

## BAAQMD Responses to EPA Comments

EPA reviewed the proposed permit for Valero's Benicia Refinery during a 45-day review period ending on October 23, 2010. In a letter dated October 25, 2010, EPA provided comments on the permit. The BAAQMD provides the following responses to the EPA comments using EPA's numbering.

### EPA Comment 1.A.:

**EPA Comment:** EPA asked the BAAQMD to add 40 C.F.R. 60.18 (Part 60, Subpart J, Section 60.18) to Sections IV, VI, and VII of the permit (Source-Specific Applicable Requirements, Permit Conditions, Applicable Limits & Compliance Monitoring Requirements, respectively) as they relate to the Benicia Refinery flares (S-16, S-17, S-18, and S-19). EPA characterized the District's reason for not including the requirement as "... the requirements are not applicable because the facility has a flare gas recovery system and all flaring events are necessarily startup / shutdown / malfunction / emergency events." EPA gave two reasons for its view that the provision should be included. First, it said that its existing regulations at 40 C.F.R. Part 60, Subparts A and J do not provide an exemption based upon the presence of a flare gas recovery system. Second, it said that "[e]ven when a flare gas recovery system is in place, design and operation and maintenance issues may result in routinely generated gases reaching the flare."

**BAAQMD Response:** The EPA comment raises in a slightly different context an issue it has previously raised for the San Francisco Bay Area refinery Title V permits: whether various flare requirements are applicable if flares handle only startup, shutdown, and malfunction gases. In this case, EPA has asked the BAAQMD to add 40 CFR § 60.18 to flare requirements for Valero's Benicia refinery.

Section 60.18 contains "requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61." It applies "only to facilities covered by subparts referring to this section." The section imposes both design and operating standards for flares and includes the following requirements: (1) flares must be designed for and operated with no visible emissions, (2) flares must be operated with a flame present at all times, (3) steam-assisted flares must be used only when the net heating value of gas being combusted exceeds 300 Btu/scf, and (4) steam-assisted flares must be designed and operated so that the exit velocity is less than 60 ft/sec or less than 400 ft/sec if gas heating value exceeds 1000 Btu/scf or less than a velocity determined by an equation.

The text of Section 60.18 indicates that it is not independently applicable and applies only if the Benicia flares are "control devices used to comply with applicable subparts of 40 CFR parts 60 and 61." This is a two-part test: (1) if a particular flare was constructed after the effective date of such a subpart or is otherwise subject to the subpart, and (2) the flare is being used as a "control device," then the requirements would appear to apply.

There is no evidence that the flares at the Valero refinery are being used as control devices. BAAQMD Regulation 12, Rule 12, Flares at Petroleum Refineries, requires the use of all feasible measures to minimize the frequency and magnitude of flaring. The rule also requires reporting and causal analysis for flaring events. The flaring reports

from this refinery covering the period from 2004 to the present show no instances of “routine” flaring. The best available data, therefore, do not support the idea that flares are being used as control devices and, as a result, § 60.18 does not apply.

This position is consistent with the position that the BAAQMD has taken in the past. EPA commented on earlier versions of the Valero permit, saying that other requirements found in subparts of parts 60 and 61 apply. In connection with Revision 3 of the Valero Benicia refinery permit, EPA commented that flares should be made subject to the monitoring requirements for flares in the Standards of Performance for Petroleum Refineries (NSPS Subpart J) at 40 CFR § 60.105(a)(3) or (4). The BAAQMD explained that S-18, the South Flare, is not subject to Subpart J at all, because it was constructed before the Subpart J effective date. The BAAQMD explained that S-19, the North Flare, was exempt from the Subpart J hydrogen sulfide limit and associated monitoring requirements pursuant to 40 CFR § 60.104(a)(1), which exempts “process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions

The BAAQMD has also concluded that even if application of 40 CFR § 60.18 were somehow directed through “applicable subparts of 40 CFR parts 60 and 61,” the section would not apply to the Benicia refinery flares because the regulatory history of the section indicates that it is intended to apply to industrial flares that operate continuously. Although the language of the section is sufficiently broad and vague as to allow an argument that it applies to refinery emergency relief flares (because it refers simply to “flares”), application to these flares would be contrary to the regulatory history, to the technical justification for the primary operative provisions - which set minimum Btu content standards for flared gases and limit flare exit velocity, and to practical considerations related to enforceability. In addition, both the BAAQMD and EPA have adopted or proposed alternative requirements that would address concerns about flaring of “routine” gases in these flares.

The requirements in § 60.18 were originally found in Subparts VV, NNN and Kb of 40 CFR Part 60 and Subparts L and V of Part 61. EPA consolidated and revised the requirements in 1986 in response to a petition from the Chemical Manufacturers Association asking EPA to reconsider the exit velocity limitations on flares used as control devices to comply with Subpart VV of 40 CFR Part 60. (See 51 Fed. Reg. 2699, January 21, 1986.) That petition was prompted by an EPA study on flare efficiency (*Evaluation of the Efficiency of Industrial Flares: Test Results*, EPA-600/2-84-095, May 1984). (See 50 Fed. Reg. 14941, April 16, 1985.) According to the study:

This study was limited to measuring the combustion efficiencies of pipe flares burning propane-nitrogen mixtures at steady operating conditions with and without steam injection, in the absence of wind.

The study concluded that with stable flames, high combustion efficiencies were achieved in the pilot-scale flares. According to the study, stable flames could be achieved at low velocities with a gas heating value as low as 300 Btu/ft<sup>3</sup>. At higher velocities, higher heating value was required for a stable flame. The study therefore supports the idea that steady-state flare operation can result in high destruction efficiencies for flares used as control devices. It also provides the basis for the minimum Btu content and exit velocity requirements of § 60.18. For a flare serving a

gas flow of relatively stable volume and composition, these design and operating requirements ensure high combustion efficiency.

The Valero Benicia refinery, like the other four San Francisco Bay Area refineries, employs a refinery fuel gas system to capture gases from process vents and relief valves and route them to the refinery fuel gas system for use in refinery process heaters and furnaces. This fuel gas system operates as a control device. Flares serve the refinery fuel gas systems to prevent direct release of these gases when the refinery fuel gas system cannot control them during periods of startup, shutdown, or malfunction. The Benicia flares primarily serve a safety function and must handle intermittent flows that could involve extremely large volumes, high flow rates, and uncertain composition, particularly in the case of a major power outage, unit or plant shutdown, or catastrophic failure. The design and operating requirements for such a flare are different than those for a flare with steady operating conditions and predictable flows and gas composition.

EPA's comment appears to be motivated by a concern that the refinery flares could be used to burn "routine" gases.<sup>1</sup> With a refinery fuel gas system served by a flare, it is certainly physically possible to send gases that are generated by routine processes to the flare by shutting down compressors or otherwise limiting the capacity of the fuel gas system to capture gases and send them to refinery combustion units. Under these circumstances, the flare could be said to be operating as a "control device" without meeting requirements that ensure efficient combustion. But § 60.18 was never intended to address this situation, and its application in this context would create several problems.

The first problem is that § 60.18 imposes design and operation requirements. Design must necessarily precede the construction of a flare. In this case, design of the Bay Area refinery flares occurred long before EPA thought to apply § 60.18 to the Valero flares. There is nothing in the regulatory history of § 60.18 that suggests that the section's requirements were intended to apply to flares associated with refinery fuel gas systems. Instead, as discussed, the requirements appear to have been intended to apply to "steady state" operation.

The second problem is that there is no easy way to know if § 60.18 would be a reasonable standard for existing refinery flares associated with fuel gas systems. EPA has not undertaken rulemaking to determine whether the standard should be clarified and applied to relief flares serving refinery fuel gas systems. Without rulemaking and the fact finding that would be part of such an effort, it can't be known whether the gas heating value requirements and exit velocity limits of § 60.18 are reasonable requirements for refinery relief flares.

A third problem is that, if applied to flares on refinery fuel gas systems, applicability of § 60.18 would be intermittent and would turn on the nature and origin of the gases being sent to the flare at a given moment. This raises enforceability questions that can only be resolved through a mechanism that requires examination of the cause of each flaring

---

<sup>1</sup> One argument advanced for § 60.18 applicability is that commingling of "routine" and "upset" gases during flaring of upset gases means that relief flares are acting as control devices for the routine gases and are therefore subject to § 60.18. It is certainly true that during refinery upsets leading to flaring, some routine gases that would otherwise go into the fuel gas system might be flared, particularly if the fuel gas system is affected by the upset. However, the routine gases would not be flared but for the upset and are therefore upset gases.

event. However, both the BAAQMD and EPA have recognized this problem and undertaken regulatory efforts to address the issue. The BAAQMD adopted Regulation 12, Rule 12, Flares at Petroleum Refineries on July 20, 2005. The rule requires the use of all feasible measures to minimize the frequency and magnitude of flaring and requires causal analysis of flaring events. EPA has undertaken a similar effort with 40 CFR Part 60, Subpart Ja.

BAAQMD is not adding § 60.18 to the flare requirements in the permit. Additional information regarding applicability for each flare is provided below.

#### S-16 Acid Gas Flare

S-16 serves as an emergency backup for the Tail Gas Treating Units (TGTU, A-24 & A-62) and Flexorb Adsorption Unit (A-56), which abate sulfur plants S-1 and S-2. S-16 is not subject to 40 CFR § 60 Subpart J because it was constructed in 1969 prior to the effective date of Subpart J and has not been modified. As a result, 40 CFR § 60.18 does not apply.

Even were S-16 subject to Subpart J, the requirements of 40 CFR § 60.18 would not apply because the flare is not allowed to serve as a routine emission control device. S-16 is subject to BAAQMD's flare minimization plan (FMP) rule, Regulation 12, Rule 12. Regulation 12-12-301 prohibits routine flaring unless it is consistent with an approved FMP, which means S-16 can only be used during startup/shutdown/malfunction/emergency events.

The consent decree does not make § 60.18 applicable to S-16. Under the consent decree, S-1 and S-2 became subject to 40 CFR § 60 Subpart J. Valero complies with the control requirements of Subpart J through the use of abatement devices A-24, A-56 and S-62. Any routinely-generated acid gas emissions from S-1 and S-2 are abated by A-24, A-56, and A-62. S-1 or S-2 emissions would only be vented to S-16 in the case of a malfunction. According to 40 CFR § 60.104(a)(1), the combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from the sulfur oxides standard of Subpart J.

In addition, Paragraph 227 of the consent decree states, "Valero and Tesoro shall apply the "startup" and "shutdown" provisions set forth in NSPS Subpart A to the SRP but not to the independent startup or shutdown of its corresponding control device(s) (e.g., TGTU). However, the malfunction exemption set forth in NSPS Subpart A shall apply to both the SRP and its control device(s)". Again, this means that the flare is exempt from Subpart J, and 40 CFR § 60.18 of Subpart A does not apply.

#### S-17 Butane Flare

S-17 is the emergency flare for the butane compressors associated with the refrigerated Butane Tank (TK-1726). The butane compressors return the butane vapor to the refrigerated system to keep the butane in liquid phase. Any routinely-generated butane gas emissions from TK-1726 are abated by the refrigeration system at TK-1726. TK-1726 emissions would only be vented to S-17 in the case of a malfunction in the refrigeration system or a malfunction of the butane compressors.

S-17 is not subject to CFR § 60 Subpart J because it was constructed in 1972 prior to the effective date of Subpart J. As a result, 40 CFR § 60.18 of Subpart A does not apply. However, in the consent decree, Valero accepted Subpart J applicability for S-17 by December 31, 2011. As required by the consent decree Flare Compliance Plan, Valero will comply with Subpart J for S-17 in accordance with paragraph 235(b) by operating the flare as a fuel gas combustion device and complying with the H<sub>2</sub>S monitoring requirements. This does not mean, however, that the consent decree makes S-17 subject to § 60.18.

The Butane Tank is not subject to the earliest NSPS, 40 CFR § 60 Subpart K, because it was constructed prior to the effective date of Subpart K. TK-1726 is also not subject to any subpart of 40 CFR § 61. As a result, there is no subpart in Part 60 or 61 that makes 40 CFR § 60.18 applicable.

### S-18 South Flare and S-19 North Flare

S-18 and S-19 serve as an emergency backup for the flare gas recovery system, S-9, which receives normally vented gases from storage tanks, pressure relief valves (PRDs), pump and compressor seal vents, and sends the vent gases to the fuel gas system for VOC destruction. Any routine hydrocarbons emissions from sources at the refinery are abated by the fuel gas system. S-18 was constructed in 1968 prior to the effective date of Subpart J. In accordance with the consent decree, Valero accepted Subpart J applicability for S-18 on 12/31/2007. S-19 was constructed in 1974, after the effective date of Subpart J. In accordance with the consent decree, Valero accepted NSPS Subpart J applicability for S-19 on December 31, 2006. Valero complies with Subpart J in accordance with consent decree paragraph 235(a) by operating a flare gas recovery system to control continuous or routine emissions.

Paragraph 235(a) of the consent decree states, “use of a flare gas recovery system on a flare obviates the need to continuously monitor and maintain records of hydrogen sulfide in the gas as otherwise required by 40 CFR §§ 60.105(a)(4) and 60.7.” This means that S-18 and S-19, both of which are operated with a flare gas recovery system, are not considered to be combusting “routine” gases (because Subpart J would require monitoring under those circumstances) and therefore cannot be control devices “used to comply with applicable subparts of 40 CFR parts 60 and 61” such as would make 40 CFR § 60.18 applicable.

In addition, the requirements of 40 CFR § 60.18 do not apply to S-18 and S-19 because the flares are not allowed to serve as routine emission control devices. S-18 and S-19 are subject to BAAQMD’s flare minimization plan (FMP) rule, Regulation 12, Rule 12. Regulation 12-12-301 prohibits routine flaring unless it is consistent with an approved FMP, which means S-18 and S-19 can only be used during startup/shutdown/malfunction/emergency events.

### **EPA Comment 1.B**

**EPA Comment:** EPA asked the BAAQMD to clarify in the permit and/or the statement of basis whether any gas streams from a table of emission units could be vented to a flare. Where requirements of sections 60.18 or 63.11 apply, EPA asked the BAAQMD to add them into the permit for the emission units/points as appropriate. EPA listed several

subparts of Parts 60 and 63 as potential sources of applicability: NSPS Subparts Kb, VV (via GGG), and VVa (via GGGa) for § 60.18, and NESHAP/MACT Subparts CC and UUU for § 63.11. For the emission units/points where sections 60.18 or 63.11 do not apply, EPA requested that the statement of basis justify a finding of non-applicability.

**BAAQMD Response:** As discussed in the response to Comment 1.A above, many sources in the refinery vent routinely-generated emissions to the flare gas recovery system headers, which are part of the refinery’s fuel gas system. These emissions are normally vented to the refinery fuel gas system for compliance with standards of various regulations, including applicable subparts of 40 CFR part 60, part 61, and part 63. Emissions from non-routine releases that are sent to the flares during startup, shutdown, upset, malfunction, maintenance, depressuring, and catalytic transfer operations are exempt from the standards and do not make §§ 60.18 and 63.11 applicable as explained below.

The table below lists each unit and the appropriate response among several responses that follow the table.

Type	Equipment	BAAQMD Response
Fugitives	S9 Blowdown System	Fugitives discussion
	S51 HCU Sandfilter	Fugitives discussion
	S52 HCU Sandfilter	Fugitives discussion
	S133 Spent Acid Tank	Source-specific discussions
	S160 Seal Oil Sparger	Source-specific discussions
	S188 Oil/Water Separator	Source-specific discussions
	S189 Oil/Water Separator	Source-specific discussions
	S211 Alkylate Debutanizer	Fugitives discussion
	S1002 Diesel Hydrofiner	Fugitives discussion
	S1003 Hydrocracker	Fugitives discussion
	S1004 Catalytic Reformer	MACT Subpart UUU discussion
	S1005 Cat Feed Hydrofiner	Fugitives discussion
	S1006 Crude Unit	Fugitives discussion
	S1007 Alkylation Unit	Fugitives discussion
	S1008 Gasoline Hydrofiner	Fugitives discussion
	S1009 Jet Fuel Hydrofiner	Fugitives discussion
	S1010 Hydrogen Plant	Fugitives discussion
	S1011 HCN Hydrofiner	Fugitives discussion
	S1012 Dimersol Unit	Fugitives discussion
	S1014 Cracked Light Ends	Fugitives discussion
S1020 Heartcut Tower	Fugitives discussion	
S1021 Heartcut Saturation	Fugitives discussion	
S1022 Cat Reformer T-90	Fugitives discussion	
S1023 Cat Naphtha T-90	Fugitives discussion	
S1024 LCN Hydrotreater	Fugitives discussion	
S1026 C5/C6 Splitter	Fugitives discussion	
S1027 C5 Rail Load Rack	Fugitives discussion	
S1058 Virgin Light Ends	Fugitives discussion	
Gas Streams	S5 FCCU Catalyst Regenerator	Gas streams discussion
	S6 Fluid Coker	Gas streams discussion

### Fugitives Discussion

EPA lists NSPS Subpart Kb as a potential avenue for § 60.18 applicability, but Kb does not apply to any of the units listed in the table.

EPA listed NSPS Subpart VV(via GGG) and VVa (via GGGa) as potentially applicable fugitive regulations that refer to section 60.18 of NSPS Subpart A.

Various pump and compressor seal vents and pressure relief devices (PRDs) are vented to the fuel gas system for compliance with the applicable equipment leak regulations, including 40 CFR § 60 Subpart VV (as referenced by 40 CFR § 60 Subpart GGG or 40 CFR § 63 Subpart CC) or 40 CFR § 60 Subpart VVa (as referenced by 40 CFR § 60 Subpart GGGa).

These equipment leak sources do not generate routine emissions. In any case, when vented to the refinery fuel gas system, the emissions are exempt from the control and monitoring standards of the applicable subparts. Section 60.482-2(f) exempts pump leaks that are vented to the fuel gas system:

If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of § 60.482-10, it is exempt from paragraphs (a) through (e) of this section.

Because § 60.482-10 is the only route through which § 60.18 would apply and, pursuant to the section quoted above, would only come into play if a control device is used instead of a fuel gas system, § 60.18 does not apply.

Similarly, sections 60.482-3(h) and 60.482-4(c) exempt compressor and PRD leaks that are vented to the fuel gas system in the same manner, and § 60.18 does not apply.

The same analysis applies to fugitives subject to Subpart VVa.

Even if these specific exemptions did not exist, the equipment leaks in Subpart VV or VVa are controlled by the fuel gas system, not by the flare. Equipment leak emissions and other routinely-vented emissions are not large enough to break the water seals at the flare. The equipment leaks would only reach the flare in connection with a process upset or equipment malfunction, and, under these circumstances, the flare is not operating as a control device and is not subject to § 60.18, as discussed in the response to Comment 1A.

### MACT Subpart UUU Discussion

The S-1004 Catalytic Reformer is not subject to 40 CFR § 63 Subpart CC because § 63.640(d)(4) of Subpart CC specifically exempts catalytic reformer catalyst generation from the rule.

S-1004 is subject to 40 CFR § 63 Subpart UUU, and routine emissions from this source during cyclic catalytic regeneration are vented to the refinery fuel gas system via the flare gas recovery system. Routine emissions from catalytic regenerations are not large

enough by themselves to cause a flaring event and could only reach S-18 or S-19 during a flaring event that occurs concurrently with S-1004's catalytic regeneration.

The only section that refers to 63.11(b) is Section 63.1566(a)(1)(i) Option 1, when the flare is used as a control device. In Valero's case, the catalytic regeneration emissions in Subpart UUU are controlled by the fuel gas system per Subpart 63.1566(a)(1)(ii) Option 2, not by the flare. As explained above in the fugitives discussion, any events that lead to flaring of the catalytic regeneration gases would be qualified as an extraordinary, infrequent process upset or equipment malfunction, and they would not be subject to 63.11(b) for the combustion of these gases.

#### Source-Specific Discussions

The following applicability determinations are for sources listed in the table above whose routine emissions are vented to the refinery fuel gas system via the flare gas recovery system. Where these sources are subject to a subpart of 40 CFR part 60, part 61, or part 63, they are controlled for compliance with that subpart by venting to the refinery fuel gas system.

- S-133 Spent Acid Tank (TK-2712) – Condition 7559.1 requires VOC emissions from S-133 to be vented to the Flare Gas Recovery System (S-9). This tank was built in 1968. It is not subject to the earliest subpart K of 40 CFR Part 60 or any 40 CFR Part 61 or Part 63. If the routine emissions from this tank were to reach a flare, the flare would not be a control device used for compliance with any subpart of 40 CFR Part 60 or Part 61 or Part 63 and would not be subject to 60.18 or to 63.11.
- S-160 Seal Oil Sparger – Condition 19466.2d requires S-160 emissions to be vented to A-13/A-26 Flare Gas Recovery System Compressors (i.e., to S-9). This source is subject to 40 CFR § 60 Subpart VV (via 40 CFR § 60 Subpart GGG). As explained above, the requirements of section 60.18 do not apply to this source because the leak emissions from this source will not reach the flare without an ongoing process upset/malfunction at another process.
- S-188 Oil/Water Separator/S-189 Oil/Water Separator – Condition 4882.1 requires emissions from S-188 and S-189 to be vented to the Flare Gas Recovery System (S-9). These oil-water separators are subject to 40 CFR § 61 Subpart FF (via 40 CFR § 63 Subpart CC), but are exempt from the control standards per the exemption at 61.340(d) for emissions routed to a fuel gas system. The emissions from these wastewater sources are specifically excluded from the definition of fuel gas in 40 CFR § 60 Subpart J. Routine emissions from these sources are not large enough by themselves to cause a flaring event and could only reach S-18 or S-19 during a process upset/malfunction flaring event. As a result, the requirements of sections 60.18 and 63.11 do not apply.

#### Gas Streams Discussion

The emissions from S-5 FCCU Catalyst Regenerator and S-6 Fluid Coker are currently abated by CO boilers and five-cell electrostatic precipitators. During upset or malfunction, the emissions are vented to the atmosphere. These two units are not connected to the flare gas recovery system or to any flare in the Valero refinery.



After the turnaround that is scheduled to be completed by January 31, 2011, the combined CO gas stream from the S-5 FCCU Catalyst Regenerator and S-6 Fluid Coker will be combusted in new CO Furnaces S- 1059/S-1060 (F-105/F-106) which are abated by dual SCR's (A-1059/A-1060) and a Belco Pre-Scrubber followed by a Cansolv regenerative amine wet gas scrubber (A-1047). These CO furnaces are replacing the existing CO furnaces F-101 and F-102 and a bank of five-cell Electrostatic Precipitators. The emissions from either or both sources S-5 and S-6 could also be vented to atmosphere through the P-69 Dump Stack in the event of a furnace trip. There is no physical path for these emissions to reach the flare gas recovery system or the main refinery flares S-18/S-19. Therefore, the requirements of 60.18 or 63.11 do not apply to S-5 and S-6.

### **EPA Comment 1.C**

**EPA Comment:** EPA asked the BAAQMD to clarify the applicability of NSPS Subpart J to equipment S-16 Acid Gas Flare and S-17 Butane Flare. Tables IV-A8.1 and IV-A8.3 for S-16 and S-17, respectively, of the proposed permit state: "Subpart J not Applicable: Flare constructed/reconstructed/modified after 6/11/1973 and before 6/24/2008." However, according to §60.100(b), "[ ] any fuel gas combustion device [ ] that meets the definition of a flare as defined in §60.101a which commences construction, reconstruction, or modification after June 11, 1973, and on or before June 24, 2008, [ ] is subject to the requirements of this subpart [J] except as provided under paragraphs (c) and (d) of this section."

**BAAQMD Response:** The description for 60.100(b) in Tables IV-A8.1 and IV-A8.3 was inadvertently changed during the Title V renewal markup. This description should not have been changed because these sources are still not subject to Subpart J. Both of the Flares (S-16 and S-17) were constructed before 6/11/1973 prior to the effective date of Subpart J as stated in the Statement of Basis of the Title V permit, Revision 2. The District has corrected the description in Tables IV-A8.1 and IV-A8.3. There is no need to document a finding of non-applicability for these sources in the Statement of Basis because their applicability with respect to NSPS Subpart J has not changed.

### **EPA Comment 2.A**

**EPA Comment:** EPA asked the BAAQMD to clarify Part 9 of Conditions 125 and 126 to properly reflect the requirements of paragraph 224 of the consent decree. Specifically, paragraph 224 requires "all emission points (stacks) to the atmosphere for tail gas emissions from each of its SRPs will be monitored and reported upon in accordance with 40 C.F.R. §§ 60.7(c), 60.13, and 60.105."

**BAAQMD Response:** The BAAQMD agrees that Part 9 of Conditions 125 and 126 do not fully reflect the requirements of Paragraph 224 of the CD. The District has added Part 10 as shown below into Conditions 125 and 126 in the Title V permit to ensure compliance with the CD requirement, and the change is documented in the Statement of Basis.

10. S-1 (or S-2) shall be an affected facility pursuant to 40 CFR Part 60 Subpart J and shall comply with all applicable requirements in 40 CFR Part 60 Subparts A

and J. All emission points (stacks) to the atmosphere for tail gas emissions from S-1 (or S-2) will be monitored and reported upon in accordance with 40 CFR §§ 60.7(c), 60.13, and 60.105. During the life of the Consent Decree and for the purpose of determining compliance with the SRP emission limits, the owner/operator shall apply the “startup” and “shutdown” provisions set forth in NSPS Subpart A to S-1 (or S-2) but not to the independent startup or shutdown of its corresponding control device(s). However, the malfunction exemption set forth in NSPS Subpart A shall apply to both S-1 and its control device(s). (Basis: Consent Decree XII.B Paragraphs 221, 222 & 224, 227)

## **EPA Comment 2.B**

**EPA Comment:** EPA asked the BAAQMD to clarify how the facility complies with paragraph 226 of the consent decree that requires “any SRP sulfur pit emissions [to be re-routed] such that all sulfur pit emissions to the atmosphere are either eliminated or included as part of the applicable SRP’s emissions subject to NSPS Subpart J limit for SO<sub>2</sub>, as a 12-hour rolling average, of 250 ppmvd SO<sub>2</sub>, or 300 ppm reduced sulfur, each at 0% oxygen, as required by 40 C.F.R. § 60.104(a)(2).” While Part 1 of this condition appears to be pertinent, it is not clear whether and how this condition meets the requirements of paragraph 226.

**BAAQMD Response:** The District already incorporated the SO<sub>2</sub> requirement of 40 CFR § 60.104(a)(2)(ii) into the Source Specific Applicable Requirements, Tables IV-A1 and IV-A2 of S-1 and S-2 Sulfur Plants, to satisfy the CD requirement of paragraph 226. The District did not create a separate condition for this requirement to avoid redundancy.

Condition 23446, Part 1 was created through Application # 15317 to eliminate atmospheric emissions from the Sulfur Pit, S-157. The Sulfur Pit became a closed vent system and is not subject to the SO<sub>2</sub> requirement of Subpart J. Therefore, specifying the SO<sub>2</sub> requirement of 40 CFR § 60.104(a)(2)(ii) in Tables IV-A1 and IV-A2 of S-1 and S-2 Sulfur Plants is more appropriate than in Condition 23446.

## **EPA Comment 2.C**

**EPA Comment:** EPA asked the BAAQMD to add into the permit a compliance schedule (pursuant to 40 CFR 70.6(c)(3)) for all consent decree requirements that have not been met and certified by Valero. Alternatively, according to EPA, the District could add (1) a facility-wide condition in the permit to require the Valero refinery to comply with all conditions in the consent decree; (2) a table to the statement of basis that lists consent decree requirements that have not yet been fulfilled and dates of compliance; and (3) a condition in the permit to require semi-annual updates regarding compliance with the consent decree.

**BAAQMD Response:** The BAAQMD has cooperated with and will continue to cooperate with the facility to meet the requirements of the consent decree with respect to the processing of permit applications submitted to add permit conditions as required by the consent decree. However, consent decrees are not “applicable requirements” for purposes of a Title V permit, and the consent decree does not require that the facility include a compliance schedule in its Title V permit. This request places an

unreasonable burden on the BAAQMD to monitor and verify the facility's compliance with the consent decree to which the BAAQMD is not a party.

### **EPA Comment 3**

**EPA Comment:** EPA asked the BAAQMD to ensure that any compliance issues including NOVs, variances, and stipulated orders are identified and described in the statement of basis. For any unresolved compliance issues, the BAAQMD should either add any necessary compliance schedules in the permit or explain in the statement of basis why one is not necessary. The BAAQMD should also ensure that the compliance discussion in the Statement of Basis is up to date at the time of permit issuance.

**BAAQMD Response:** The BAAQMD updated the Compliance summary in the Statement of Basis.