Section I

Flare Permit Conditions and Applicable Requirements

This section includes comments regarding Permit Condition 18618 and other applicable requirements for the flares. The following changes should be made to Revision 1 of the Title V permit. For BAAQMD's convenience, parts of Condition 18618 are corrected in strikeout mode at the end of this section.

- 1. In Condition 18618 Part 12, combine the limits for two flares. Although only S-1471 is currently in service, there remains infrequent times when S-1471 must be removed from service for inspection. During these times, S-1472 would be placed in service.
- 2. In Condition 18618 Part 13, correct typo. The wrong source number was accidentally entered.
- 3. In Condition 18618 Part 14, clarify that this part only applies to those sources listed in Part 12 and correct the reference number. This minor change confirms the discussion with between Kathy Wheeler, Carol Lee, and Wayne Howard on March 24, 2004 that the scope of #14 only applies to those sources listed in #12. Change reference from Part 2 to Part 15. This error is believed to have been created by inserting new parts into an existing document.
- 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. This minor change confirms the discussion with between Kathy Wheeler, Carol Lee, and Wayne Howard on March 24, 2004 that the scope of #15 only applies to those sources listed in #12.
- 5. In Condition 18618 Part 16, correct the referenced number. This minor change is needed to correct numbering issues believed to be created by inserting these new parts into an existing document.
- 6. In Condition 18618 Part 17, correct the referenced numbers. This minor change is needed to correct numbering issues believed to be created by inserting these new parts into an existing document.
- 7. In Condition 18618 Part 18, add future effective date that is consistent with other parts listed here and correct number. These minor numbering changes are believed to be created by inserting these new parts into an existing document.
- 8. Delete Flare Condition 20747. This condition is redundant to Condition 18618 Part 19.
- **9.** Delete 6-305 From Flares And Other Gas-Fired Only Combustion Devices. Gas-fired combustion devices do not have the potential to emit visible particles large enough to fall on property other than Shell Martinez Refinery. This requirement is not applicable to similar combustion sources in other Bay Area refinery permits. Delete BAAQMD 6-305 from the following Table IVs:
 - IV-AW
 - IV-AXa

- IV-AXb
- IV-AZ
- IV-BC
- IV-BD
- IV-BZ
- IV-CS
- IV-CU
- **10.** In Table VII-AN, The Alternative Monitoring Method Under 60.13(I) For S1470 LOG LPG Loading Flare Is Not Continuous. Change the frequency to periodic event (P/E).
- 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.
- 12. In Table VII-AN For S1470 LOG LPG Loading Flare, Monitoring For BAAQMD 6-301 And 6-310 Should Be None. 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.
- **13. Delete BAAQMD Regulation 12 Rule 11 Requirements In Table VII-CI (S4201)).** BAAQMD Regulation 12 Rule 11 requirements should not be Section VII because these rules do not have a numeric limit. Only numeric limits belong in Section VII.
- **14. Rename The Two Table VII-AO's.** Table VII-AO was correctly split, but they should be differentiated possibly VII-AOa and VII-AOb.
- 15. In Table VII-AO For A101 through A103, Monitoring For BAAQMD 6-301 And 6-310 Should Be None. 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.
- **16. Delete BAAQMD 12-11 Requirements In Table VII-AO for A101 through A103.** The vapor recovery system flares are exempt from BAAQMD Regulation 12 Rule 11, in accordance with BAAQMD 12-11-110.
- **17. Delete NSPS 40 CFR 60 Subpart J Requirements From Table VII-AO for A101 through A103.** This citation is an exemption, not a numeric limit.
- Delete BAAQMD Regulation 12 Rule 11 Requirements In Table VII-AOb (S1471 and S1472). BAAQMD Regulation 12 Rule 11 requirements should not be Section VII because these rules do not have a numeric limit. Only numeric limits belong in Section VII.
- **19. Change Monitoring Citation for BAAQMD 6-301 in Table VII-BI.** Change the monitoring citation from Condition 18618 Part 15 to Part 18.
- **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
- VII-CE
- **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
- 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).
- **23. Correct Throughput Limits Mistakes In Table VII-BI, BJ, And CI**. The limits are off by a factor of 1000.

24. A strikeout version of Condition 18618, Parts 12 through 18 is provided below to assist BAAQMD in making the corrections.

12. Effective June 1, 2004, the owner/operator shall not flare more than the following limits of vent gas, as defined in Regulation 12-11-210, at <u>the following sources</u> :

a.	S1471 LOP Auxiliary Flare + S1472 LOP Main Flare	630,000 lbs/hr
b.	S1472 LOP Main Flare	<u> </u>
c.	S1771 OPCEN Flexigas Flare	750,000 lbs/hr
d.	S1772 OPCEN HC Flare	510,000 lbs/hr
e.	S4201 Clean Fuels Flare	2,000,000 lbs/hr
(basis: Regulation 8-1-110.3; 2-1-403)		

- Effective June 1, 2004, in order to demonstrate compliance with Part 12 of this condition, the owner/operator shall record on an hourly basis the pounds of vent gas flared at S14710, S1472, S1771, S1772, and S4201 Flares. The owner/operator shall maintain these records for a period of five years from the date of entry and make sure records are available for the APCO upon request. (basis: Regulation 8-1-110.3; 2-6-409.2; 2-6-501)
- 14. Effective June 1, 2004, for the purposes of these conditions, a flaring event is defined as a flow rate of vent gas flared in any consecutive 15 minutes period that continuously exceeds 330 standard cubic feet per minute (scfm) for the sources listed in Part 12. If during a flaring event, the vent gas flow rate drops below 330 scfm and then increases above 330 scfm within 30 minutes, that shall still be considered a single flaring event, rather than two separate events. For each flaring event during daylight hours (between sunrise and sunset), the owner/operator shall inspect the flare within 15 minutes of determining the flaring event, and

within 30 minutes of the last inspection thereafter, using video monitoring or visible inspection following the procedure described in Part 2-<u>15</u> of this condition. (basis: Regulation 2-6-409.2)

- 15. Effective June 1, 2004, the owner/operator shall use the following procedure for the initial inspection and each 30-minute inspection of a flaring event for the sources listed in part 12.
 - a. If the owner/operator can determine that there are no visible emissions using video monitoring, then no further monitoring is necessary for that particular inspection.
 - b. If the owner/operator cannot determine that there are no visible emissions using video monitoring, the owner/operator shall conduct a visual inspection outdoors using either:
 - a. <u>i.</u> EPA Reference Method 9; or
 - b. <u>ii.</u> Survey the flare by selecting a position that enables a clear view of the flare at least 15 feet, but not more than 0.25 miles, from the emission source, where the sun is not directly in the observer's eyes.
 - c. If a visible emission is observed, the owner/operator shall continue to monitor the flare for at least 3 minutes, or until there are no visible emissions, whichever is shorter.
 - d. The owner/operator shall repeat the inspection procedure for the duration of the flaring event, or until a violation is documented in accordance with Part <u>165</u>. After a violation is documented, no further inspections are required until the beginning of a new calendar day.

(basis: Regulation 6-301, 2-1-403)

- 16. Effective June 1, 2004, the owner/operator shall comply with one of the following requirements if visual inspection is used:
 - a. If EPA Method 9 is used, the owner/operator shall comply with Regulation 6-301 when operating the flare.
 - b. If the procedure of <u>15</u>4.b.ii is used, the owner/operator shall not operate a flare that has visible emissions for three consecutive minutes.
 - c. (basis: Regulation 2-6-403)
- 17. Effective June 1, 2004, the owner/operator shall keep records of all flaring events, as defined in Part <u>143</u>. The owner/operator shall include in the records the name of the person performing the visible emissions check, whether video monitoring or visual inspection (EPA Method 9 or visual inspection procedure of Part <u>154</u> of this condition) was used, the results of each inspection, and whether any violation of this condition (using visual inspection procedure in Part <u>154</u> of this condition 6-301 occurred (using EPA Method 9). (basis: Regulation 2-6-501; 2-6-409.2)
- 18. Effective June 1, 2004, For those flares that exclusively burn flexicoker gas with or without supplemental natural gas the owner/operator shall conduct a visual emission inspection weekly following the protocol in Part <u>165</u> a, b and c and shall comply with Parts <u>17 or ??6</u> and <u>18 or ??-7</u> of this condition. If no visible emissions are observed after 52 weekly inspections, then this condition no longer applies to the flare. (basis: Regulation 2-6-501; 2-6-409.2)
- 19. Effective June 1, 2004, the owner/operator shall operate S1471, S1472, S4201, A101, A102,

and A103 Flares to burn only process upset gases as defined by 60.101(e) or fuel gas as defined by 60.101(d) that is released to it as a result of relief valve leakage or other emergency malfunctions. (basis: 60.104(a)(1); Regulation 2-1-403)