S24 S26 S35 S173	Condition 20617, Part 5	Delete “at all times of operation.” and replace with “This operational range shall be maintained within a tolerance of equal to or less than 10% for measurement uncertainty.” See Attachment C.1 for proposed revisions to Condition 20617.	An allowable tolerance should be established to account for natural source testing variability. See Attachment C.2 for supporting rationale.
7.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 5.a	Extend table to include refinery NOx Box sources. See Attachment C.1 for proposed revisions to Condition 20617.	Make the NOx Box Conditions in the Valero refinery and asphalt plant Title V permits consistent. Consistent with the approach used for the ACP permit condition, Condition 19239, which is the same in both facility permits.
8.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 5.b	Modify the condition language by adding two commas as shown. See Attachment C.1 for proposed revisions to Condition 20617.	Editorial comments clarify condition language, based on discussions with District staff.

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901 (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
9.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 6.a	<p>Add a statement clarifying that source testing required after a NOx Box deviation shall reasonably represent the deviation conditions.</p> <p>Modify the sentence specifying the time frame for the source test to delete “no later than the next regularly scheduled source test period, or within 8 months, whichever is sooner.” and replace it with “within 8 months of the event.”</p> <p>Add “application” after “permit amendment”.</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	<p>To exactly replicate an “out of the box” condition over three runs can take a significant amount of time without actually obtaining a more accurate test result.</p> <p>See Attachment C.2 for supporting rationale for proposed tolerance level.</p> <p>While it is advantageous to conduct “out of the box” testing as soon as possible, there may be operational reasons to test at a later date</p> <p>For more details see WSPA comments submitted to the District on 4/9/04.</p>
10.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 6.a.1	<p>Change “lower than” to “less than or equal to” in the first sentence of Case 1.</p> <p>Modify the condition language to specify “by more than 5%” as the maximum allowable exceedance of the higher NOx emission factor or the CO limit.</p> <p>Modify the last sentence from the negative “will not be considered to be in violation” to the positive “will be considered to be in compliance”</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	<p>Clarifies the range of conditions that apply to Case 1 where source test results are less than “or equal to” the Emission Factor.</p> <p>Make the NOx Box Conditions in the Valero refinery and asphalt plant Title V permits consistent. Consistent with the approach used for the ACP permit condition, Condition 19239, which is the same in both facility permits.</p> <p>Semi-annual source tests should have a tolerance of 5% because the emissions involved are miniscule in relation to the calculations involved, the paperwork for both the District and facility is extensive and provides no environmental benefit. This provision will operate in both directions, since the facility would not be submitting for REDUCTIONS if a single source test result showed it 5%, or even 10% lower.</p>

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901 (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
11.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Parts 6.A.2 and 7.B	<p>Modify the condition language to specify "Part 5A" as the source of permitted emission concentrations or emission rates.</p> <p>Modify the condition language to specify "by more than 5%" exceedances as the trigger point for further action.</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	<p>Clarifies Condition 20617, Part 5.A as the source of the permitted emission concentrations or emission rates.</p> <p>Semi-annual source tests should have a tolerance of 5% because the emissions involved are miniscule in relation to the calculations involved, the paperwork for both the District and facility is extensive and provides no environmental benefit. This provision will operate in both directions, since the facility would not be submitting for REDUCTIONS if a single source test result showed it 5%, or even 10% lower.</p>
12.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Parts 6.a.2.A; 6.a.2.A.1; and 6.a.2.A.2	<p>Modify the condition language to clarify the basis for determining the period that NOx IERCs need to be retroactively applied to maintain compliance with the refinery-wide NOx limit for the two different conditions that can occur.</p> <p>See Attachment C.1 for proposed revisions to Condition 20617.</p>	<p>Part 1 allows NOX IERC usage. However, additional language is proposed in Part 6.a.2.A to clarify that the facility will be in compliance with 9-10-301 unless there are insufficient NOX IERCs provided.</p>
13.	4/14/04	NEW COMMENT	IV-M	S19	Condition 20617, Part 7.a.1	<p>Change to 7.a.2 and modify description to reflect applicability of this subpart to sources greater than 25 MM Btu/hr.</p>	<p>Editorial correction.</p>
14.	4/14/04	NEW COMMENT	IV-N, O	S20 S21	Condition 20617, Part 7.a.2	<p>Change to 7.a.1 and modify description to reflect applicability of this subpart to sources less than 25 MM Btu/hr.</p>	<p>Editorial correction.</p>

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901 (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
15.	4/14/04	NEW COMMENT	VI IV-M, N, O	S19 S20 S21	Condition 20617, Part 7.c	Add new Part 7.c to Condition 20617. See Attachment C.1 for proposed revisions to Condition 20617. Add Part 7.c to Table IV-M, N, and O.	Addition of new Part 7.c provides an allowance for rescheduling a source test to accommodate downtimes.
16.	4/14/04	NEW COMMENT	VI IV – M, N, O	NA	Condition 20617, Part 8	Add condition language for CO source testing requirements on sources that have NOx CEMS. Renumber Parts 8 and 9 to become Parts 9 and 10 and change descriptions in Section IV tables to allow for addition of new part. See Attachment C.1 for proposed revisions to Condition 20617.	Addition of Part 8 provides consistency with the refinery NOx Box Condition 21233.
17.	4/14/04	NEW COMMENT	VI IV- N, O	S19 S20 S21	Condition 20617, Part 9 (renumbered)	Modify condition language to require a CEM on sources greater than 25 MM Btu/hr if source test results show CO > 200 ppm more than two times in a 5-year period. Delete Part 9 from Tables IV-N and O because this part only applies to sources greater than 25 MM Btu/hr. See Attachment C.1 for proposed revisions to Condition 20617.	CO emissions from small sources are insignificant and do not warrant CO CEMS. This is consistent with previous NOx Box guidance.

Attachment C
Comments on NOx Box Permit Condition 20617 for Sections IV and VI - Facility A0901 (Continued)

Line #	Date	4/14/04 Status	Permit Location	Sources	Applicable Requirement	Proposed Change	Rationale
18.	4/14/04	NEW COMMENT	VI	S19 S20 S21	Condition 20617, Part 10 (renumbered)	Add "Regulation" before "9-10-504". Change "facility" to "owner/operator" See Attachment C.1 for proposed revisions to Condition 20617.	Editorial comments

Attachment C.1

Proposed Revisions to NOx Box Permit Condition 20617 - Facility A0901

Regulation 9-10 Refinery-Wide Compliance
Effective June 1, 2004, shall supercede Condition 20617 above.

- *1. The following sources are subject to the refinery-wide NOx emission rate and CO concentration limits in Regulation 9, Rule 10 (Basis: Regulation 9-10-301, 9-10-305).

Facility No. B2626, Valero Refining Company

<u>S#</u>	<u>Description</u>	<u>CEM (Y/N)</u>
7	F-103 Jet Fuel HF, 53 MMBtu/hr	No
20	F-104 Naphtha HF, 62 MMBtu/hr	No
21	F-301 Hydrogen, 614 MMBtu/hr	Yes
22	F-351 Hydrogen, 614 MMBtu/hr	Yes
23	F-401 Gas Oil HC, 200 MMBtu/hr	Yes
24	F-601 Cat Feed HF, 33 MMBtu/hr	No
25	F-701 Cat Feed, 230 MMBtu/hr	Yes
26	F-801 HCN HF, 33 MMBtu/hr	No
30	F-2901 PFR Preheat, 463 MMBtu/hr total	Yes
31	F-2902 PFR Preheat, 463 MMBtu/hr total	Yes
32	F-2903 PFR Preheat, 463 MMBtu/hr total	Yes
33	F-2904 PFR Preheat, 463 MMBtu/hr total	Yes
34	F-2905 PFR Regen Gas, 74 MMBtu/hr	No
35	F-2906 PFR React Gas, 14 MMBtu/hr	No
40	SG-2301 Steam Gen, 218 MMBtu/hr	Yes
41	SG-2302 Steam Gen, 218 MMBtu/hr	Yes
173	F-902 Coker Steam Superheat, 20 MMBtu/hr	No
220	F-4460 MRU Hot Oil, 351 MMBtu/hr	Yes

Facility No. A0901, Valero Benicia Asphalt Plant

<u>S#</u>	<u>Description</u>	<u>CEM (Y/N)</u>
19	Vacuum Heater, 40 MMbtu/hr	No
20	Steam Boiler, 14.7 MMbtu/hr	No
21	Steam Boiler, 14.7 MMbtu/hr	No

A. Compliance with the daily refinery wide average NOx emission limit, 0.033 lb NOx/MMBtu fired duty is achieved through the use of an approved Alternate Compliance Plan using NOx IERCs in accordance with the provisions in Regulation 2-9-303.

B. The owner/operator of each source listed in Part 1 above shall determine compliance with Regulation 9-10 as follows:

- 1) Calculate NOx emissions from each furnace using measured fuel gas rates, and either:
 - a. CEM data or
 - b. NOx emission factors from Part 5A
- 2) The daily refinery wide average emission rate shall be determined by dividing the combined total emissions from sources listed in Part 1 by the combined total heat input.
- 3) Sufficient NOx IERC's will be provided in accordance with the provisions of Regulation 2-9-303 to ensure compliance with the refinery wide average NOx emission limit of 0.033 lb NOx/MMBtu fired duty.

Attachment C.1
Proposed Revisions to NOx Box Permit Condition 20617 - Facility A0901
(continued)

*2. The owner/operator of each source with a maximum firing rate greater than 25 MMBtu/hr listed in Part 1 shall properly install, properly maintain, and properly operate an O₂ monitor and recorder. This Part shall be effective September 1, 2004. (Basis: Regulation 9-10-502)

*3. The owner/operator shall operate each source listed in Part 1 that does not have a NOx CEM within specified ranges of operating conditions (firing rate and oxygen content) as detailed in Part 5. The ranges shall be established by utilizing data from district-approved source tests. (Basis: Regulation 9-10-502)

- a. The NOx Box for units with a maximum firing rate of 25 MMBH or more shall be established using the procedures in Part 4.
- b. The NOx Box for units with a maximum firing rate less than 25MMBH shall be established as follows: High-fire shall be the maximum rated capacity. There shall be no maximum or minimum O₂.

*4. The owner/operator shall establish the initial NOx box for each source subject to Part 3 by June 1, 2004. The NOx Box may consist of two operating ranges in order to allow for operating flexibility and to encourage emission minimization during standard operation. (Basis: Regulation 9-10-502) The procedure for establishing the NOx box is

- a. Conduct district approved source tests for NOx and CO, while varying the oxygen concentration and firing rate over the desired operating ranges for the furnace;
- b. Determine the minimum and maximum oxygen concentrations and firing rates for the desired operating ranges (Note that the minimum O₂ at low-fire may be different than the minimum O₂ at high-fire. The same is true for the maximum O₂). The owner/operator shall also verify the accuracy of the O₂ monitor on an annual basis.
- c. Determine the highest NOx emission factor (lb/Mmbtu) over the preferred operating ranges while maintaining CO concentration below 200 ppm; the owner/operator may choose to use a higher NOx emission factor than tested.
- d. Plot the points representing the desired operating ranges on a graph. The resulting polygon(s) are the NOx Box, which represents the allowable operating range(s) for the furnace under which the NOx emission factor from part 5a is deemed to be valid.
 1. The NOx Box can represent/utilize either one or two emission factors.
 2. The NOx Box for each emission factor can be represented either as a 4- or 5-sided polygon. The NOx box is the area within the 4- or 5-sided polygon formed by connecting the source test parameters that lie about the perimeter of successful approved source tests. The source test parameters forming the corners of the NOx box are listed in Part 5.
- e. Upon establishment of each NOx Box, the owner/operator shall prepare a graphical representation of the box. The representation shall be made available on-site for APCO review upon request. The box shall also be submitted to the BAAQMD with permit amendments.

*5. Except as provided in part 5b & 5c, the owner/operator shall operate each source within the NOx Box ranges listed below. This operational range shall be maintained within a tolerance of equal to or less than 10% for measurement uncertainty. This part shall not apply to any source that has a properly operated and properly installed NOx CEM. (Basis: Regulation 9-10-502)

- a. NOx Box ranges

Attachment C.1
Proposed Revisions to NOx Box Permit Condition 20617 - Facility A0901
(continued)

Source No.	Emission Factor (lb/MMBtu)	Min O ₂ at Low Firing (O ₂ % , MMBtu/hr)	Max O ₂ at Low Firing (O ₂ % , MMBtu/hr)	Min O ₂ at High Firing (O ₂ % , MMBtu/hr)	Mid O ₂ at Mid/High Firing (polygon) (O ₂ % , MMBtu/hr)	Max O ₂ at High Firing (O ₂ % , MMBtu/hr)
Plant B2626						
7	0.35	3, 16	17, 10	6, 30	N/A	11, 38
20	0.23	2, 19	7, 13	2, 37	N/A	6, 41
24	TBD					
26	TBD					
34	0.25	17, 2	20, 2	4, 26	N/A	7, 38
35	TBD					
173	TBD					
Plant A0901						
S-19	TBD					
S-20	TBD					
S-21	TBD					

The limits listed above are based on a calendar day averaging period for both firing rate and O₂%.

- b. Part 5a. does not apply to low firing rate conditions (i.e., firing rate less than or equal to 20% of the unit's rated capacity), during startup or shutdown periods, or periods of curtailed operation (ex. during heater idling, refractory dryout, etc.) lasting 5 days or less. During these conditions the means for determining compliance with the refinery wide limit shall be accomplished using the method described in 9-10-301.2 (i.e. units out of service & 30-day averaging data).
- c. Part 5a does not apply during any source test required or permitted by this condition. See Part 7 for the consequences of source test results that exceed the emission factors in Part 5.

*6. NOx Box Deviations (Basis: Regulation 9-10-502)

- a. The owner/operator may deviate from the NOx Box (either the firing rate or oxygen limit) provided that the owner/operator conducts a district approved source test which **reasonably represents** the past operation outside of the established ranges. The source test representing the new conditions shall be conducted within eight months **of the event**. The source test results will establish whether the source was operating outside of the emission factor utilized for the source. The source test results shall be submitted to the district source test manager within 45 days of the test. As necessary, a permit amendment **application** shall be submitted.
 - 1. Case 1: Source Test result is **less than or equal to** Emission Factor
 If the results of this source test do not exceed the higher NOx emission factor in Part 5 **by more than 5%**, or the CO limit in Part 9, the unit will be considered to be in **compliance** during this period for operating out of the "box."
 The facility may submit an accelerated permit program permit application to request an administrative change of the permit condition to adjust the NOx Box operating range(s), based on the new test data.
 - 2. Case 2: Source Test result is higher than Emission Factor
 If the results of this source test exceed the permitted emission concentrations or emission rates **in Part 5a by more than 5%** then the actions described below must be followed:

Attachment C.1
Proposed Revisions to NOx Box Permit Condition 20617 - Facility A0901
(continued)

A. Utilizing the measurement, the owner/operator shall perform an assessment of compliance with Section 9-10-301 as described below.

1. “Out of Box” Condition – for the day(s) in which the “out of box “ condition(s) occurred ensure sufficient NOx IERCs will be provided that day (or those days) to ensure the facility is in compliance with the refinery wide limit.
2. Within the Box but Higher Emission Factor Only – The higher emission factor must be retroactively applied back to the date of the previous source test and sufficient NOx IERCs provided for that time period to ensure the facility is in compliance with the refinery wide limit specified in 9-10-301. The unit will be considered in violation of Regulation 9-10-301 for each day there are insufficient NOx IERCs provided to bring the refinery wide average into compliance with 9-10-301.

B. The facility may submit a permit application to request an alteration of the permit condition to change the NOx emission factor and/or adjust the operating range, based on the new test data.

b. Reporting: The owner/operator must report conditions outside of box within 96 hours of occurrence.

*7. For each source subject to Part 3, the owner/operator shall conduct source tests at the schedule listed below. The source tests are performed in order to measure NOx, CO, and O₂ at the as-found firing rate, or at conditions reasonably specified by the APCO. The source test results shall be submitted to the district source test manager within 45 days of the test. (Basis: Regulation 9-10-502)

a. Source Testing Schedule

1. Heater < 25 MMBtu/hr

One source test per consecutive 12-month period. The time interval between source tests shall not exceed 16 months.

2. Heaters ≥ 25 MMBtu/hr

Two source tests per consecutive 12-month period. The time interval between source tests shall not exceed 8 months and not be less than 5 months apart. The source test results shall be submitted to the district source test manager within 45 days of the test.

b. Source Test Results > NOx Box Emission Factor

If the results of any source test under this part exceed the permitted concentrations or emission rates in Part 5a by more than 5%, the owner/operator shall follow the requirements of Part 6.a.2. If the owner/operator chooses not to submit an application to revise the emission factor, the owner/operator shall conduct another Part 7 source test, at the same conditions, within 90 days of the initial test.

- c. If a source is shutdown during the period when a source test is scheduled (i.e., outside of normal routine maintenance turnaround schedule), then the owner/operator shall conduct the source test within 30 days of start up of the source.

Attachment C.1
Proposed Revisions to NOx Box Permit Condition 20617 - Facility A0901
(continued)

*8. For each source listed in Part 1 with a NOx CEM installed, the Owner/Operator shall conduct semi-annual District approved CO source tests at as-found conditions. The time interval between source tests shall not exceed 8 months. District-conducted CO emission tests associated with District-conducted NOx CEM field accuracy tests may be substituted for the CO semi-annual source tests. (Basis: Regulation 9-10-502)

*9. For any source with a maximum firing rate greater than 25 MMBtu/hr listed in Part 1 for which any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O₂, the owner/operator shall properly install, properly maintain, and properly operate a CEM to continuously measure CO and O₂. The owner/operator shall install the CEM within the time period allowed in the District's Manual of Procedures. (Basis: Regulation 9-10-502, 1-522)

*10. In addition to records required by Regulation 9-10-504, the owner/operator must maintain records of all source tests conducted to demonstrate compliance with Parts 1 and 5. These records shall be kept on site for at least five years from the date of entry in a District approved log and be made available to District staff upon request. (Basis: Regulation 9-10-504)

Attachment C.2
Rationale for Proposed NOx Box Source Testing Tolerance - Permit Condition 20617, Part 5 - Facility A0901

Reg 9 Rule 10 Alternative Compliance Monitoring

Demonstration of NOx Box Tolerance(s) Equivalence to CEMS

Continuous Emissions Monitoring Systems	Mean Difference	Source Testing	Mean Difference
Sampling location and stratification	1%	Sampling location and stratification, 12 traverses	1%
extractive/in-situ sampling		extractive/in-situ sampling	
probe, type and location	3-6%	probe, type and location	2-10%
calibration drift	<2.5%	calibration drift	<2.5%
Interference	2%	Interference	2%
calibration gases	<5%	calibration gases	<5%
CO ₂ or O ₂ diluent correction monitor	<1%	CO ₂ or O ₂ diluent correction monitor	<1%
Flow monitor	2-15%	Flow monitor	2-15%
Water Correction	3-5%	Water Correction	3-5%
Pressure Measurements	5%	Pressure Measurements	5%
Temperature Measurements	1.5%	Temperature Measurements	1.5%
Data acquisition and handling system		Data acquisition and handling system	
Rounding errors, equation errors, linearity		Rounding errors, equation errors, linearity	
Bias Adjustment Factor correct for systematic error		Source Test Accuracy	
Relative Accuracy of CEMS	<20%	Address systematic error	<20%
		Address random error	

"Accuracy of a measurement refers to the degree of agreement between the measured value and a true value. In source measurements, the true value of a physical parameter is rarely known. In source testing, the "true" value is assumed to be that value determined by the EPA Reference Method."

Reference 6

Sources:

1. BAAQMD Manual of Procedures
2. Cal EPA ARB Method 7 Determination of Nitrogen Oxide Emissions from Stationary Sources
3. EPA 40 CFR 60 Appendices A, B
4. SCAQMD Protocol for the Measurement of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Sources Subject to SCAQMD Rule 1146
5. "Techniques to Improve Measurement Accuracy in Power Plant Reported Emissions", All contents copyright © 2002 ISA The Instrumentation, Systems, and Automation Society. All rights reserved.
6. EPA's Operator's Guide to Eliminating Bias in CEMS Systems <http://www.epa.gov/airmarkets/monitoring/bias/>

WSPA Rationale for Tolerance Levels for NOx Box Testing

Attachment C.2
Rationale for Proposed NOx Box Source Testing Tolerance - Permit Condition 20617, Part 5 - Facility A0901

The permit conditions in question establish equivalency for those heaters and boilers regulated by Regulation 9-10 using an Alternative Compliance Plan (ACP) under the provisions of that rule. Based on a direct equivalency, the District previously allowed a tolerance of 20% for source testing in its "District guidance on Equivalent Verification" issued June 2000 for the ACP.

There is inherent variability in all test methods and this is well documented in scientific and regulatory literature. This is the basis for tolerances established in regulations and regulatory reference test methods. Tolerances for systemic and random errors of 20% have been established for CEMs. EPA and CARB Reference Test Methods verify CEMs results based on source testing results. An analysis of measurement uncertainty in source testing can be verified by a review of the various measurements required for source testing, the potential for random error, and the potential for systemic errors such as occur in data handling and collection. Based on a review of scientific literature and various federal, state, and local reference test methods, this measurement uncertainty is between 10 to 20% based on the specific source testing configuration, measurement devices, the data collection protocol, and the data handling techniques.

There is inherent variability in all test methods and this is well documented in scientific and regulatory literature. This is the basis for tolerances established in regulations and regulatory reference test methods. Tolerances for systemic and random errors of 20% have been established for CEMs. EPA and CARB Reference Test Methods verify CEMs results based on source testing results. An analysis of measurement uncertainty in source testing can be verified by a review of the various measurements required for source testing, the potential for random error, and the potential for systemic errors such as occur in data handling and collection. Based on a review of scientific literature and various federal, state, and local reference test methods, this measurement uncertainty is between 10 to 20% based on the specific source testing configuration, measurement devices, the data collection protocol, and the data handling techniques.

In addition, calculation of emissions using the method specified in the June 2000 guidance result in extremely conservative estimates. WSPA members report that emissions calculated according to the ACP may be overstated by as much as 30%. This finding is intuitive because all operating conditions are calculated at the highest emission factor (worst operating case scenario), when most operating conditions are lower than the highest firing and O₂ rates.

Therefore, there is a large margin for error introduced in the ACP calculation requirements themselves which directionally increases the likelihood of exceeding the emissions estimates that would have been yielded had CEMs been installed.

Thus, this requested amendment does nothing to harm the demonstration of alternative compliance assurance. Source tests are logistically and operationally burdensome, and returning to identical and previous operating conditions is even more costly, with the potential to increase emissions of NOx and other pollutants.

WSPA believes it to be within the District's authority to continue a 10 to 20% tolerance for measurement uncertainty.