

Bay Area Air Quality Management District

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**Proposed
Permit Evaluation
and
Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT
Reopening – Revision 1.5**

for
**ConocoPhillips – San Francisco Refinery
Facility #A0016**

Facility Address:

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Rodeo, CA 94572

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January 2005

Application 11699

Reopening of Title V permit for Conoco Phillips

Statement of Basis

On October 8, 2004, EPA Region IX determined that cause exists to reopen the Title V permit for Conoco-Phillips. The two issues identified by EPA are compliance monitoring for enclosed combustion devices, and federal enforceability of certain ConocoPhillips permit conditions originally established in NSR permits. The purpose of this reopening is to address these issues. The District responded to EPA regarding these two issues in a January 6, 2005, letter, the contents of which is referred to herein and which also forms a part of the basis for this reopening.

Compliance Monitoring for Enclosed Combustion Devices

EPA's October 8, 2004 finding of cause to reopen states that the Bay Area Title V permits lack periodic monitoring for the following requirements: 40 CFR 60.482-10(c), 60.692-5(a), and 61.242-11(c). These standards require that enclosed combustion devices be designed and operated to reduce VOC emissions by 95% or to provide a minimum residence time at a specified temperature.

40 CFR 60.482-10(c) requires the operator to choose one of two compliance options: 95% control or 20 ppm exit concentration (whichever is less stringent), or a minimum residence time and temperature.

40 CFR 60.692-5(a) requires the operator to choose one of two compliance options: 95% control or a minimum residence time and temperature.

40 CFR 61.242-11(c) requires the operator to choose one of two compliance options: 95% control or 20 ppm exit concentration (whichever is less stringent), or a minimum residence time and temperature.

EPA's October 8, 2004, letter directs this finding of cause to reopen towards "all refineries" in the Bay Area. The District has reviewed applicability of these requirements, and believes that EPA's finding of cause to reopen is relevant to the following sources at the Bay Area refineries:

| Source | Applicable Req. | Monitoring contained in Current Permit | |
|--|-----------------|--|-----------|
| | | Temp | Res. Time |
| Chevron | | | |
| Fugitive Sources (abated by ES-300's or ES-60) | 60.482-10(c) | Table VII.H.2.1 | None |

| | | | |
|--|--------------|--|--|
| Fugitive Sources (abated by ES-300's or ES-60) | 60.692-5(a) | Table VII.H.2.1 | None |
| Fugitive Sources (abated by ES-300's or ES-60) | 61.242-11(c) | Table VII.H.2.1 | None |
| Conoco-Phillips | | | |
| Components | 60.482-10(c) | None—all subject sources are vented to fuel gas system | None—all subject sources are vented to fuel gas system |
| Components | 60.692-5(a) | None—all subject sources are vented to fuel gas system | None—all subject sources are vented to fuel gas system |
| Tesoro | | | |
| Components | 60.482-10(c) | Table VII-CF | Table VII-CF |
| Components | 60.692-5(a) | None (temp monitoring for 60.692-5(b) in Table VII-CF) | None |
| Components | 61.242-11(c) | Table VII-CF | Table VII-CF |
| Shell | | | |
| No affected sources | | | |
| Valero & Valero Asphalt | | | |
| No affected sources | | | |

Subpart QQQ:

The Conoco Phillips permit cites 40 CFR 60, Subpart QQQ for the following sources: S-324, U100_API Oil Wastewater Separator (with outlet channel cover); S-1007, U100 Dissolved Air Flotation Unit (with fixed roof); and S-388, Sludge Pretreatment. Sources S-324 and S-1007 are controlled with covers, not control devices. Therefore they are not subject to 40 CFR 60.692-5(a), which concerns enclosed combustion devices. Source S-388 is vented to the refinery fuel gas system, which is exempt from Subpart QQQ in accordance with the definition of closed vent system 40 CFR 60.691.

Therefore, the citation for 40 CFR 60.692-5(a) will be deleted from Tables IV-AB and VII-AB of the proposed permit.

Subpart VV:

The Conoco Phillips permit cites 40 CFR 60, Subpart VV for the following sources: S-350, U267 Crude Distillation Unit; S-370, U228 Isomerization Unit; and S-438, U110, H-1 (H2 Plant Reforming) Furnace. Source S-437, Hydrogen Manufacturing Unit, is the correct source instead of S-438. This correction will be made in this action. Sources S-350, S-370, and S-437 are subject because they were built after 1983 and therefore are subject to 40 CFR 60, Subpart GGG. Any equipment that is subject to Subpart GGG is subject to Subpart VV. The affected facility is "equipment," which is defined in 60.481 as "each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart."

However, the standard in the NESHAPS 40 CFR 63, Subpart CC supersedes the standard in Subpart VV. Section 640(p) states that "After the compliance dates ... equipment leaks that are also subject to the provisions of 40 CFR parts 60 and 61 are required to comply only with the provisions specified in this subpart." In Section 640(d)(5), Subpart CC states that emission points routed to a fuel gas system are not subject to the standards. Section 648 does require the refineries to comply with the other leak standards in 40 CFR 60, Subpart VV-- Sections 60.482-1 through 60.482.9. Therefore, Section 40.482-10 will be deleted from the permit. 40 CFR 63, Sections 640(d)(5) and (p) will be added to Table IV-A, Facility-Specific Generally Applicable Requirements.

Cause for reopening: Federal Enforceability of ConocoPhillips Permit Terms Contained in NSR permits

When it initially issued the Conoco-Phillips Title V permit, the District determined that the firing rate limits in Part 1 of Condition #1694 were not federally enforceable. EPA commented that limits created through prior NSR permits must be incorporated into the Title V permit as federally enforceable requirements.

Many of the firing rate limits in Part 1 of Condition #1694 were imposed in order to facilitate implementation of Rule 9-10, and pursuant to the District's authority under BAAQMD regulation 2-1-234. The need for certainty regarding firing rates occurs because determining compliance with 9-10 depends, in part, on maximum firing rates of subject combustion equipment. 2-1-234 is the District regulation providing authority to establish a limit that represents maximum capacity. The current versions of these regulations are not in the SIP, and have not been submitted to EPA for incorporation into the SIP. The District imposed the firing rate limits during its issuance of an authority to construct issued under the District's NSR rule. The permit application did not concern or modify any of the sources listed below. The establishment of these firing rate limits in the context of this authority to construct permitting action was for administrative convenience, i.e., in order to avoid having to create a separate permit action.

As the District noted in its January 6, 2005, letter, 40 CFR 52.23 is encompassing in its scope, stating that all terms contained in permits issued pursuant to SIP-approved programs are federally enforceable. EPA policy interpretations, such as the March 21, 1999 John Seitz letter, appear to consistently affirm this scope. As the District reads section 52.23, the 1999 Seitz letter, and EPA's October 8, 2004, letter, in determining whether the firing rate conditions as they existed in the initial preconstruction permit were federally enforceable, it is not critical to know whether the firing rate conditions at issue in this reopening have factored into an NSR determination. Rather, the determinative factor indicating federal enforceability is simply that these conditions were established in a permit issued pursuant to a SIP-approved program. The District understands this to be the basis for the October 8, 2004, EPA finding of cause to reopen.

The District's previous understanding of 40 CFR 52.23 was that this provision established a presumption that all terms in a SIP permit are federally enforceable, but that this presumption could be overcome, and the terms of the SIP permit revised, if it could be shown that those terms bore no direct relationship to implementation of the SIP. Clear examples of permit conditions eligible for revision might be those related solely to control of odor, nuisance, or toxics not regulated under the federal CAA. EPA's 1994 White Paper 1 elaborated on this concept by explaining the procedure by which SIP permits could be revised in parallel with issuance or revision of a Title V permit.

Regarding the firing rates at issue in the Conoco Phillips permit, the District intends to explore this option more fully. First, it must be determined whether, as a substantive matter, these conditions are candidates for revision to non-federally enforceable status. As is more fully explained in the District's January 6, 2005, letter, there has been uncertainty regarding the identity and history of the conditions that are the subject of EPA's concern. Clarity on these points, as well as clarity regarding the proper procedure for redesignating permit conditions from federally to non-federally enforceable, will be important to reconsideration of this issue. For the time being, however, to be responsive to EPA's October 8, 2004, finding of cause to reopen, this proposed revision to the ConocoPhillips permit redesignates the firing rates as federally enforceable.

Changes to the Permit

Section IV

Table IV-A: 40 CFR 63, Sections 640(d)(5) and (p) have been added as discussed above.

Tables IV-A.1 through A.23, A.25, A.26, and A.29 through A.34: The federal enforceability of BAAQMD Condition 1694, part A.1 has been changed from "N" to "Y."

Table IV-AA: Unit 110 (S-438) has been corrected to Hydrogen Manufacturing Plant (S-437).

Table IV-AB: Under the Subpart VV heading, S-438 has been corrected to S-437. The citations of 40 CFR 60.482.8 and 60.482.9, duplicated in error, were corrected. The citations of 40 CFR 60.482-10 and 40 CFR 60.692-5 were deleted.

Section VI

BAAQMD Condition 1694 is listed for reference. It has not been changed.

Section VII

Tables VII-A.1 through A.23, A.25, A.26, and A.29 through A.34: The federal enforceability of BAAQMD Condition 1694, part A.1 has been changed from "N" to "Y." The heat input limits for each device have been entered into the tables. In the "Type of Limit" column, the description "all combustion emissions" has been changed to "heat input" for clarity.

Table IV-AB: Under the Subpart VV heading, S-438 has been corrected to S-437. The citations of 40 CFR 60.482-10 and 40 CFR 60.692-5 were deleted.