

**THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT (“DISTRICT”)  
RESPONSES TO COMMENTS SUBMITTED BY SHELL OIL PRODUCTS US (“SHELL”)  
ON THE PROPOSED MAJOR FACILITY REVIEW PERMIT FOR SITE #A0011.**

Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
<b>Section 1: Flare Permit Conditions and Applicable Requirements</b>		
1.1	In Condition 18618 Part 12, combine the limits for flares S-1471 and S-1472.	Yes
1.2	In Condition 18618, correct typo i.e. change reference to S-1470 to S-1471.	Yes
1.3	In Condition 18618 Part 14, clarify that this part only applies to those sources listed in Part 12 and correct the reference number from part 2 to part 15.	Yes
1.4	In Condition 18618 Part 15, clarify that this part only applies to those sources listed in Part 12 and correct a minor format issue i.e. sub-parts under part 15.b. need to be renumbered to part’s 15.b.i. and 15.b.ii.	Yes
1.5	In Condition 18618 Part 16, correct the referenced number from part 4.b.ii. to part 15.b.ii.	Yes
1.6	In Condition 18618 Part 17, correct the referenced numbers from parts 3 and 4 to parts 14 and 15, respectively.	Yes
1.7	In Condition 18618 Part 18, add future effective date of June 1, 2004 and correct referenced numbers from parts 5, 6, and 7 to 16, 17, and 18.	Yes
1.8	Delete Flare Condition 20747 because it is redundant to Part 19 in Condition 18618.	Yes
1.9	Delete 6-305 From Flares And Other Gas-Fired Only Combustion Devices.	No. The District disagrees with Shell that flares and other gas fired combustion devices don’t have the potential to emit visible particles large enough to fall on property not owned by Shell.
1.10	In Table VII-AN, the frequency of the Alternative Monitoring Method Under 60.13(i) For S1470 - LOG LPG Loading Flare Is Not Continuous and needs to be changed to periodic event i.e. from “C” to “P/E” .	Yes
1.11	Delete Visible Emission Inspections To Demonstrate Compliance With Grain Loading in Tables VII-AN, AOa and AOb, BI, BJ, and CI. Condition 18618, Part 15 or visible emissions inspections should be deleted as the monitoring requirement for the 6-310 FP limit. It is not feasible to demonstrate compliance with a particulate grain-loading limit using visible inspections. Replace Condition 18618, Parts 15 with None.	No. Since the flares cannot be source tested, the visible emissions monitoring serves as a surrogate.
1.12	In Table VII-AN For S1470 – LOG LPG Loading Flare, Monitoring For BAAQMD 6-301 And 6-	No.

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	310 Should Be None, since these flares have a very low probability for visible emissions and grain loading exceedences. Note that Condition 18618 Part 15 does not apply to these flares.	The District will address this comment in subsequent revisions.
1.13	Delete BAAQMD Regulation 12 Rule 11 Requirements In Table VII-CI (S4201). BAAQMD Regulation 12 Rule 11 requirements should not be in Section VII, because these rules do not have a numeric limit. Only numeric limits belong in Section VII.	No. Section VII contains both limits and monitoring. This includes monitoring when there are no explicit limits. As an example, consider Acid Rain permits which contain NOx monitoring requirements without any limits. Therefore, the District disagrees with Shell.
1.14	Rename The Two Table VII-AO’s as Table’s VII-AOa and VII-AOb.	Yes
1.15	In Table VII-AO For A101 through A103, Monitoring For BAAQMD 6-301 And 6-310 Should Be None, since these flares have a very low probability for visible emissions and grain loading exceedences. Note that Condition 18618 Part 15 does not apply to these flares.	No The District will address this comment in subsequent revisions.
1.16	Delete BAAQMD 12-11 Requirements In Table VII-AO for A101 through A103, because the vapor recovery system flares are exempt from BAAQMD Regulation 12 Rule 11, in accordance with BAAQMD 12-11-110.	Yes
1.17	Delete NSPS 40 CFR 60 Subpart J Requirements From Table VII-AO for A101 through A103, because the citation is an exemption, not a numeric limit.	Yes
1.18	Delete BAAQMD Regulation 12 Rule 11 Requirements In Table VII-AOb (S1471 and S1472), because these rules do not have a numeric limit. Only numeric limits belong in Section VII.	No Section VII contains both limits and monitoring. This includes monitoring when there are no explicit limits.

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		As an example, consider Acid Rain permits which contain NOx monitoring requirements without any limits. Therefore, the District disagrees with Shell.
1.19	Change Monitoring Citation for BAAQMD 6-301 in Table VII-BI from Condition 18618 Part 15 to Part 18.	Yes
1.20	Change Monitoring Requirement In BAAQMD 9-10. Since BAAQMD 9-10-504.2 only applies to small units, change BAAQMD 9-10-504 to 9-10-504.1 in the monitoring column of the following tables: VII-AP, VII-AQ, VII-AR, VII-AT, VII-AU, VII-AX, VII-BB, VII-BL, VII-CB, and VII-CE.  <i>Note that not all tables are still numbered the same in this revision. To correct this problem in all applicable tables, search for 9-10-504.2 and replace with 9-10-504.1.</i>	No The District will address this comment in subsequent revisions.
1.21	Delete BAAQMD Regulation 6 Requirements From Sulfur Pit. In Table IV-DE, delete the BAAQMD Regulation 6 requirements, which do not apply to a fixed roof molten sulfur tank	No However, Shell may seek to demonstrate that the sulfur pit emits no particulates.
1.22	On Table VII-CF For S4080, Change The CO, NH3, And H2S Monitoring Frequency From “P/A” To “P” For Condition 12271, Parts 109, 110, And 115. These permit conditions provide an allowance for a decrease in source testing frequency for results that are less than 50% of the standard, therefore, since it is subject to change in the future, the frequency cannot be specified in the Title V permit. (Note that some of these conditions may be deleted per discussion in Section I Priority Comments of this letter).	No The District will address this comment in subsequent revisions.
1.23	Correct Throughput Limits Mistakes In Table VII-BI, BJ, And CI. The limits are off by a factor of 1000.	Yes
<b>Section 2: Permit condition 18265; Implementing Reg.9, Rule 10</b>		
2.1	Keep original permit condition language if possible. Some of the new conditions reflect the future	No

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	effective date of June 1, 2004. It would be cleaner to keep the original conditions. If Rev 1 comes out after the effective date of the new NOx conditions, replace the sunset conditions with the old condition (keeping the ones that still apply.)	Revision 1 (December 16, 2004) incorporates changes to the NOx provisions agreed to by the District, following extensive discussions with refineries and WSPA. To the extent Shell has further proposals, it may submit them for future consideration.
2.2	Clarify Part 5B. In Part 5B, revise the condition based on the WSPA comment to clarify that startup and shutdown can be separate from curtailed operation or low firing rate conditions and do not have to meet the < 20% of the unit's rated capacity to qualify for the exemption.	Yes
2.3	Revise Part 6 based on WSPA Comment. In Part 6A, revise the condition based on the WSPA comment to allow extension of source test submittal with approval of BAAQMD. Also clarify that the source test must take place either at the next scheduled source test or within eight months. Delete “whichever is sooner”.  <i><b>BAAQMD replaced “replicates” with “reasonably represents.” No other change made.</b></i>	Yes, in part as noted. Revision 1 (December 16, 2004) incorporates changes to the NOx provisions agreed to by the District, following extensive discussions with refineries and WSPA. To the extent Shell has further proposals, it may submit them for future consideration.
2.4	Revise Part 7 based on WSPA Comment. In Part 7, revise the condition based on the WSPA comment to allow extension of source test submittal with approval of BAAQMD.  <i><b>BAAQMD added Part 7c per WSPA comment. BAAQMD rejected Part 7b changes, but added provision for retest.</b></i>	Yes, in part as noted. Revision 1 (December 16, 2004) incorporates changes to the NOx provisions agreed to by the District, following extensive discussions with refineries and WSPA. To the

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		extent Shell has further proposals, it may submit them for future consideration.
2.5	Revise Part 7A2 based on WSPA Comment. In Part 7A2, add WSPA comment for reduced source test frequency (similar to other permit conditions that allow this).	Yes
2.6	Clarify that measurement of combined exhaust is allowed. In Part 11, delete comment about Alternative Compliance Plan and retain the part of the condition that clearly allows measurement of NOx and O2 of combined exhaust for those heaters with common stacks or chimneys. This is a Shell issue and not part of the WSPA comments.  <i>Clarification was added, but the comment about the Alternative Compliance Plan remains.</i>	Yes, in part as noted. Revision 1 (December 16, 2004) incorporates changes to the NOx provisions agreed to by the District, following extensive discussions with refineries and WSPA. To the extent Shell has further proposals, it may submit them for future consideration.
2.7	Add Parts 12 – 15. These sections are currently in the Title V permit and should not be sunset with the new revised condition since they have to do with IERC's. These sections are not addressed by the revised conditions.	Yes
2.8	Add Part 16. Shell and WSPA agree that there is a need to allow delay in source testing for heaters that are shutdown for prolonged periods until after the heater is back up. This is in the current permit for Boiler 5 (S1800) and needs to be stated in general. We have several heaters in Lubes that may never run again. Feed is not available to test these heaters. If we decide to operate them again, then testing would be required within 30 days of startup.  <i>Part 16 remains, but without the added text.</i>	Yes, in part as noted. The District will address this comment in subsequent revisions.
2.9	Add Part 20, which is currently in the Title V permit and should not be sunset. It includes the ongoing requirement to maintain a fuel flow meter.	Yes
2.10	Delete Parts 8 and 16 Under Permit Condition #18265 from Section IV Tables AY, AZ, and CS.	Yes

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Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
	Part 8 applies to sources subject to Permit Condition #18265 that currently have CEMS analyzers installed. Tables AY, AZ, and CS include only sources without CEMS analyzers; therefore, Parts 8 and 16 should be removed from Tables AY, AZ, and CS. Part 16 only applies to S1800 and should be removed from the listed tables in Section IV.	
2.11	Delete Parts 3, 4, 5, 6, 7, 9, 12, 16, 18, and 19 Under Permit Condition #18265 from Section IV Tables BA, BC, BD, BG, BL, and CU. The tables listed above include only sources with CEMS analyzers currently installed. The parts listed above apply to sources without CEMS analyzers. These parts should be removed from Section IV tables that include only sources with CEMS analyzers.	Yes
2.12	Consolidate Line Items for NOx Limits Under BAAQMD 9-10-301 and 9-10-303 in Section VII Tables AP, AQ, AR, AT, AU, AX, BB, BL, CB, AND CE.  <b><i>Change made in Tables AQ, AT, AU, AX, BB, BL, CB, CE. Change not made in Table AP and AR.</i></b>	Yes, in part as noted. The District will address this comment in subsequent revisions.
2.13	Monitoring Requirement Citation for BAAQMD 9-10-301 and 9-10-303 in Section VII Tables AP, AQ, and CB Should Reference Permit Condition #18265 Parts 1-7, 9-15, and 17-21.  <b><i>New part added per comment for monitoring of 9-1-301 in Tables AQ and CB, but not 9-1-303. Wrong parts are still referenced in AP, AQ, and CB on the citation for 9-1-303. Note that in Table AP there are two lines for 9-1-303. The first is correct; the second one is not. There are also two lines for 9-1-301 and neither is correct.</i></b>	Yes, in part as noted. The District will address this comment in subsequent revisions.
2.14	Monitoring Requirement Citation for BAAQMD 9-10-301 and 9-10-303 in Section VII Tables AR, AT, AU, AX, BB, BL, and CE Should Reference Permit Condition #18265 Parts 1, 2, 8, 10, 11, 12, 13, 15, 17, 20 and 21. <b><i>Table BB is correct except that it references 11-21. Other tables have been corrected.</i></b>	Yes, in part as noted. The District will address this comment in subsequent revisions.
2.15	Citation of NOx Limit from Permit Condition #18265 Part 2 in Section VII Table AP Is Incorrect and Should Be Changed to Permit Condition #18265 Part 5. The NOx limit specified in this line item comes from a table in Part 5(a) of the permit condition not Part 2. Part requires that the owner install and O2 analyzer. The citation of Permit Condition #18265 Part 2 should be changed to Permit Condition #18265 Part 5.	Yes
2.16	Citation of Monitoring Requirements for BAAQMD 9-10-303 in Section VII Table AT Is	Yes

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	Redundant. The NOx limit and monitoring requirement for BAAQMD 9-10-303 is listed three times in Table AT, and should be consolidated into one line item referencing the applicable parts of Permit Condition #18265 under Monitoring Requirement Citation.	
2.17	Add BAAQMD 9-10-301 Requirements to Section VII Tables AU, AX, CB, And CE. BAAQMD 9-10-301 is a less stringent NOx limit than required in 9-10-303, however, it still applies to the heaters listed in Tables AU, AX, CB, and CE. The citation of the NOx limit defined in Reg. 9-10-301 should be added to these tables. The applicable parts of Permit Condition #18265 should be referenced in the Monitoring Requirement Citation column.	Yes
2.18	Add Condition 18265 Part 14 to Tables IV-BA, IV-BC, IV-BD, and IV-BG. Part 14 should be added to these tables that have sources with common stacks.	Yes
<b>Section 3: NSPS Subpart J Alternative Monitoring for Process Vents</b>		
Please refer to Attachment A for a detailed description of Shell’s comments as it relates to items 3.1 through 3.8		
3.1	Modify Table VII-AU	Yes
3.2	Modify Table VII-CDa	Yes
3.3	Modify Table VII-AX	Yes
3.4	Modify Table VII-BY	Yes
3.5	Modify Table VII-AQ	Yes
3.6	Modify Table VII-AQa	Yes
3.7	Modify Table VII-CB	Yes
3.8	Modify Table VII-CC	Yes
<b>Section 4: NSPS Subpart J Alternative Monitoring for Marine Vapor Recovery Systems</b>		
Please refer to Attachment B for a detailed description of Shell’s comments as it relates to items 4 through 4.2		
4	Add to Condition # 4288	Yes The District has addressed this comment in Rev. 2.
4.1	In Table IV-CF, add the following line items as follows	Yes The District has addressed this comment in Rev. 2.
4.2	In Table VII-BR, add the following line item as follows:	Yes

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		The District has addressed this comment in Rev. 2.
<b>Section 5: Typographical Errors, Mistakes, and Other Corrections</b>		
5.A.1	Delete Condition 12271 Part 115 Because It Duplicates Condition 18618 Part 10. These conditions are identical except that Condition 12271 part 115 applies only to OPCEN Sulfur Plant 4 (SRU4) (S4180), while Condition 18618 Part 10 applies to all sources subject to BAAQMD 9-1-313.2 (all of the sulfur plants and facility wide).	Yes The District has deleted part 115 of permit condition 12271 in Rev. 2.
5.B.2	Add Gas Turbine and Duct Burners (S4190 through S4193) to Table IV B. These sources now have a throughput limit in Condition 18618, Part 1.	Yes
5.B.3	Add Gas Turbine and Duct Burners (S4190 through S4193) to Table VII-A. These sources now have a throughput limit in Condition 18618, Part 1 and are subject to Condition 18618, Part 2.	Yes
5.B.4	In Table IV-DNa for Standby Engines, consider deleting BAAQMD 6-305 or add that it is federally enforceable. Consider deleting BAAQMD 6-305, because it is not likely that standby diesel engines will emit visible particles large enough to fall on property other than Shell Martinez Refinery.	No The District will address this comment in subsequent revisions.
5.B.5	In Table IV-DNa for Standby Engines, Delete BAAQMD 9-1-301. This is a facility wide requirement and is already included in Table IV-DV. This ground level concentration applies to the entire facility, not an individual source.	No The District will address this comment in subsequent revisions.
5.B.6	Delete Redundant Words in Condition 19097, Part 7 for Standby Engines. Delete “shall be checked for” because it is repeated twice.	Yes
5.B.7	In Section VI, Modify Condition 19097, Part 7. Modify the condition to read “The engines shall be checked for visible emissions after combustion of 1,000,000 gallons of liquid fuel.” Inspection after 1,000 gallons is too frequent for ten IC engines that are being tested regularly.	Yes
5.B.8	In Table VII-CY (Facility), Change The Monitoring Requirement For BAAQMD 9-1-313.2 To Condition 18618 Part 10. Replace Condition 12271 Part 115 with Condition 18618 Part 10. Condition 12271 Part 115 applies only to S4180, whereas Condition 18618 Part 10 applies to all sources subject to BAAQMD 9-1-313.2. Since Table VII-CY contains facility wide requirements, Condition 18618 Part 10 is the	Yes The District has deleted monitoring for 9-1-313.2 in Rev. 2.



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	appropriate monitoring condition.	
5.B.9	In Table IV-AQ, Correct Description Of Condition 18618 Part 10. This condition reads source test to demonstrate compliance with BAAQMD 9-1-313.2. Source testing is no longer required. It should read analysis and recordkeeping.	Yes
5.B.10	In Table IV-AQ, Correct Federal Enforceability Of Condition 18618 Part 10. This condition is not federally enforceable.	Yes
5.B.11	In Condition 12271 Part 111, Add Language To The End Of The Condition. Add the following to the end of the condition: The frequency of source testing required under this condition shall be reduced to once every five years if three consecutive annual source tests document that emissions are less than 50 percent of the standard. The frequency of source testing shall revert back to once per year, if a source test documents that emissions are 50 percent of the standard or more. The source testing frequency can again be reduced to once every five years if another three consecutive annual source tests document that emissions are less than 50 percent of the standard. [basis: Regulation 2-6-409.2]	Yes
5.B.12	In Condition 12271 Part 112, Add Language To The End Of The Condition. Add the following to the end of the condition: The frequency of source testing required under this condition shall be reduced to once every five years if three consecutive annual source tests document that emissions are less than 50 percent of the standard. The frequency of source testing shall revert back to once per year, if a source test documents that emissions are 50 percent of the standard or more. The source testing frequency can again be reduced to once every five years if another three consecutive annual source tests document that emissions are less than 50 percent of the standard. [basis: Regulation 2-6-409.2]	Yes
5.B.13	In Condition 12271 Part 113, Add Language To The End Of The Condition. Add the following to the end of the condition: The frequency of source testing required under this condition shall be reduced to once every five years if three consecutive annual source tests document that emissions are less than 50 percent of the standard. The frequency of source testing shall revert back to once per year, if a source test documents that emissions are 50 percent of the standard or more. The source testing frequency can again be reduced to once every five years if another three consecutive annual source tests document that emissions are less than 50 percent of the standard. [basis: Regulation 2-6-409.2]	Yes
5.B.14	Correct typo in Table IIB, Row A-33.	Yes

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	The citation 40 CFR 60.112(b)(3)(ii) should read 40 CFR 60.112b(a)(3)(ii).	
5.B.15	<p>Add Monitoring Citation to Tables VII-L, VII-Y, VII-AM, VII-BS and VII-CO. For the numeric limit in NESHAP Subpart FF 63.649(a)(2)(ii), add the monitoring citation, 40 CFR 63.640(d)(5). The monitoring frequency and type are none, because no testing, monitoring, recordkeeping, or reporting is required for refinery fuel gas systems or emission points routed to refinery fuel gas systems.</p> <p><b><i>The citation for the numerical limit is incorrect; correct citation is 61.349(a)(2)(ii). Also, Subpart FF has been amended; and, the correct monitoring citation is 61.340(d).</i></b></p>	<p>Yes, in part as noted. The District will address this comment in subsequent revisions.</p>
5.B.16	<p>Re-number Condition 7382, Parts 3, 4 and 5. Condition 7382, Parts 1, 2, and 3 (which apply to S1005) were correctly reinstated into Section VI. However, in Condition 7382, the Parts for S1072 were incorrectly re-numbered from 1, 2 and 3 to 3, 24, and 5. Correctly renumber them to 4, 5, and 6.</p> <p><b><i>Changes were made. However, after Part 6 is a line reading “4. Condition deleted.” This should either be changed to “7. Condition Deleted” or removed</i></b></p>	<p>Yes, in part as noted. The District will address this comment in subsequent revisions.</p>
5.B.17	<p>Delete Visible Emission Inspections to Demonstrate Compliance with Grain Loading. On Tables VII-AP, AR, AX, BB and CH. Condition 18618, Parts 3 and 7 for visible emissions inspections after 1 MM gallon fuel combusted should be deleted as the monitoring requirement for the 6-310.3 FP limit. It is not feasible to demonstrate compliance with a particulate grain loading limit using visible inspections. Replace Condition 18618, Parts 3 and 7 with None.</p>	<p>No This is the standard monitoring approved by the CAPCOA, ARB, and the EPA for liquid fuel combustion sources. Shell may propose an alternative monitoring such as source testing, for District approval.</p>
5.B.18	Add Condition 16688, Part 1 to Table IV-BZ (S1800).	Yes
5.B.19	<p>Correct or Delete Condition 17533, Part 15. This part inappropriately references Permit #26876. Either the Condition 17533 Part 15 should include the requirement or it should be deleted. This deletion should be made throughout the document.</p>	Yes
5.B.20	In Table VII-AP, Correct the Spelling of Sampling.	Yes

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	Change “sampline” to “sampling”. This is a typo.	
5.B.21	On Table VII-CE For S4161, Change the Monitoring Type for the Subpart J SO2 Limit and Monitoring Under 60.105(A)(4) from “Monitoring, Records, and Reporting” to “H2S Analyzer” 60.105(A)(4) states “In place of the SO2 monitor in paragraph (a)(3) of this section, an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in fuel gases before being burned in any fuel gas combustion device.” An H2S analyzer is the instrument to be used to monitor the H2S concentration for compliance with the limit.	Yes
5.B.22	Add a Permit Shield for the 9-1-502 Requirements for Continuous Monitoring Under 1-522. The 9-1-502 requirements appear to be superceded by Condition 18618, Part 4 for the following sources: S1476, S1477. Note that a previous comment suggested the addition of 9-1-502 for completeness in Section IV applicability. Condition 18618, Part 4 requires sampling and analysis of sulfur content of the fuel to demonstrate SO2 emissions compliance. This method is effective, since SO2 emissions are presumed to be the result of, and cannot exceed, 100% oxidation of sulfur molecules in the fuel. This presumption negates the need for continuous emissions monitoring of SO2.  <i>Tables are correct. However, Permit Shield was not added</i>	Yes, in part as noted. The District will address this comment in subsequent revisions.
5.C.23	Cooling Water Tower Process Weight Rate Table VII-AJ for the cooling water towers includes BAAQMD 6-311, which limits particulate emissions based on process weight rate. This rule does not apply to cooling towers and should be deleted from this table. Note that this requirement does not appear in the corresponding Section IV tables, so no change is required in Section IV.  <i>Change was not made. Also, this provision appears in Tables IV – AS and IV – CY in addition to Table AS – AJ. Please remove citation in all tables.</i>	No
5.C.24	Delete BAAQMD 8-2-301 Requirements From Tables IV-AS, CY and Table VII-AJ. Cooling towers at Shell are exempted by Rule 8-2-114. “Emissions from cooling towers...are exempt from this Rule, provided best modern practices are used.” Shell described its cooling water tower practices in an application provided to BAAQMD in May 2003. Shell notes that the BAAQMD engineering evaluation dated May 29, 2003, does not address the specific exemption for cooling towers in Rule 8-2-114.	Yes The District has deleted monitoring for 8-2-301 in Tables IV-AS, CY and VII-AJ in Rev. 2.

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5.D.25	Delete the Word “Combined” in Condition 20042, Part 1 for Tank 17095 (S-17095). In Section VI, Condition 20042, Part 1, delete the word “combined” because the throughput is from one source and is not a combined throughput.	Yes
5.D.26	Delete Table IV-AG and Table VII-AA for S1116 - Tank 1116 Fresh Acid. This sulfuric acid tank does not emit particulates or acid mist. In Table IV-AG, delete 6-301 as the basis for the concentration limit on the acid. Also delete all Regulation 6 requirements.	No
5.D.27	Delete Table IV-Kb. Change “See Table IV-J...” to “See Table IV-Jb...”.	Yes
5.D.28	Correct Typo in VII – CM Header. Put “S” in front of 4311 making it S4311.	Yes
5.D.29	Correct Monitoring Frequency in Table VII-CG. For condition 60.333(b), change frequency code form “P” to “P/E (upon transfer to storage tank from another source).”	Yes
5.D.30	Correct Monitoring Frequency in Table VII-CA. For condition #12271, Part 11, change “P/E” to “P/A.”	Yes
5.D.31	Clarify Emission Calculation Procedures in Condition 12271 Part A. The second paragraph in Part A reads “Emissions shall be calculated in accordance with the emission calculation procedures used in this permit application, and summarized in Appendix B...” Replace the reference to the application and Appendix B with the actual procedure.	No The District will address this comment in subsequent revisions.
5.D.32	Table VII-I, J. Add the citation for 8-5-401.1 requirement citation for monitoring citation of 8-5-501.2. In Table VII-J, change the monitoring citation for 8-5-328.1.1 from 8-5-501 to 8-5-501.1. These are external floating roof tanks.	Yes
5.D.33	Table VII-P. Add the citation for 8-5-401.1 requirement citation for monitoring citation of 8-5-501.2.	Yes
5.D.34	Delete Monitoring Requirements Pertaining to Condition 6707 Part 2.b.i and ii from Table VII-BW. Monitoring should say none. Since the POC and toxics emissions were originally evaluated based on worst case conditions at the allowable throughput, the POC emissions and toxics emissions inherently will not exceed the requirements of Part 2.b.i and ii.	No The District will address this comment in subsequent revisions.
5.D.35	Delete Monitoring Requirements Pertaining to Condition 18646 Part 2.b.i and ii from Table VII-F. Monitoring should say none. Since the POC and toxics emissions were originally evaluated based on	No The District will address this

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Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
	worst case conditions at the allowable throughput, the POC emissions and toxics emissions inherently will not exceed the requirements of Part 2.b.i and ii.	comment in subsequent revisions.
5.D.36	Correct Internal Floating Roof Requirements in Table IX B-2 Permit Shield for Subsumed Requirements. Citation 60.115b(b) should be changed to 60.115b(a) Reporting and Recordkeeping Requirements for IFRTs (not EFRTs).	Yes
5.E.37	On Table VII-CA, Correct The Condition 12271, Part 11 VOC Emission Limit From “19.3 Tpy” To “193.5 Tpy”	Yes
5.E.38 & 39	Modify Table VII – AG For S1426 With The Following Changes: Delete the “source testing” from the monitoring type citation for 60.102(a)(1) PM standard.	Yes
5.E.40	Modify Table VII – AG For S1426 With The Following Changes: Delete 40 CFR 60.106(g) and 60.107 performance testing and notification requirements from the monitoring requirement citations for the 60.104(b)(2) SO2 standard.  <i>40 CFR 60.106(g) and 60.107 have been removed; however, 60.108(d) remains and should be deleted.</i>	Yes, in part as noted. The District will address this comment in subsequent revisions.
5.E.41	In Table IV-AP, Delete “SJT1” and “SJT2” from Descriptions in 63.1565(b)(1). This was a note (initials) that appears to still be in the document.	Yes
5.E.42	In Table IV-AP, Citation 63.1570(e), change “SSMPP” to “SSMP” This is a typo.	Yes
5.E.43	Replace the 40 CFR Part 63 Subpart A References in Section IV Table AP Excluding the Following Subparts. These subparts do not apply to sources listed in Table AP. 63.6(b)(6), 63.6(c)(3)-(4), 63.6(d), 63.6(f)(2)(iii)(D), 63.6(h)(2)(i) and (ii), 63.6(h)(3), 63.6(h)(5), 63.6(h)(7)(iii), 63.6(i)(15), 63.10(c)(7)-(8), 63.10(d)(2) and 63.10(e)(3)  <i>The original comment was modified later. The table is correct.</i>	N/A
5.F.44	In Table IV-CD, Modify Table IV-CD For Parts And Solvent Cleaners (S1900, S1902 And S1903). The description for 8-16-501.3 should read “monthly” rather than “annual”.	Yes
5.F.45	In Table VII-BN, Make The Following Changes Because 8-31 Were Amended On October 16, 2002 For the monitoring frequency for citation 8-31-306, add P/M for monthly records of cleanup and	Yes

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Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
	surface preparation solvent used.	
5.F.46	On Table VII-BP For The Maintenance Degreasers And Cleaners, Delete The “P/E – Visual Inspection” For BAAQMD 8-16-303.4.1 And Replace With None There is no basis for the visual inspection.	No The District will address this comment in subsequent revisions.
5.G.47	Revised SIP Rule 8-7 11/06/2002. Table IV BO cites Rule 8-7 for Gasoline Dispensing Facilities (11/17/99). A revised Rule 8-7 was approved in the SIP 11/06/2002. Consequently, for Table VII-BD, add for requirements 8-7-301.6 and 8-7-302.5 the testing requirement in 8-7-301.13. Add for requirement 8-7-302.14 the testing requirements in 8-7-302.14.	Yes
5.G.48	Modify Conditions 18618, Part 5 to Have an Annual Visible Emissions Check Instead of Quarterly. Historically, the sand hopper, coke silos, and dry fines silo have not posed visible emissions issues, since they are operated with methods to minimize fugitive dust. Reduce this requirement from quarterly to annual.	No Before the District can reduce the monitoring frequency, Shell must submit an application for a significant revision of their Title V permit.
5.G.49	Visible Emissions Monitoring If Condition 18618, Part 5 is Not Modified to Have an Annual Visible Emissions Check Instead of Quarterly, Then Add Language that Will Reduce Monitoring After Four Quarters of Visible Emissions Checks Indicate No Visible Emissions. Historically, the sand hopper, coke silos, and dry fines silo have not posed visible emissions issues, since they are operated with methods to minimize fugitive dust. Reduce this requirement from quarterly to annual.	No Before the District can reduce the monitoring frequency, Shell must submit an application for a significant revision of their Title V permit.
5.G.50	On Table VII-BE For The S1650 Sandblasting Sand Hopper, Delete Condition 18618, Part 5 And Replace With None Delete Condition 18618, Part 5 And Replace With None. Condition 18618, Part 5 visible emissions monitoring requirement is not an appropriate method for demonstrating compliance with the grain loading limit of BAAQMD 6-311.	No Before the District can reduce the monitoring frequency, Shell must submit an application for a significant revision of their Title V permit.

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Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
5.G.51	In Table VII-BG for S1767, S1768, and S1769, Delete Condition 18618, Part 5 And Replace With None. Condition 18618, Part 5 visible emissions monitoring requirement is not an appropriate method for demonstrating compliance either with the grain loading limits of BAAQMD 6-310 and 6-311 or the control efficiency requirement of Condition 7618, Part D.3.	No Shell must apply for a modification of the monitoring requirement.
5.G.52	In Table VII-BZ for S4005 Coke Handling Facility, Delete Condition 12271, Parts 75, L And M As The Monitoring Requirements For The Condition 12271, Parts 79 And 81 PM Limits. Delete Condition 12271, Parts 75, L And M As The Monitoring Requirements For The Condition 12271, Parts 79 And 81 PM Limits. Condition 12271, Part 75 is a visible emission limit, not a monitoring requirement. Replace Part 75 with None as there is no appropriate compliance monitoring requirement to demonstrate compliance with the Parts 79 and 81 grain loading limits.	No Shell must apply for a modification of the monitoring requirement.
5.G.53	Condition 7618 List Of Applicable Sources Still Appears To Have Errors. Shell previously recommended deleting this list because it was unnecessary and has errors. See previous comments from 2001 to the present that identify errors and correct them.	No Please resubmit comments for consideration in subsequent revisions.
5.G.54	Condition 7618 Is Listed Incorrectly For Many Sources in Section IV and VII Tables. Review previous comments from 2001 to the present that identify errors and correct them. Also Shell will provide additional clarifications. Due to time constraints, Shell was unable to list all of the errors related to this condition that still exist in the draft Title V permit.	No Please resubmit comments for consideration in subsequent revisions.
5.G.55	Modify Condition 4041, Part 10 to Have an Annual Visible Emissions Check, If Operated, Rather Than Quarterly. If Operated, Rather Than Quarterly. Historically, the coke corral has not had visible emissions, because it is operated with methods to minimize fugitive dust. Reduce this requirement from quarterly to annual.	No Before the District can reduce the monitoring frequency, Shell must submit an application for a significant revision of their Title V permit.
5.G.56	On Table VII-BM for the S1803 Coke Corral, change the monitoring frequency for Condition 4041, Part 10 from “P/E” to “P/A” or P/Q (unless the condition language is being modified to require the monitoring only during operation of the Coke Corral).	Yes, in part as noted. Before the District can reduce the monitoring frequency, Shell must submit an application for a significant

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Section/ Comment #	Comment	Was the change incorporated in the Rev. 1 Permit signed by the APCO on December 16, 2004?
	<i>Table VII-BM gives monitoring frequency: P/Q for limit BAAMQD 6-301 P/Q for limit BAAMQD 6-311 P/E for limit BAAMQD Condition 4041 Part 3</i>	revision of their Title V permit.
5.G.57	On Table VII-BM for the S1803 Coke Corral, delete Condition 4041, Parts 10 and 11 as the monitoring requirement for BAAQMD 6-311 The visible emission inspection is not an appropriate method to demonstrate compliance with the 6-311 grain loading particulate matter limit.	No Shell must apply for a modification of the monitoring requirement.
5.G.58	On Table VII-BM for the S1803 Coke Corral, delete the averaging period “for no more than 3 minutes/hour” for Condition 4041, Part 3 or modify the permit condition language to include the averaging period.	Yes
5.G.59	Delete Condition 18618, Part 11 Startup/Shutdown Notification Requirements From Table IV-DV For Facility-Wide Applicability. This permit condition should only be listed on the Table IV’s for the process units included in the condition limited. Note, if the Condition 18618 Part 11 is deleted from Section VI, then delete it from the entire document.	No The District will address this comment in subsequent revisions.
5.H.60	Delete NESHAP Requirements 63.52 through 63.53 in the Facility-Wide Table IV-DV. These citations require applications for specific source categories, i.e. combustion turbines, site remediation, process heaters, etc. Some categories are not applicable, such as the MACT for Organic Liquid Distribution. Also the Reciprocating Internal Combustion MACT was withdrawn. Each of these requirements needs to be evaluated on a source-by-source basis. If any are applicable they should be put in source specific tables and not the facility-wide table.	No Please submit a detailed list of requirements for inclusion into source specific tables for the District’s consideration in subsequent revisions.
5.H.61	Correct Subpart A Requirements. There are still errors in many of the tables regarding Subpart A requirements associated with NSPS, NESHAPS and MACT standards. These should be corrected.	No Please submit a detailed list of the errors for the District’s consideration in subsequent revisions.



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**Attachment A**

**NSPS Subpart J - Fuel Gas Combustion Devices  
 Process Vents  
 Alternative Monitoring**

NSPS Subpart J requires that H<sub>2</sub>S in fuel gas be limited to 163 ppm if the fuel gas is combusted in an affected fuel gas combustion device. To demonstrate compliance, CEMS are required to monitor the H<sub>2</sub>S concentration of fuel gas. The primary fuel gas streams at the refinery include refinery fuel gas (RFG) and flexigas (FXG). Each of these fuel gas streams have an H<sub>2</sub>S CEMS as required by NSPS Subpart J. The definition of fuel gas under NSPS Subpart J also includes other "fuel gas" streams, such as process vent gases, if they are routed to an affected fuel gas combustion device. For these vent gases, the refinery does not use CEMS and instead utilizes alternative monitoring that is allowed under 60.13(i). In accordance with 60.13(i), the alternative monitoring plans have been approved by U.S. Environmental Protection Agency, Region IX. In the Title V Permit, the following changes are requested to clarify the appropriate monitoring requirements.

1. In Table VII-AU, modify the following line item as follows:

SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) <u>for refinery fuel gas (RFG) and/or flexigas (FXG)</u>	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3)	C	H <sub>2</sub> S analyzer for <u>refinery fuel gas (RFG) and/or flexigas (FXG)</u>
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2. Modify Table VII-CDa as follows:

**Table VII – CDa  
 Applicable Limits and Compliance Monitoring Requirements  
 S4141 – DC F-14011 HGHT FEED**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
See Table VII – AU & CD for additional requirements.							

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**Table VII – CDa  
 Applicable Limits and Compliance Monitoring Requirements  
 S4141 – DC F-14011 HGHT FEED**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3) for refinery fuel gas and flexigas	C	H <sub>2</sub> S analyzer
SO <sub>2</sub>	NSPS Subpart J 60.104 (a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for <u>CR-2 vent gas</u>	40 CFR 60.13(i) for <u>CR-2 vent gas</u>	P	Monitoring, records, and reporting for <u>CR-2 vent gas</u>

3. In Table VII-AX, modify the following line item as follows:

SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for <u>refinery fuel gas (RFG) and/or flexigas (FXG)</u>	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3)	C	H <sub>2</sub> S analyzer for <u>refinery fuel gas (RFG) and/or flexigas (FXG)</u>
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4. In Table VII-BY, modify the following two line item as follows:

SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10-gr/dscf (163 ppm)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3) for refinery fuel gas and flexigas	E	H <sub>2</sub> S analyzer
SO <sub>2</sub>	NSPS Subpart J 60.104 (a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for <u>CR-2 vent gas</u>	40 CFR 60.13(i) for <del>CR-2 vent</del> gas	P	Monitoring, records, and reporting for <u>CR-2 vent</u> gas

5. In Table VII-AQ, modify the following line item as follows:

SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for <u>refinery fuel gas (RFG)</u> and/or flexigas (FXG)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3)	C	H <sub>2</sub> S analyzer for <u>refinery fuel</u> <u>gas (RFG)</u> and/or <u>flexigas</u> <u>(FXG)</u>
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6. Modify Table VII-AQa as follows:

**Table VII – AQa  
 Applicable Limits and Compliance Monitoring Requirements  
 S1480 – LUBS F-69 ASPHALT CIRCULATION, S1481 – OPCEN F-30 DSU,  
 S1484 – LUBS F-34 LHT CHARGE, S1506 – CP F-61 CGP FEED**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.1 gr/dscf (163 ppm)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3) for refinery fuel gas	C	H <sub>2</sub> S analyzer
SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.1 gr/dscf (163 ppm) for vent gases from <u>Sulfonation Unit SO<sub>2</sub> Adsorber and Lubricants Hydrotreater #1 Vacuum Flash Dryer</u>	40 CFR 60.13(i) for <u>Sulfonation Unit SO<sub>2</sub> Adsorber vent gas for S1480 and Lubricants Hydrotreater #1 Vacuum Flash Dryer vent gas for S1484</u>	P	Monitoring, records, and reporting for <u>vent gases from Sulfonation Unit SO<sub>2</sub> Adsorber and Lubricants Hydrotreater #1 Vacuum Flash Dryer</u>

7. In Table VII-CB, modify the following line item as follows:

SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for refinery fuel gas (RFG) and/or flexigas (FXG)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3)	C	H <sub>2</sub> S analyzer for refinery fuel gas (RFG) and/or flexigas (FXG)
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8. Modify Table VII-CC as follows:

**Table VII – CC  
 Applicable Limits and Compliance Monitoring Requirements  
 S4171 – LUBS F-13000 LHT2 FEED**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm)	NSPS Subpart J 60.105(a)(4) and 60.105(e)(3) for flexigas	C	H <sub>2</sub> S analyzer
SO <sub>2</sub>	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H <sub>2</sub> S limited to 0.10 gr/dscf (163 ppm) for vent gas from <u>Lubricants Hydrotreater #2 Vacuum Flash Dryer</u>	40 CFR 60.13(i) for <del>Lubricants Hydrotreater #2 Vacuum Flash Dryer</del> vent gas	P	Monitoring, records, and reporting for <u>vent gas from Lubricants Hydrotreater #2 Vacuum Flash Dryer</u>

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**Attachment B**

**NSPS Subpart J – Fuel Gas Combustion Devices  
Marine Vapor Recovery System  
Alternative Monitoring**

NSPS Subpart J [40 CFR 60.104(a)(1)] requires that H<sub>2</sub>S in fuel gas be limited to 230 mg/dscm (0.10 gr/dscf or 163 ppmvd) if the fuel gas is combusted in an affected fuel gas combustion device. To demonstrate compliance, CEMS are required to monitor the H<sub>2</sub>S concentration of fuel gas. The definition of fuel gas under NSPS Subpart J also includes other "fuel gas" streams, such as process vent gases, if they are routed to an affected fuel gas combustion device. Thus 40 CFR 60.104(a)(1) regulates the vent gases from marine terminal loading that are controlled by the A100 thermal oxidizer. These include:

- Gasoline and finished gasoline component vapors with sulfur specifications; and
- Non-gasoline/non-finished gasoline component vapors mixed with natural gas.

For these vapors, the refinery does not use CEMS and instead utilizes alternative monitoring that is allowed under 60.13(i). In accordance with 60.13(i), the alternative monitoring plans were approved by U.S. Environmental Protection Agency (EPA), Region IX. Accordingly, Shell shall comply with the requirements of 40 CFR Part 60, Subparts J and A, except as explicitly listed in the alternative monitoring provisions below. The following alternative monitoring requirements shall only apply to the marine vapor recovery system at the Shell Martinez refinery.

In the Title V Permit, the following changes are requested to clarify the appropriate monitoring requirements.

**Add to Condition # 4288:**

12. Alternative Monitoring for H<sub>2</sub>S

- a. For gasoline and finished gasoline component vapors with sulfur specifications, Shell shall obtain a single sample from the gas inlet to the thermal oxidizer using a Gastec #4LL H<sub>2</sub>S tube. If the gas stream composition changes, or if the gas stream will no longer be required to meet product specifications, then the gas stream must be resubmitted for approval under the alternative monitoring plan.
- b. For non-gasoline/non-finished gasoline component vapors mixed with natural gas, where the products have sulfur specifications, Shell shall take a single detector tube sample and submit an alternative monitoring plan similar to the plan for the gasoline and finished gasoline component vapors each time the new product is loaded.

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- c. For non-gasoline/non-finished gasoline component vapors mixed with natural gas, where the products have no sulfur specifications, Shell shall sample the gas stream at least every two hours while the marine vessel recovery system is processing the vessel vapors to assure that the gas stream complies with the 230 mg/dscm (0.10 gr/dscf or 163 ppmvd) requirement. For each product, Shell may propose a less frequent sampling schedule if the measured H<sub>2</sub>S concentration is insignificant.

13. Recordkeeping Requirements for Alternative H<sub>2</sub>S Monitoring.

- a. Shell shall record each gas sampling performed pursuant to Section 1.0. Each record shall identify the date and location of sampling.
- b. Shell shall maintain records for a period of five (5) years after the generation of such documentation, except this alternative monitoring plan, which shall be kept permanently, or until it has been replaced with a different alternative monitoring plan or five years after the date the marine vapor recovery system is permanently taken out of service.

14. Reporting Requirements for Alternative H<sub>2</sub>S Monitoring.

Shell shall submit a written report to USEPA within 5 days of exceeding the Subpart J requirement for H<sub>2</sub>S concentration when loading the products without product sulfur specifications. The report shall include at a minimum the date and location of sampling and the duration of the exceedance.

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The following changes to tables are requested to clarify the appropriate monitoring requirements.

**9. In Table IV-CF, add the following line items as follows:**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>40 CFR Part 60 Subpart A</b>	<b>General Provisions</b>		
60.13(i)	Alternatives to any monitoring procedures or requirements	Y	
<b>NSPS 40 CFR 60 Subpart J</b>	<b>Standards of Performance for Petroleum Refineries (7/1/00)</b>		
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S limit	Y	
<b>BAAQMD Condition # 4288</b>			
Part 12	Alternative Monitoring for H2S	Y	
Part 13	Recordkeeping Requirements for Alternative H2S Monitoring	Y	
Part 14	Reporting Requirements for Alternative H2S Monitoring	Y	



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10. In Table VII-BR, add the following line item as follows:

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS Subpart J 60.104(a)(1)	Y		Fuel gas H2S limited to 0.10 gr/dscf (230 mg/dscm or 163 ppmvd) for	40 CFR 60.13(i) Condition 4288 Part 12, 13 and 14	P/E	Gastec #4LL H2S tube