# Attachment 1 Response to Refinery Comments for Application 10994

#### Letter of February 18, 2009

Comment 1: Delete the requirement to install a second port for particulate testing in the stacks for S1001, S1002, and S1003, Sulfur Recovery Units, delete the requirement for annual testing, and require only a one-time test using the existing port.

The refinery has expressed concern about installing a second port by drilling through 3 inches of refractory. The refinery has requested that any tests be performed using one port, and that the District determine whether the test is acceptable.

The refinery also theorizes that the grain loading is less than 0.15 gr/dscf, the limit in BAAQMD Regulation 6-1-310, because there is no visible plume.

The refinery has submitted calculations showing that if the grain-loading were about 0.15 gr/dscf (the limit in 6-1-310), the emissions would be about 7.7, 9.1, and 11.3 lb/hr for S1001, S1002, and S1003, respectively. The corresponding limit in BAAQMD Regulation 6-1-311 based on process flow was 10.5, 9.1, and 13.6 lb/hr, respectively.

## Response:

The refinery has not documented any difficulties in installing the original port for the SO2 CEM to comply with the Subpart UUU requirements, which occurred around 2003, and has not documented any problems with the existing port, such as weakening of the stack or corrosion around the port.

The main objection to performing the tests with only one port is that results may not be accurate due to stratification in the stack. Because the stack is extremely high (207 ft), the likelihood is that turbulence at the level that the samples are collected will be high, and the test will be accurate. The District will allow testing with the single port. The District's source test team will witness the test and determine whether turbulence at the level that the samples are collected is sufficient to ensure accuracy. If the source test team determines that the test is not acceptable without the second port, the District will reopen the permit to require the installation of the second port.

The assertions that the grain loading is less than 0.15 gr/dscf because there is no visible plume cannot be verified without testing.

The calculations of hourly mass emissions at 0.15 gr/dscf show that at that level the emissions would be between 50 and 100 percent of the limit in BAAQMD Regulation 6-1-311.

Generally, the minimum frequency for periodic monitoring is annually. The District only allows a reduced frequency where the margin of compliance is known to be large. With no existing testing and with uncertainties regarding the proposed testing with one port, the District cannot allow a lower testing frequency at this time. If the facility has results with a high margin of compliance for three or more tests for each sulfur recovery unit, the facility may submit an application for reduced testing at that time.

In conclusion, the requirement will be amended to allow annual testing with one port on a provisional basis.

#### Letter of March 12, 2008

### Comment 1: SRU Sulfur Pit Vents & NSPS J Applicability

The refinery commented that Subpart J does not apply to the sulfur pits and that the consent decree does not require the refinery to accept Subpart J applicability to the sulfur pit vents. The refinery proposed limiting applicability of Subpart J to the sulfur recovery units.

Response: The refinery is incorrect on both accounts.

First, EPA has made clear that primary sulfur pits are part of the SRU under Subpart J, as it emphasized on page 35840 of the preamble to final amendments to Subpart J published on June 24, 2008.

Second, the consent decree does require the refinery to accept Subpart J applicability to the sulfur pit vents by making the refinery's sulfur recovery units, which include the units' primary sulfur pits, subject to Subpart J and by imposing Subpart J requirements on sulfur pits. The consent decree states in Paragraph 119, "All of [ConocoPhillips'] Sulfur Recovery Plants will be subject to NSPS Subpart J . . . ." In Paragraph 123, it states, "COPC will either eliminate, control, and/or include and monitor as part of a Covered SRP's emissions under 40 C.F.R.§ 60.104(a)(2), all sulfur pit emissions." (EPA's acronym for sulfur recovery units is SRP.)

EPA has made it clear that the sulfur pits are subject to Subpart J, so the refinery's proposed changes will not be made.

#### Comment 2: Catalytic Reformer Control Requirements

The refinery commented that the permit should have included all of the control options for the reformer, including venting the emissions to the fuel gas recovery system. The permit will be amended to include these options.

Accordingly, the provision in 40 CFR 63.1562(f)(5) that states that the standard does not apply to gaseous streams that are routed to a fuel gas recovery system has been added.

In Table IV-Nb, under the citation of 40 CFR 63.1566(b) entitled "How do I demonstrate initial compliance with the emission limitations and work practice standard?", Options 1 and 2 have been consolidated at the refinery's request.

In Table VII-Nb, the citation for monitoring for 40 CFR 63.1566(a)(1)(ii) has been corrected from "40 CFR 63.11(b)(5)", which would apply to flares, to "Monitoring to be determined during initial compliance demonstration for chosen control and according to Tables 17 & 18 of 40 CFR 63, Subpart UUU."

The refinery commented that the requirement for the flares during regeneration in Table II-B, Abatement Devices, should have been "Meet requirements of 40 CFR 63.11(b). Visible emissions must not exceed a total of 5 minutes during any 2-hour operating period." instead of "98% control of non-methane TOC by weight or concentration of 20 ppmw as hexane, dry @ 3% O2, whichever is less stringent." Table II-B will be corrected.

Comment 3: <u>8-10-301 Applicable Limit</u>: Add English units to the citation of the 1000 mm Hg limit in SIP Regulation 8-10-301.

Response: The English units have been added to all of the citations of SIP Regulation 8-10-301 in the permit. This is an administrative amendment since the limit is expressed in both units in the rule. In Section IV, Applicable Requirements, for BAAQMD and SIP Regulations are cited separately. In

Section VII, Applicable Limits and Compliance Monitoring Requirements, both regulations are cited together, since the limit is similar. Since the requirements are not identical, Section VII will be corrected so that the citations for both regulations are cited separately. This correction affects Tables VII-M, VII-Na, VII-Nb, VII-O, VII-P, and VII-V for various process vessels. This is an administrative amendment because it is a change in formatting as defined by BAAQMD Regulation 2-6-201.