

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of ConocoPhillips Company –  
San Francisco Refinery  
Rodeo, California Facility

Major Facility Review Permit  
Facility No. A0016  
Issued by the Bay Area Air Quality  
Management District

Petition No. IX-2004-09

ORDER RESPONDING TO  
PETITIONER'S REQUEST THAT THE  
ADMINISTRATOR OBJECT TO  
ISSUANCE OF A STATE OPERATING  
PERMIT

**ORDER DENYING IN PART AND GRANTING IN PART**  
**A PETITION FOR OBJECTION TO PERMIT**

On December 8, 2004, the Environmental Protection Agency, ("EPA") received a petition ("Petition") from Communities for a Better Environment ("CBE" or "Petitioner") requesting that the EPA Administrator object to the issuance of a state operating permit from the Bay Area Air Quality Management District, ("BAAQMD" or "District") to ConocoPhillips Company to operate its petroleum refinery located in Rodeo, California ("Permit"), pursuant to title V of the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. §§ 7661-7661f, CAA §§ 501-507, EPA's implementing regulations in 40 C.F.R. Part 70 ("Part 70"), and the District's approved Part 70 program. *See* 66 Fed. Reg. 63503 (Dec. 7, 2001).

Petitioner requested EPA object to the Permit on several grounds. Petitioner identified several alleged flaws in the Permit application and issuance. In addition, Petitioner alleged that the permit impermissibly lacked a compliance schedule and failed to include monitoring for several applicable requirements. Finally, Petitioner alleged that the Permit was deficient in its regulation of flares at the facility and that the Permit failed to include several MACT requirements.

EPA has now fully reviewed the Petitioner's allegations pursuant to the standard set forth in section 505(b)(2) of the Act, which places the burden on the petitioner to "demonstrate[] to the Administrator that the permit is not in compliance" with the applicable requirements of the Act or the requirements of Part 70, *see also* 40 C.F.R. § 70.8(c)(1), and I hereby respond to them by this Order. In considering the allegations, EPA reviewed the ConocoPhillips Permit and

related materials and information provided by the Petitioner in the Petition.<sup>1</sup> Based on this review, I partially deny and partially grant the Petitioner's request that I object to issuance of the Permit for the reasons described below.

## I. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act calls upon each State to develop and submit to EPA an operating permit program to meet the requirements of title V. In 1995, EPA granted interim approval to the title V operating permit program submitted by BAAQMD. 60 Fed. Reg. 32606 (June 23, 1995); 40 C.F.R. part 70, Appendix A. Effective November 30, 2001, EPA granted full approval to BAAQMD's title V operating permit program. 66 Fed. Reg. 63503 (Dec. 7, 2001).

Major stationary sources of air pollution and other sources covered by title V are required to apply for an operating permit that includes applicable emission limitations and such other conditions as are necessary to assure compliance with applicable requirements of the Act. *See* CAA §§ 502(a) and 504(a). The title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting, and other compliance requirements when not adequately required by existing applicable requirements to assure compliance by sources with existing applicable emission control requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992). One purpose of the title V program is to enable the source, EPA, permitting authorities, and the public to better understand the applicable requirements to which the source is subject and whether the source is meeting those requirements. Thus, the title V operating permits program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to facility emission units and that compliance with these requirements is assured.

Under section 505(a) of the Act and 40 C.F.R. § 70.8(a), permitting authorities are required to submit all operating permits proposed pursuant to title V to EPA for review. If EPA determines that a permit is not in compliance with applicable requirements or the requirements of 40 C.F.R. part 70, EPA will object to the permit. If EPA does not object to a permit on its own initiative, section 505(b)(2) of the Act and 40 C.F.R. § 70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to the permit. Section 505(b)(2) of the Act requires the Administrator to issue a permit objection if a petitioner demonstrates that a permit is not in compliance with the requirements of

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<sup>1</sup>On March 10, 2005 EPA received a lengthy (over 250 pages, including appendices), detailed submission from ConocoPhillips Company regarding this Petition. Due to the fact that ConocoPhillips Company made its submission very shortly before EPA's settlement agreement deadline for responding to the Petition and the size of the submission, EPA was not able to review the submission itself, nor was it able to provide the Petitioner an opportunity to respond to the submission. Although the Agency previously has considered submissions from permittees in some instances where EPA was able to fully review the submission and provide the petitioners with a chance to review and respond to the submissions, time did not allow for either condition here. Therefore, EPA did not consider ConocoPhillips Company's submission when responding to the Petition via this Order.

the Act, including the requirements of part 70 and the applicable implementation plan. *See* 40 C.F.R. §70.8(c)(1); *New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (“*NYPIRG*”). Part 70 requires that a petition must be “based only on objections to the permit that were raised with reasonable specificity during the public comment period . . . unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.” 40 C.F.R. § 70.8(d). A petition for objection does not stay the effectiveness of the permit or its requirements if the permit was issued after the expiration of EPA’s 45-day review period and before receipt of an objection. If EPA objects to a permit in response to a petition and the permit has been issued, the permitting authority or EPA will modify, terminate, or revoke and reissue such a permit using the procedures in 40 C.F.R. §§ 70.7(g)(4) or (5)(i) and (ii) for reopening a permit for cause.

## II. PROCEDURAL BACKGROUND

### A. Permitting Chronology

BAAQMD held its first public comment period for the Conoco permit, as well as BAAQMD’s other title V refinery permits from June through September 2002.<sup>2</sup> BAAQMD held a public hearing regarding the refinery permits on July 29, 2002. From August 5 to September 22, 2003, BAAQMD held a second public comment period for the permits. EPA’s 45-day review of BAAQMD’s initial proposed permits ran concurrently with this second public comment period, from August 13 to September 26, 2003. EPA did not object to any of the proposed permits under CAA section 505(b)(1). The deadline for submitting CAA section 505(b)(2) petitions was November 25, 2003. EPA received petitions regarding the Conoco Permit from (i) Communities for a Better Environment; and (ii) Plumbers and Steamfitters Union Local 342, Heat and Frost Insulators / Asbestos Workers Local 16, the International Brotherhood of Electrical Workers Local 302, the Boilermakers Union Local 549, and the Laborers Union Local 324, all represented by the law firm of Adams Broadwell Joseph & Cardozo (“Adams Broadwell”). EPA also received section 505(b)(2) petitions regarding the other BAAQMD refinery permits.

On December 1, 2003, BAAQMD issued its initial title V permit for the Bay Area refineries, including the Conoco facility. On December 12, 2003, EPA informed the District of EPA’s finding that cause existed to reopen the permits because the District had not submitted proposed permits to EPA as required by title V, part 70 and BAAQMD’s approved title V program. *See* Letter from Deborah Jordan, Acting Director, Air Division, EPA Region 9 to Jack Broadbent, Air Pollution Control Officer, Bay Area Air Quality Management District, dated December 12, 2003. EPA’s finding was based on the fact that the District had substantially revised the permits in response to public comments without re-submitting proposed permits to

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<sup>2</sup>There are a total of five petroleum refineries in the Bay Area: Chevron Products Company’s Richmond refinery, ConocoPhillips Company’s San Francisco Refinery in Rodeo, Shell Oil Company’s Martinez Refinery, Tesoro Refining and Marketing Company’s Martinez refinery, and Valero Refining Company’s Benecia facility.

EPA for another 45-day review. As a result of the reopening, EPA required BAAQMD to submit to EPA new proposed permits allowing EPA an additional 45-day review period and an opportunity to object to a permit if it failed to meet the standards set forth in section 505(b)(1).

On December 19, 2003, EPA dismissed all of the section 505(b)(2) petitions seeking objections to the refinery permits as unripe because of the just-initiated reopening process. *See e.g.*, Letters from Deborah Jordan, Director, Air Division, EPA Region 9, to William Rostov and Holly Gordon, Communities for a Better Environment and Daniel Cardozo, Richard Drury and Suma Peesapati, Adams Broadwell, dated December 19, 2003. EPA also stated that the reopening process would allow the public an opportunity to submit new section 505(b)(2) petitions after the reopening was completed. In February 2004, three groups filed challenges in the United States Court of Appeals for the Ninth Circuit regarding EPA's dismissal of their 505(b)(2) petitions. The parties resolved this litigation by a settlement agreement under which EPA agreed to respond to new petitions from the litigants (*i.e.*, those submitted after EPA's receipt of BAAQMD's re-proposed permits including this Petition) by March 15, 2005. *See* 69 Fed. Reg. 46536 (Aug. 3, 2004).

BAAQMD submitted new proposed permits to EPA on August 25, 2004; EPA's 45-day review period ended on October 9 2004. EPA objected to the Conoco Permit on two issues: (1) the District's failure to identify as federally enforceable a condition contained in a preconstruction permit issued pursuant to a SIP-approved NSR permit; and (2) the District's failure to require adequate monitoring, or a design review, of thermal oxidizers subject to EPA's New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants.

#### B. Timeliness of Petition

The deadline for filing section 505(b)(2) petitions expired on December 8, 2004. EPA finds that the Petition was submitted on December 6, 2004, which is within the 60-day time frame established by the Act and Part 70. EPA therefore finds that the Petition is timely.

### III. ISSUES RAISED BY PETITIONER

#### A. Permit Application and Public Process

Petitioner alleges that the applicant did not submit a complete permit application in accordance with the requirements of the Clean Air Act, 40 C.F.R. § 70.5(c). Petition at 7-10. Petitioner's concerns regarding the application are summarized as follows:

- BAAQMD did not incorporate information into the application submitted by Conoco after its submittal of its initial application in 1996;
- the application fails to list insignificant sources at the refinery, contrary to District Regulation 2-6-405.4;

- BAAQMD failed to require Conoco to submit emissions calculations for sources that are exempt from District permits or excluded from District regulations;
- Information on stack discharge points; fuels, fuel use, raw materials, production rates and operating schedules; air pollution control equipment and monitoring; dates of installation for emission sources and control equipment; calculations and process production rates and throughput capacities.

EPA denies Petitioner's claim that the Permit is deficient because the application was incomplete for the reasons set forth below.

As an initial matter, EPA's Part 70 regulations, at 40 C.F.R. § 70.7(h)(2), specify that states must provide the public with notice of the location of information relevant to permit proceedings, including "copies of the draft permit, . . . all *relevant* supporting materials . . . and all other materials available to the permitting authority that are *relevant* to the permit decision." 40 C.F.R. § 70.7(h)(2) (emphasis added). This plain language suggests that it is the permitting authority – i.e., here, the District – that decides what materials are relevant to its decision and, thus, considered part of the application. *See In the Matter of Shaw Industries, Inc. Plant No. 80*, Petition IV-2001-9 at 7-9 (Nov. 15, 2002).

With respect to information submitted by Conoco since submittal of the original application, Petitioner provides no support for its allegation that these submittals exist or that they contain information that should be considered part of the application. Petitioner did not describe these submittals in the Petition, explain their relationship to the Permit or provide them as an attachment in support of it. In reviewing a petition to object to a title V permit because of an alleged failure of the permitting authority to meet all procedural requirements in issuing the permit, EPA considers whether the petitioner has demonstrated that the permitting authority's failure resulted in, or may have resulted in, a deficiency in the content of the permit. *See CAA* § 505(b)(2); *see also* 40 C.F.R. § 70.8(c)(1); *In the Matter of Los Medanos Energy Center*, at 11 (May 24, 2004); *In the Matter of Doe Run Company Buick Mill and Mine*, Petition No. VII-1999-001, at 24-25 (July 31, 2002). Therefore, EPA finds that Petitioner has failed to demonstrate that these materials have any relationship to the adequacy of the Permit or that the failure to incorporate this information into the application resulted in or may have resulted in a deficiency in the permit.

District Regulation 2-6-405.4 requires applications for title V permits to identify and describe "each permitted source at the facility" and "each source or other activity that is exempt from the requirement to obtain a permit . . ." EPA's Part 70 regulations, which prescribe the minimum elements for approvable state title V programs, require that applications include a list of insignificant sources that are exempted on the basis of size or production rate. 40 C.F.R. § 70.5(c). EPA's regulations have no specific requirement for the submission of emission calculations to demonstrate why an insignificant source was included in the list. Petitioner makes no claim that the Permit inappropriately exempts insignificant sources from any applicable requirements or that the Permit omits any applicable requirements. Similarly,

Petitioner makes no claim that the inclusion of emission calculations in the application would have resulted in a different permit. Because Petitioner failed to demonstrate that the alleged flaw in the permitting process resulted in, or may have resulted in, a deficiency in the Permit, EPA is denying the Petition on this ground.

Finally, EPA denies Petitioner's claim regarding "information that should have been included in the application." Petitioner provides absolutely no support for its claim that this information was not provided. Moreover, we find that the information specified in the Petition is merely a recitation of the federal criteria for state title V program requirements for permit applications. Because Petitioner has not demonstrated that this information is missing from the application and has not demonstrated that the omission of this information may have resulted in a deficiency in the Permit, EPA denies Petitioner's request that we object to the Permit on this basis.

B. Inadequate Schedules of Compliance

1. New Source Review Rules

a. Throughput Limits and Increases in Firing Rates

Petitioner claims that since the Permit does not contain a schedule of compliance to remedy New Source Review ("NSR")<sup>3</sup> deficiencies, the Permit is not in compliance with the Act and related regulations and EPA must object to the Permit. Petition at 13. Petitioner claims to have identified two instances of noncompliance with applicable NSR rules, as follows: (i) confusing and potentially contradictory permit provisions regarding throughput limits; and (ii) administrative increases in the maximum firing rate of several pieces of equipment at the refinery.<sup>4</sup> Petition at 12-13.

All sources subject to Title V must have a permit to operate that assures compliance by the source with all applicable requirements. See 40 C.F.R. § 70.1(b); CAA §§ 502(a), 504(a). Such applicable requirements include the requirement to obtain NSR permits that comply with

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<sup>3</sup> "NSR" is used in this section to include both the nonattainment area New Source Review permit program and the attainment area Prevention of Significant Deterioration ("PSD") permit program.

<sup>4</sup> Petitioner also takes issue with the District's position that "the [NSR] preconstruction review rules themselves are not applicable requirements, for purposes of Title V." Petition, at 11; Consolidated Response to Comments, dated December 1, 2003 ("2003 CRTS"), at 6-7. Applicable requirements are defined in the District's Regulation 2-6-202 as "[a]ir quality requirements with which a facility must comply pursuant to the District's regulations, codes of California statutory law, and the federal Clean Air Act, including all applicable requirements as defined in 40 C.F.R. 70.2." Applicable requirements are defined in 40 C.F.R. § 70.2 to include "any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act...." Since the District's NSR rules are part of its implementation plan, the NSR rules themselves are applicable requirements for purposes of Title V. Since this point has little relevance to the matter at hand (i.e., whether in this case the NSR rules apply to a particular new or modified source at the refinery), EPA views the District's position as *obiter dictum*.

applicable NSR requirements under the Act, EPA regulations, and state implementation plans. *See generally* CAA §§ 110(a)(2)(C), 160-69, 172(c)(5), and 173; 40 C.F.R. §§ 51.160-66 and 52.21. NSR requirements include the application of the best available control technology (“BACT”) to a new or modified source that results in emissions of a regulated pollutant above certain legally-specified amounts.<sup>5</sup>

Based on the information provided by Petitioner, Petitioner has failed to demonstrate that NSR permitting and BACT requirements have been triggered at the refinery. In fact, the Petition does not even identify the particular sources that Petitioner claims violate NSR requirements. With regard to permit throughput limits, Petitioner merely asserts that: “[t]he permit provisions regarding throughput limits are confusing and potentially contradictory, and therefore it is not clear if the limits are in compliance with applicable New Source rules.” Petition at 13. Petitioner offers no further exposition on this matter, other than to refer the reader to two paragraphs in the proposed permit, leaving it up to the reader not only to divine what Petitioner finds confusing and contradictory, but also how these throughput limit provisions lead to specific violations of NSR rules at particular sources.

With regard to the administrative increases in the maximum firing rate, the Petition makes a vague reference to “several pieces of equipment at the refinery,” and then, in a footnote, refers the reader to comments submitted by Adams Broadwell on September 30, 2002 (“2002 AB Comments”) and on September 22, 2003 (“2003 AB Comments”) “for a more detailed discussion of these issues.” Petition at 12. However, the 2002 AB Comments are themselves short on details of specific NSR violations at the refinery. For example, the 2002 AB Comments claim that “the District has recognized that an increase in firing rates was due to debottlenecking of the fuel gas system,” but supports this claim by referring to a case of de-bottlenecking at another refinery. Petition, Appendix 18, at 40. The 2003 Comments are even more problematic. In the 2003 Comments, Adams Broadwell states that:

“Although these specific sources were discussed in our original comments on the draft permit for ConocoPhillips, attached is additional evidence that the firing rates of Sources # 4330-4339 and 4349 were allowed ‘an administrative increase in firing rates’ by the District without being subject [*sic*] NSR, despite significant increases in these rates. For example, the District allowed ConocoPhillips’ Source #4388 a 63% ‘administrative increase’ in its firing rate without NSR compliance. *See* Exhibit C at 1....[T]hese known NSR violations must be corrected in the proposed permit.”

Petition, Appendix 19, at 15.

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<sup>5</sup> The Act distinguishes between the requirement to apply BACT, which is part of the PSD permit program for attainment areas, and the requirement to apply the lowest achievable emission rate (“LAER”), which is part of the NSR permit program for nonattainment areas. In this case, however, the District’s NSR rules use the term “BACT” to signify “LAER.”

Yet, the sources referred to in this excerpt, as well as in Exhibit C, are sources at the Chevron refinery in Richmond, not the Conoco refinery in Rodeo.

The only references to specific sources at the Conoco refinery occur in two attachments to the 2002 AB Comments. The first is a May 17, 2000, letter from the District acknowledging a “correction” in the maximum firing rate of heater S-10. The second is an April 2, 1999, letter from the previous refinery owner requesting that the District revise the firing rate limit for heater S-29. Petition, Appendix 18, Exhibit 2. With regard to heater S-10, the District recently stated that:

“The firing rate at S10 was changed to 223 MM BTU/hr following an audit of refinery heater firing rates that was related to the implementation of the facility-wide NOx emission limit in Regulation 9, Rule 10. The firing rate has been set at 223 MM BTU/hr since the year 2000 permit renewal. No evidence of heater modification was found, and the source of the original firing rate is unknown and assumed to be erroneous.”

District Response to Comments from EPA, dated April 14, 2004 (“April 2004 RTC (EPA)”).

Although the District claims that there is no evidence of heater S-10 modification, EPA is unable to conclude at this time that changes in the firing rates of heaters S-10 and S-29 would not constitute “modifications” under NSR rules.<sup>6</sup> Nevertheless, Petitioner offers no evidence as to whether refinery emissions were in any way affected by these changes in firing rates. Thus, based on the information provided by Petitioner, EPA is unable to conclude at this time that such changes resulted in daily or annual cumulative emissions increases that would trigger NSR requirements. *See* SIP-approved BAAQMD Regulations 2-2-301 and 2-2-304.

Petitioner does not claim to have sufficient evidence to establish that these sources are subject to NSR permitting and the application of BACT. The 2002 AB Comments that Petitioner relies on make clear that Adams Broadwell “could not evaluate the basis or the magnitude of the emissions increase associated with ‘administratively increased’ firing rates at the Refinery.” Petition, Attachment 18, at 41. At first, the Petition echoes Adams Broadwell’s uncertainty when Petitioner states that “[t]he increase in firing rates *could be* due to de-bottlenecking... [T]hese administrative increases *may have* caused significant emissions increases.” Petition at 12 (emphasis added). However, four sentences later, without any further exposition or evidence regarding how these changes affected emissions at the refinery, Petitioner concludes that “[t]hese changes have resulted in modifications to sources requiring NSR because the sources underwent physical or operational changes that caused significant emissions increases.” Petition at 13. Especially absent evidence regarding emissions, the Petitioner has not met its burden of demonstrating that the permit is not in compliance with the NSR

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<sup>6</sup> For example, increasing a heater’s firing rate above its enforceable permit condition may, in certain cases, constitute a change in the method of operation and, therefore, a “modification” under NSR rules. *See* District Regulation 2-2-223 and 40 C.F.R. § 52.21(b)(2).



requirements.

During the title V permitting process, EPA has also been pursuing similar types of claims in another forum. As part of its National Petroleum Refinery Initiative, EPA identified four of the Act's programs where non-compliance appeared widespread among petroleum refiners, including apparent major modifications to refinery heaters and boilers that resulted in significant increases in NO<sub>x</sub> and SO<sub>2</sub> emissions without complying with NSR requirements. Recently, on January 27, 2005, the United States filed a complaint and lodged a consent decree alleging NSR violations at certain heaters and boilers at Conoco's refineries.<sup>7</sup> Conoco's Rodeo refinery is part of this action. However, consistent with its approach under the Refinery Initiative, EPA has not conducted an in-depth investigation of each heater and boiler at Conoco's refineries to identify potential NSR violations at individual units.<sup>8</sup> The United States' claims have not been subject to full adjudication, and Petitioner has failed to provide EPA sufficient additional information to establish conclusively that heaters S-10 and S-29 are out of compliance with NSR requirements.

Since Petitioner has failed to show that NSR requirements apply to these sources, EPA finds that Petitioner has not met its burden of demonstrating a deficiency in the permit. Therefore, the Petition is denied on this issue.

## 2. Unconditional Order of Abatement

Petitioner alleges that EPA must object to the Permit because it must include additional requirements "for monitoring, limiting, and preventing" nuisance odor problems. Petition at 13.

EPA finds that Petitioner has not demonstrated that the Permit is not in compliance with the requirements of the Act. The Petition includes as an attachment an "incident report" from October 31, 2004 regarding a release of hydrogen sulfide from 4:00 a.m. to 7:00 a.m. and associated complaints regarding odors. The Petition, however, fails to establish that nuisance and odor problems are related to an applicable requirement or that a change to the Permit would actually address problems of this type. EPA notes particularly that Petitioner does not specify that any applicable requirements or required monitoring are actually missing from the Permit or that the odor and nuisance problems are attributable to a violation of an applicable requirement. Because the Petitioner has not demonstrated that the Permit is not in compliance with applicable requirements, EPA denies the Petition.

## 3. Source-specific Emissions

Petitioner alleges that EPA must object to the Permit because it fails to address

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<sup>7</sup> The case was filed in the United States District Court for the Southern District of Texas (Civil Action No. H-05-0258). The settlement is not effective until it is approved and entered by the District Court.

<sup>8</sup> EPA notes that with respect to the specific claims of NSR violations raised by Petitioner in its comments, the District "intends to follow up with further investigation." 2003 CRTS at 22.

noncompliance with a NOx limit applicable to sources S-352 through 3-357, which are three turbines and three duct burners. Petition at 13-14. Petitioner also claims that the Permit is deficient because three units, S-400, S-324 and S-1007 are subject to a condition of “no detectable VOC emissions,” yet the District’s emissions inventory shows high emissions from these sources. *Id.* Finally, Petitioner claims that the Permit does not “identify” carbon emissions from unit S-307. *Id.*

EPA disagrees with Petitioner’s claim that it must object to the Permit on these grounds. First, with regard to Petitioner’s allegations as to compliance with NOx and VOC limits, EPA does not agree with Petitioner’s premise that, in this instance, the District’s emissions inventory is sufficiently accurate to establish non-compliance or to establish that the lack of a compliance schedule in the Permit warrants an objection from the Administrator. EPA’s concern regarding the use of the emissions inventory to determine compliance is founded in large part on the District’s own statements with regard to the reliability of the inventory and the uses for which it is intended. For example, in response to a public comment on this same issue, the District’s 2003 CRTS stated:

Emissions inventory statistics are a highly unreliable indicator of compliance status. The inventory is used for planning, and the emissions figures are accurate enough to use as inputs into a macro-analysis of total stationary source emissions in the Bay Area. However, the methodologies used to derive inventory statistics, and the degree of review and quality control over inventory numbers for individual facility, does not approach the degree of accuracy and reliability that would render these figures useful for determining compliance. The emission inventory is an estimate of emissions based on emission factors and throughputs reported by the facility. Compliance with the emission limits is best determined by direct measurement (either continuously or periodically). A combination of emissions factors and throughput amounts might yield credible evidence regarding compliance, but only after careful review to determine accuracy and the appropriateness of the emissions factor. Because the emissions inventory functions as a macro tool, the District does not subject emissions inventory figures to analysis sufficiently rigorous to ensure credibility relative to compliance with applicable requirements. For instance, the District does not systematically update emissions factors used in the emissions inventory to reflect the most current compliance tests. Though emissions inventory statistics are generally public records, and though these records were requested by reviewers of the refinery Title V permits, it does not follow that the inventories are either useful or relevant to decisions made in issuing the Title V permit.

To summarize, the emission inventory is accurate enough for planning purposes, but not for compliance determination. The District has never represented otherwise regarding the emissions inventory. Nevertheless, the fact that the emission estimate found in the planning inventory is higher than the emission limit could be taken to mean that a closer look at compliance is warranted. However, for the reasons stated above, the District does not consider the emissions inventory the most useful starting point for its enforcement investigations.

2003 CRTS at 16. The District's view of the unsuitability of its own emissions inventory for the purposes of establishing compliance must be considered. EPA finds that the District's understanding of the inventory as a tool for planning purposes rather than compliance is reasonable and that Petitioner has failed to demonstrate that the District's use of the inventory primarily for planning purposes resulted in, or may have resulted in, a deficiency in the Permit. *See* CAA § 505(b)(2); *see also* 40 C.F.R. § 70.8(c)(1).

With respect to Petitioner's allegation regarding "total carbon emissions" from unit S-307, EPA finds that Petitioner has failed to demonstrate that the District failed to incorporate the applicable requirement or any associated monitoring into the Permit.

#### 4. Emissions Inventory

Petitioner alleges that EPA must object to the Permit because the District "uses emission inventory estimates for purposes of establishing exemptions from emissions limits," whereas the District also states that the inventory estimates are insufficiently reliable for determining compliance. Petition at 14-15.

EPA disagrees with Petitioner's allegation that it must object to the Permit for this reason. Petitioner incorrectly alleges that Conoco's application relied on the emissions inventory to demonstrate applicability of HAPs requirements. Petition at 17 and n.79. EPA's review of the portion of Conoco's application cited by Petitioner states that "the emissions estimates for hazardous air pollutants are taken from the refinery's 1995 SARA 313 Report." Application at 4. (SARA is the acronym for the Superfund Amendments and Reauthorization Act of 1986. Section 313 of SARA (also known as the Emergency Planning and Community Right to Know Act) refers to a requirement for companies to submit annual reports to EPA quantifying their releases of certain hazardous chemicals to the environment. *See* 42 U.S.C. § 11023.

Petitioner's own reference to BAAQMD's Manual of Procedures shows that the District may rely on information outside the emissions inventory. As stated in the Petition, "If accurate emission inventory calculations for a source are not available from the District, the facility must provide the calculations and explain any assumptions regarding emission factors and abatement factors." *Id.* (quoting BAAQMD Manual of Procedures, Volume II, Part 3, at 3-7 (May 2, 2001)). Since the Manual of Procedures requires applicants to provide accurate data if the emissions inventory is not accurate, it is unclear why Petitioner insists that the BAAQMD is inconsistent regarding the use of inventory data.

Thus, EPA denies Petitioner's claim on this issue because Petitioner has not demonstrated that the use of emission inventory information resulted in, or may have resulted in, a deficiency in the Permit.

#### 5. Flaring

Petitioner alleges that EPA must object to the Permit to require the District to (i) clarify

whether it has resolved NOV's pertaining to flaring events and all other outstanding NOV's; (ii) identify the root cause of a flaring event on July 10, 2002 "and other compliance problems at the refinery" and (iii) "impose a schedule of compliance that requires the refinery to implement the process or operational changes necessary to avoid such incidents in the future." Petition at 15.

Petitioner relies on comments submitted by Adams Broadwell to BAAQMD on September 30, 2002 to satisfy the jurisdictional prerequisite of 40 C.F.R. § 70.8(d) and CAA § 505(b)(2). *Id.* at n. 67. The BAAQMD has stated that these comments were not timely submitted, as the relevant public comment period ended on September 28, 2002. *See* Letter from William C. Norton, Chief Executive Officer, BAAQMD to Jack Broadbent, Director, Air Division, EPA Region 9, dated August 5, 2003. EPA therefore finds that Petitioner has not met the requirements of 40 C.F.R. § 70.8(d), which requires that a petition be "based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in § 70.7(h) of this part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period." *See* CAA § 505(b)(2) (same). EPA finds that Petitioner has not met this requirement, and that this issue is therefore procedurally deficient. EPA denies the Petition as to this issue on this ground.

### C. Monitoring

Petitioner alleges that, despite the requirement of title V that permits include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit," the District erroneously concluded that including monitoring in a title V permit is discretionary based on a balancing test of their own making, rather than a clear requirement. Petitioner also alleges that the "District's determination that, in some cases, requiring additional monitoring is inappropriate where there is no monitoring, directly contradicts the mandate of Title V of the Act." Petition at 15-16.

EPA notes that there may be limited situations in which a finding that no periodic monitoring is needed may be appropriate. For instance, where a prior stack test showed that emissions were only a small percentage of the applicable emission limit, and the source owner or operator periodically certifies that relevant production information remains substantially unchanged, ongoing compliance could be assured without any additional monitoring beyond the periodic certification of operating conditions. *See In the Matter of Fort James Camas Mill*, Petition No. X-1999-1 at 11-12 (December 22, 2000). Petitioner's specific allegations that the periodic monitoring included in the permit is inadequate are addressed below.

#### 1. Combustion Units and Sulfur Plants

Petitioner alleges that the Permit contains no monitoring or inadequate monitoring to assure compliance with SIP-approved BAAQMD Regulations 6-301 and 6-310 for boilers,

furnaces, heaters, combustion turbines and duct burners, and sulfur plants.<sup>9</sup> Petition at 16. SIP-approved BAAQMD Regulation 6-301 limits visible emissions to Ringlemann No. 1. SIP-approved BAAQMD Regulation 6-310 limits the emissions to 0.15 grains per dscf. Regulation 6 does not specify periodic monitoring for these standards.

Because Regulations 6-301 and 6-310 impose no monitoring of a periodic nature, 40 C.F.R. § 70.6(a)(3)(i)(B) specifies that the Permit must contain “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit . . . .” Thus, the issue before EPA is whether compliance with the Permit can be determined in the absence of periodic monitoring, or in some instances, based on the allegedly inadequate monitoring imposed in the Permit, and whether the Statement of Basis adequately explains the District’s rationale pursuant to the requirements set forth in § 70.7(a)(5).

a. Boilers, Furnaces, Combustion Turbines, Duct Burners, and Heaters

For all boilers, furnaces, combustion turbines, duct burners, and all but one heater (S-3), the District has cited the June 24, 1999 CAPCOA/CARB/EPA Periodic Monitoring Recommendations for Generally Applicable Requirements (“Recommendations”) as a justification for no periodic monitoring for the opacity standard of Regulation 6-301 at these sources. Statement of Basis (Dec. 2003) at 21-22; Statement of Basis (Dec. 2004) at 10.<sup>10</sup> Specifically, for gaseous-fueled combustion equipment (except flares), the recommended periodic monitoring for generally applicable opacity standards is “none when unit is firing on gaseous fuel.”

For heater S-3, the District is requiring visible emissions inspections after every 1 million gallons of diesel is combusted, per the June 24, 1999 Recommendations. Specifically, these recommendations state that for any California source firing on diesel fuel, recommended periodic monitoring for generally-applicable opacity limits is a visible emissions inspection after every 1 million gallons of diesel combusted. This monitoring is included in the December 16, 2004 permit. Permit at 319.

We believe, per the 1999 Recommendations, that the justifications provided in the Statements of Basis are adequate for a finding that no periodic monitoring is needed for these

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<sup>9</sup>The page numbers cited in the Petition correspond to the following units:

Boilers: S- 8 & 9

Furnaces: S- 371, 372, 438

Heaters: S- 2-5, 7, 10-12, 14-15, 17-22, 29-31, 36, 43-44, 337, 351, 461

Combustion Turbines: S- 352-354

Duct Burners: S- 355-357

Sulfur Plant: S- 1001-1003

<sup>10</sup>Units 36 and 461 are discussed in the 2004 Statement of Basis; all others are addressed in the 2003 Statement of Basis.

sources to assure compliance with Regulation 6-301. Therefore, the Petition is denied on this issue.

The District has also cited the 1999 Recommendations as justification that no periodic monitoring is needed for boilers, furnaces, combustion turbines, duct burners, and heaters to assure compliance with the grain loading standard of Regulation 6-310. The 1999 Recommendations, however, only address periodic monitoring to evaluate compliance with grain loading standards with respect to stack and fugitive emissions from material handling units, not combustion sources. The District makes no reference to recommendations published by CAPCOA/CARB/EPA in 2001 for periodic monitoring for generally applicable grain loading standards for combustion sources (“2001 Recommendations”). The 2001 Recommendations address certain types of combustion units -- specifically, combustion units fired on natural-gas, landfill-gas, and digester-gas. The 2001 Recommendations do not specifically address combustion units that fire on refinery fuel gas. The 2001 Recommendations note that periodic monitoring for source categories that are not included (such as refinery-gas fired combustion units) should be determined on a case-by-case basis.

EPA finds that the District’s reliance on the 1999 Recommendations, and its failure to mention any consideration of the 2001 Recommendations, is insufficient justification for the lack of periodic monitoring for Regulation 6-310 for these units. 40 C.F.R. § 70.7(a)(5); *see In Re Fort James Camas Mill* (“*Fort James*”), Petition No. X-1999-1, at 8 (Dec. 22, 2000) (interpreting § 70.7(a)(5) to require that the rationale for the selected monitoring method be documented in the permit record). EPA is therefore requiring BAAQMD to reopen the Permit to re-analyze the question of appropriate periodic monitoring for the grain loading standard for these units as fired on refinery fuel gas. The District’s analysis should consider the 2001 Recommendations and its reference to source-specific factual circumstances, such as the sulfur content of refinery fuel gas.

b. Sulfur Plants

The Statement of Basis contains no justification for the District’s decision not to require monitoring for the sulfur plants. EPA's regulations state that the permitting authority must provide the Agency with a statement of basis that sets forth the legal and factual basis for the permit conditions. 40 C.F.R. § 70.7(a)(5). In this case, EPA finds that the District’s monitoring decision is unsupported by the record. Therefore, EPA is granting the Petitioner’s request to object to the permit as it pertains to the lack of periodic monitoring for sulfur plants pursuant to SIP-approved BAAQMD Regulations 6-301 and 6-310. The District must reopen the permit to include periodic monitoring that assures compliance with the applicable standards or explain in the Statement of Basis why such monitoring is not necessary. *See Fort James* at 8.

2. SIP-Approved BAAQMD Regulation 8-7

Petitioner alleges that EPA must object to the Permit because it does not contain adequate monitoring requirements to assure compliance with SIP-approved BAAQMD Regulation 8-7 for

gasoline dispensing facilities. Petitioner refers to pages 393-394 of the Proposed Permit. Petition at 16. These pages contain monitoring requirements for S-294, a non-retail gasoline dispensing facility. Pages 393-394 of the Permit indicate that S-294 is subject to seven limits or requirements of Regulation 8-7. The permit indicates that no periodic monitoring is required for five of these requirements: Regulation 8-7-301.2, 8-7-301.10, 8-7-313.1, 8-7-313.2, and 8-7-313.3. In the December 2003 Statement of Basis, the District states:

The standard District POC emission factor for uncontrolled aboveground tanks is 1.52 lb/1000 gallon pumped. Based on this emission factor, the maximum estimated POC emissions from this source are:

$$(400,000 \text{ gallon/year}) \times (1.52 \text{ lb/1000 gallon}) = 608 \text{ lb POC/year} = 0.3 \text{ ton POC/yr}$$

The potential to emit is low. Therefore, additional monitoring of this source is not required. Regulation 8, Rule 7, Gasoline Dispensing Facilities requires records of throughput. Regulation 8, Rule 7, Section 313 requirements are requirements to install CARB-certified equipment; the standards are not performance standards. Statement of Basis at 25.

Regulation 8-7-313 requires that all new equipment be CARB-certified to meet the emission limitations in Regulations 8-7-313.1, 8-7-313.2, and 8-7-313.3 without any maintenance being performed. Regulation 8-7-301.2 and 8-7-301.10 are also equipment standards. While it is unclear why the Statement of Basis attempts to justify that no monitoring is required based on a low potential to emit, EPA agrees with the District that the standards of Regulation 8-7-301 and 8-7-313 are not performance standards, and that no monitoring is necessary. Therefore, EPA is denying the Petition on this issue.

### 3. SIP-approved BAAQMD Regulation 8-5 and Storage Tanks

Petitioner claims that tank monitoring requirements imposed pursuant to SIP-approved BAAQMD Regulation 8-5 are inappropriate. Specifically, Petitioner objects to the District's use of "look up" tables or a sample analysis as the method for monitoring tanks that are subject to federally enforceable VOC limits. Petitioner alleges that by allowing the use of a look up table or sample analysis, the District improperly proposed to use emission factors as a substitute for monitoring.

BAAQMD Regulation 8-5-117 contains a provision that exempts storage tanks from the requirements of the rule provided that they store organic liquids with a true vapor pressure of less than or equal to 0.5 psia. In order to determine the true vapor pressure for purposes of applicability, Section 8-5-117 requires that sources use the methods specified Sections 8-5-602 and 8-5-604 of the same rule. Section 8-5-604 states, "Table I shall be used to determine if a storage tank is subject to the requirements of this rule. For organic liquids not listed in Table I, refer to Sections 8-5-601 or 602." Section 8-5-602 in turn states that Lab Method 28 (Manual of Procedures, Volume 3) shall be used to analyze samples of liquids that are not in Table I. This

table and the alternative sampling procedure specified in the SIP are the procedures referred to in the Permit as "Look-up table or sample analysis." In every instance in the Permit, the condition involving the look up table is associated with Section 8-5-604 and a corresponding requirement to determine the vapor pressure of the tank contents. In no case is the table used as a substitute for other monitoring requirements or in a manner that is inconsistent with the SIP. EPA finds that there is no basis for objecting to the Permit for the reasons cited in the Petitioner's claim. Therefore, EPA is denying the Petitioner's request to object to the Permit as the request pertains to the use of look-up tables pursuant to District Regulation 8-5.

#### D. Reporting

Petitioner argues that Standard Condition I.F. of the Permit, which requires reports of all required monitoring to be submitted to the District at least once every six months, should explicitly require bi-annual reporting of log data in order to comply with 40 C.F.R. § 70.6(a)(3)(iii)(A).

Petitioner provides no legal or factual basis to support its argument that part 70 requires the submittal of logs of operating data, as opposed to monitoring data. Under 40 C.F.R. § 70.6(a)(3)(iii)(A), title V permits must require the submittal of reports of any required *monitoring* at least every six months. Standard Condition I.F. of the permit requires reports of all required monitoring to be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Section VII. of the Permit, *Applicable Limits and Compliance Monitoring Requirements*, identifies the permit conditions that require monitoring and recordkeeping. These conditions identified in Section VII of the Permit are subject to the bi-annual reporting requirement of Standard Condition I.F. In addition, Standard Condition I.F. states that "[a]ll instances of non-compliance shall be clearly identified in these [bi-annual] reports." Consequently, Standard Condition I.F. meets the requirements of 40 C.F.R. § 70.6(a)(3)(iii)(A), and Petitioner has not met its burden under CAA section 505(b)(2). Therefore, EPA denies the Petition on this issue.

#### E. Flares

Petitioner makes several claims as to the inadequacy of the permit with respect to flares, stating that "Conoco's Title V permit fails to include key federal and state applicability provisions and the monitoring necessary to comply with federal rules related to flares." Among the claims are that the Permit fails to include NSPS Subpart A and J requirements (the NSPS general provisions and the NSPS for Petroleum Refineries, respectively) and that the permit fails to include federally enforceable District Regulation 8-2 and appropriate monitoring. Petitioner also claims that EPA violated Title V when it failed to object to the permit after acknowledging that the permit omitted federally enforceable requirements. These issues, as well as others related to flares and flaring, are addressed below.

##### 1. Exemption of S-296 From NSPS on Basis That It Has Not Been Modified



Petitioner claims that the Permit illegally exempts flare S-296 from NSPS Subparts A and J. Petitioner claims that the District's conclusion that Conoco has not modified Flare S-296 is unsupported because there is evidence that the flare has been modified, the Statement of Basis construes "modifications" too narrowly, and the Statement of Basis fails to include information that would reveal whether or not modifications had occurred. Petition at 18-20.

Petitioner points to an email from Conoco to BAAQMD in which Conoco acknowledged that it had replaced the burner tip to Flare S-296. Petitioner states that this is a change that the District accepts as constituting a flare modification. Hence, Petitioner claims, based on the District's own reasoning, this flare is subject to NSPS requirements. Petitioner attached this email as an exhibit to its Petition. This email indicates that the burner tip for Flare S-296 was replaced sometime after 1977 with a burner tip of a different model. The email also suggests that the capacity for Flare S-296 may have increased at some point, from a capacity of 692 tons per hour of gas handling capacity to a capacity of 845 tons per hour. While this email alone does not prove that Flare S-296 has been modified in a manner that would constitute a modification as that term is defined for purposes on NSPS Subpart J, it does raise a valid question about whether Flare S-296 should be subject to NSPS. BAAQMD provided only a generic response to Petitioner's comment and did not meaningfully address this issue. *See* 2004 RTC (CBE) at 2 #12.

Therefore, EPA is granting the Petition on the basis that the District's conclusion that S-296 has not been modified is unsupported by the record. BAAQMD must reopen the Permit to address the changes that have occurred at Flare S-296 in the Statement of Basis, and if necessary, to revise the Permit to include the requirements of NSPS Subpart J for Flare S-296.

Petitioner also claims that the Statement of Basis construes modifications at flares too narrowly. Petitioner alleges that the Statement of Basis states: "a modification *only* occurs when the flare burner tip is replaced" (emphasis added). This allegation is misleading. The Statement of Basis actually says: "Modification of a flare, as defined in Subpart J, *would likely* only occur if the burner tip is replaced by one with a larger capacity – which is likely to be a rare event." *See* 2004 Statement of Basis at 22 (emphasis added). The District does not limit a modification at a flare only to the replacement of a flare tip, rather the District implies that this is the most likely means by which a flare would be modified within the definition of a modification pursuant to 40 C.F.R. §§ 60.2, 60.14.

Therefore, EPA is denying the petition on this issue.

Petitioner further claims that the District failed to comply with 40 C.F.R. § 270.42(a) and (b) by not including a condition in the title V permit requiring the refineries to notify the District when flare burner tips are replaced or when the refinery makes any other flare modifications. Petition at 24. Section 270.42 governs the regulation of solid wastes. Petitioner has provided no legal basis for claiming that a title V permit is deficient because it does not include a requirement for the regulation of solid wastes. *See* 40 C.F.R. § 70.2 (defining "applicable requirement" for purposes of title V). For these reasons, EPA is denying the petition on this issue.

## 2. Exemption of S-398

Petitioner also claims that the Permit inappropriately exempts flare S-398 (an NSPS affected flare as defined in § 60.100) from the applicable requirement in section 60.104 based on the assumption that "some of the facilities have identified NSPS flares that are not designed to burn anything other than ...gases that result from emergency breakdowns." Petitioner notes that the Statement of Basis does not address why S-398 specifically is exempt from the H<sub>2</sub>S limit. Accordingly, Petitioner states, NSPS J should apply to these flares, including 40 C.F.R. § 60.104, or the District should provide the basis for the exemption.

The February 2004 draft permit and Statement of Basis indicated that flare S-398 is not subject to the H<sub>2</sub>S limit in section 60.104(a)(1). *See* draft Permit (February 2004) at 8; Statement of Basis (Feb. 2004) at 8. BAAQMD subsequently revised the Permit to indicate that S-398 is exempt from the H<sub>2</sub>S limit if the flare is used only for upsets or emergency malfunctions. Permit (Dec. 16, 2004) at 129. The Statement of Basis was also revised to indicate that S-398 is only exempt from the monitoring requirements. Statement of Basis (Dec. 16, 2004) at 32.

Therefore, Petitioner is incorrect that the Permit exempts flare S-398 from the applicable requirement § 60.104, and EPA is denying this issue as moot.

EPA, however, has determined that the Permit is deficient because it does not include adequate monitoring to assure compliance with NSPS Subpart J. In a process separate from this Order, EPA will require the District to reopen the Permit to address this deficiency.

## 3. 40 C.F.R. Part 60, Subpart A

Petitioner states that the Permit illegally exempts S-296 from NSPS Subpart A requirements. Petitioner reasons that because NSPS J applies, the Subpart A requirements are also applicable and must be included in the Permit.

As explained above, it is not yet clear whether NSPS Subpart J actually applies to flare S-296. Therefore, EPA is denying the Petition on this basis. If the District determines that NSPS Subpart J does in fact apply to Flare S-296, then the District must also revise Permit to include the requirements of Subpart A, as well as Subpart J, for Flare S-296.

During its review of this issue, EPA noted that the Permit appears to inappropriately exclude the requirements of NSPS Subpart A for S-398. Petitioner did not raise this issue and it is beyond the scope of this Petition. Therefore, in a process separate from this Order, EPA will require the District to reopen the Permit to address this deficiency.

## 4. SIP-approved BAAQMD Regulation 8-2

Petitioner makes several claims with regard to the treatment of flares under SIP-approved BAAQMD Regulation 8-2, "Miscellaneous Operations." Petitioner claims that EPA must object to the Permit because it does not assure that Conoco meets the criteria for an exemption from the rule and because only flaring events, not flares, should be exempt. Petitioner therefore claims that Regulation 8-2 should be included in the Permit as an applicable requirement.

BAAQMD Regulation 8-2 prohibits the discharge into the atmosphere from any miscellaneous operation an emission containing more than 15 pounds per day and a concentration of more than 300 ppm total carbon on a dry basis. The rule defines a miscellaneous operation as one that is not limited by another rule in BAAQMD Regulations 8 or 10.<sup>11</sup> Regulation 8-1, however, which covers the general provisions for all of Regulation 8, allows an exemption from the standard in Regulation 8-2, which states, in relevant part:

110.3: Any operation or group of operations...which are subject to Regulation 8, Rule 2 or Rule 4, and for which emissions of organic compounds are reduced by at least 85% on a mass basis. Where such reduction is achieved by incineration, at least 90% of the organic carbon shall be oxidized to carbon dioxide.

The District has determined that a properly designed flare that is operated within its design capacity, in the presence of a flame, and that combusts gases with a BTU content in excess of 300 Btu/scf will meet a control efficiency of at least 90% and will therefore qualify for the exemption provided in Regulation 8. The District has included federally enforceable requirements in Condition 18255 to operate the flares in accordance with these criteria. These requirements (i) limit vent gas to each flare to within the flare's design capacity; (ii) require presence of a pilot flame at all times; and (iii) allow combustion only of gases with a BTU content greater than 300 Btu/scf.

Petitioner claims that the Permit does not take into account the many other factors that can affect combustion efficiency, including wind speed, low load, steam quenching, gas heat content, low exit velocity, a split flame, or a smoking flare. Petitioner additionally cites studies where such factors have contributed to flare efficiencies as low as 50%.

Petitioner also notes that, while the District included operating requirements and monitoring in the Permit under Condition 18255 to demonstrate that a control efficiency of 90% or greater will be achieved, the Permit excludes federally enforceable periodic monitoring to show compliance with these conditions.

Additionally, Petitioner claims, the District did not demonstrate that the flares are properly designed by conducting a design review, but rather relies on the fact that "OSHA requires that flare system design basis and testing information be kept at the facilities and that

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<sup>11</sup>Petitioner incorrectly states that the flares are not covered by another rule. This statement is not true for all of the refinery's flares. For instance, any flare subject to NSPS Subpart J is also subject to District Regulation 10, which incorporates NSPS standards by reference.

flares be operated consistent with the design basis."

Finally, Petitioner claims that the exemption does not apply to flares as a blanket rule; therefore the Permit must list BAAQMD Regulation 8-2 as an applicable requirement and the refinery must demonstrate that the exemption applies during each event.

EPA disagrees with Petitioner's claim that the Permit must list Regulation 8-2 as an applicable requirement because the exemption only applies on an event basis. Regulation 8, as noted above, contains the general provisions for all rules under Regulation 8, including Regulation 8-2. Regulation 8 specifically states that any operation that achieves 90% control efficiency by incineration is exempt from the provisions of this regulation. An operation that achieves 90% control is not subject to Regulation 8-2. This is in contrast to NSPS Subpart J, which applies to any flare built or modified after June 11, 1973, regardless of the exemption in § 60.104(a)(1). Therefore, EPA denies the Petition on this issue.

EPA, however, agrees that BAAQMD must conduct a design review. One of the key components of the District's analysis is that the flare must be properly designed in order to achieve a 90% control efficiency. The District has never made a determination that Conoco's flares have been properly designed. Such a design review should consider the parameters in 40 C.F.R. § 63.11 and 40 C.F.R. § 60.18.<sup>12</sup>

EPA also agrees with Petitioner that federally enforceable monitoring is necessary to assure compliance with the federally enforceable requirements of Condition 18255. These conditions are federally enforceable applicable requirements with no underlying periodic monitoring requirements. Therefore, title V requires the addition of monitoring adequate to assure compliance with the operating conditions. 40 C.F.R. § 70.6(a)(3)(i)(B).

For the reasons stated above, EPA is granting the Petition on the basis that the Permit lacks periodic monitoring sufficient to assure compliance with all applicable requirements and on the basis that the District has not adequately justified the non-applicability of Regulation 8-2 by demonstrating that Conoco's flares consistently meet a 90% control efficiency. BAAQMD must conduct a design review for Conoco's flares and must reopen the Permit to either include the results in the Statement of Basis or, if needed, to include the requirements of Regulation 8-2 in the Permit. BAAQMD must also reopen the Permit to include federally enforceable monitoring for the requirements of Condition 18255.

## 5. 40 C.F.R. Part 63, Subpart CC

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<sup>12</sup>For purposes of compliance with Maximum Achievable Control Technology standards, a flare designed and operated in accordance with the requirements of 40 C.F.R. § 63.11 is considered at least equivalent to using another control device designed and operated to achieve 98% control. For purposes of compliance with New Source Performance Standards, a flare designed and operated in accordance with the requirements of 40 C.F.R. § 60.18 is considered at least equivalent to using another control device designed and operated to achieve 95% control.

Petitioner claims that EPA acknowledged in its latest permit review that the Statement of Basis failed to make a determination on the applicability of 40 C.F.R. Part 63, Subpart CC, and that EPA violated the Clean Air Act by not objecting to this omission. Petition at 23.

40 C.F.R. Part 63, Subpart CC contains the Maximum Achievable Control Technology (“MACT”) requirements for petroleum refineries. Under Subpart CC, the owner or operator of a Group 1 miscellaneous process vent, as defined in § 63.641, must reduce emissions of Hazardous Air Pollutants either by using a flare that meets the requirements of § 63.11 or by using another control device to reduce emissions by 98% or to a concentration of 20 ppmv. 40 C.F.R. § 63.643(a)(1). If a flare is used, a device capable of detecting the presence of a pilot flame is required. 40 C.F.R. 63.644(a)(2).

The applicability provisions of Subpart CC are set forth in section 63.640, “Applicability and designation of affected source.” Section 63.640(a) provides that Subpart CC applies to petroleum refining process units and related emissions points. The Applicability section further provides that affected sources subject to Subpart CC include emission points that are “miscellaneous process vents.” 40 C.F.R. § 63.640(c)(1). The Applicability section also provides that affected sources do not include emission points that are routed to a fuel gas system. 40 C.F.R. § 63.640(d)(5). Gaseous streams routed to a fuel gas system are specifically excluded from the definition of “miscellaneous process vent,” as are “episodic or nonroutine releases such as those associated with startup, shutdown, malfunction, maintenance, depressuring, and catalyst transfer operations.” 40 C.F.R. § 63.641.

The District’s 2004 Statement of Basis is silent regarding the applicability of MACT Subpart CC requirements to its flares, although it indicates that MACT Subpart CC applies generally to the facility. See Statement of Basis (Dec. 16, 2004) at 45. EPA agrees with Petitioner that the applicability of MACT Subpart CC requirements to Conoco’s flares should be addressed in the Statement of Basis. See 40 C.F.R. § 70.7(a)(5).

Therefore, EPA is granting the Petition on this issue. BAAQMD must reopen the Permit to address applicability in the Statement of Basis, and, if necessary, to include the flare requirements of MACT Subpart CC in the Permit.

#### 6. Emissions Limits Related to BAAQMD Regulation 8-2

Petitioner claims that the permit creates an improper emission limit for flares to support a flare exemption from the miscellaneous operations rule. Petition at 23.

First, Petitioner states that the limits are so high as to provide effectively no limit at all. BAAQMD included limits on vent gas (not emissions) at flares to help show compliance with the requirement that the flares achieve a control efficiency of 90% or greater. Vent gas is defined as the gas that is directed to a flare. See BAAQMD Regulation 12-11-210. These new limits intended to restrict the amount of gas that can flow to a flare. As discussed above, BAAQMD has determined that one factor to consider in determining whether a 90% or greater control

efficiency will be achieved at a flare is to ensure that the flare is operated within its design capacity. The limit cited by Petitioner is a limit on flow to the flares to ensure that the flares are operated within their design capacities and are not a limit on the amount of VOCs permitted to be emitted from flares.

Petitioner also claims that the limits conflict with, and do not assure compliance with, the 15 pound per day limit in Regulation 8-2. The sole purpose of these limits is to ensure that the flares are operated within their design capacity. They serve no other purpose. As noted in the District's response to Petitioner's comments these limits do not authorize operation in exceedance of any other requirement that applies at the facility, and therefore do not constitute authorization to increase emissions above existing authorized levels. 2004 RTC (CBE) at 4. Petitioner's claim that the limits do not assure compliance with BAAQMD Regulation 8-2 is not supported by any analysis.

Finally, Petitioner claims that the Title V permit cannot be used to create new limits. EPA is unclear why Petitioner believes it is inappropriate to set such limits. While Title V generally does not authorize the creation of new federally enforceable limits, a permitting authority is not prohibited from adding new limits or requirements if it sees fit under its own independent authority. *See* 40 C.F.R. § 70.6(b)(2) (authorizing permitting authorities to include "state-only enforceable" conditions in Title V permits).

For the reasons stated above, EPA denies the petition on these issues.

#### 7. BAAQMD Regulation 12-11

Petitioner claims that the flare monitoring language in the Permit is inconsistent with BAAQMD Regulation 12-11. BAAQMD Regulation 12-11 requires monitoring and recording of emissions for flares at petroleum refineries. Regulation 12-11, however, is not a federally enforceable requirement; therefore, Petitioner's issue has no legal basis from a federal standpoint. So-called "state-only" requirements are not subject to the requirements of Title V and, therefore, are not evaluated by EPA unless their terms may either impair the effectiveness of the Title V permit or hinder a permitting authority's ability to implement or enforce the Title V permit. *See, e.g., In the Matter of Eastman Kodak Company*, Petition No. II-2003-02, at 37 (Feb. 18, 2005).

Petitioner has not demonstrated that the Permit is inconsistent with Part 70, therefore EPA is denying the petition on this issue.

#### 8. Video Monitoring

Petitioner claims that the Permit contains language suggesting that once video monitoring occurs, no further monitoring is necessary. Petitioner also claims that the language conflicts with 40 C.F.R. § 60.18 and that it is still necessary for Conoco to identify any smoking of flares over three minutes, regardless of whether a video monitoring inspection has previously been done. Petition at 25.

The Permit states in relevant part:

The owner/operator shall use the following procedure for the initial inspection and each 30-minute inspection of a flaring event.

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:

i. EPA Reference Method 9; or

ii. 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 5. After a violation is documented, no further inspections are required until the beginning of a new calendar day.

EPA believes it is clear from the Permit that this monitoring regime only applies to visible emissions monitoring (i.e. any other monitoring required for flares would not be superceded by this requirement). EPA also believes it is clear that the refinery must reinspect visible emissions every 30 minutes during a flaring event and identify any smoking of flares over three minutes, regardless of whether a video monitoring inspection has previously been done.

For these reasons, and because Petitioner has not demonstrated that the Permit is out of compliance with the requirements of title V, EPA is denying the Petition on this issue.

#### 9. Enforceability of BAAQMD Regulation 12-11

Petitioner makes a general statement regarding the federal enforceability of BAAQMD Regulation 12-11, stating that EPA has expressed the opinion that Regulation 12-11 should be federally enforceable so that it can be used to demonstrate compliance with other rules. Petitioner continues, stating that regardless of whether Regulation 12-11 is federally enforceable, the Permit must incorporate the requirement accurately.

EPA has suggested to the District that it could streamline monitoring for applicable requirements by using the monitoring required by the flare monitoring rule, as long as the streamlined requirement were federally enforceable. *See* EPA Comments dated Sept. 26, 2003 at

1. EPA's comment regarding Regulation 12-11 was a suggestion for streamlining monitoring requirements, not an assertion that EPA believes that, as a legal matter, Regulation 12-11 should be federally enforceable. Because Regulation 12-11 is not a federally enforceable requirement, this issue has no regulatory merit for federal purposes. Petitioner has provided no legal basis in requesting that EPA object to the Permit because it does not accurately incorporate a non-federally enforceable rule. *See 40 C.F.R. § 70.6(b)(2)* (authorizing permitting authorities to include "state-only enforceable" conditions in Title V permits). EPA is therefore denying the petition for this issue.

#### F. MACT Standards

Petitioner alleges that "several MACT requirements that apply to the refineries have not been included in the permit," citing Adams Broadwell's September 27, 2002 comments ("2002 AB Comments"). Petition at 33. EPA is not obligated to consider general allegations of permit deficiencies based solely upon comments incorporated by reference into the Petition. *See, e.g., In the Matter of Al Turi Landfill, Inc.*, Petition No. II-2002-13-A (Jan.30, 2004) at 3. EPA is therefore denying the Petition on that ground.

Despite this clear legal ground for denying the Petition, EPA provides the following response.

##### 1. NESHAP/MACT General Applicability

Through the 2002 AB Comments, Petitioner alleges that neither the Statement of Basis nor the Permit contained information on HAPs or sources of HAPs, or otherwise explained how the District determined NESHAP/MACT applicability. Therefore, the Permit should be revised to contain the basis for the District's decisions and be recirculated for public review.

Petitioner has not demonstrated that the omission from the Statement of Basis has resulted in, or may have resulted in, a deficiency in the content of the Permit. Even if Petitioner's allegations were procedurally sound, EPA would therefore deny the Petition on this issue.

##### 2. 40 C.F.R. Part 63, Subpart UUU

Through the 2002 AB Comments, Petitioner alleges that the District must modify the title V permit to include the requirements of 40 C.F.R. Part 63, Subpart UUU, which is the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries for Catalytic Cracking and Reforming Units and Sulfur Recovery Units. The comments contend that the District should ensure that the permit imposes and makes enforceable all applicable limits from Subpart UUU.

The compliance deadline for MACT Subpart UUU is April 11, 2005. 40 C.F.R. § 1563(b). When a permit is issued prior to the MACT compliance date, EPA believes that it is



acceptable for the initial permit to describe MACT applicability at the Subpart level, and for all other compliance requirements (including compliance options and parameter ranges) of the MACT that apply below the Subpart level to be added at a later time as a significant permit modification. Conoco's Permit, as issued December 16, 2004, incorporates the requirements of Subpart UUU with sufficient detail to satisfy the guidelines above. Even if Petitioner's allegations were procedurally sound, EPA therefore would deny the Petition on this issue.

3. 40 C.F.R. Part 63, Subpart R

Through the 2002 AB Comments, Petitioner argues that the District must ensure that the Permit imposes all applicable requirements on all equipment covered under 40 C.F.R. Part 63, Subpart R, which is the NESHAP for Stage 1 Gasolene Distribution.

EPA was unable to determine that the Permit includes the requirements of 40 C.F.R. Part 63, Subpart R. EPA was also unable to find any discussion of the applicability of Subpart R in the public record for the Permit. EPA believes that the Permit should either include the requirements of 40 C.F.R. Part 63, subpart R for any affected units, or, in the absence of any affected units, the Statement of Basis should discuss the non-applicability of the standard to the refinery.

Because the Petition with regard to this issue is procedurally invalid, EPA is denying Petitioner's request. EPA has determined, however, that the Permit fails to comply with the requirements of 40 C.F.R. § 70.7(a)(5) by excluding a discussion of the applicability of 40 C.F.R. Part 63, subpart R, and potentially fails to comply with 40 C.F.R. § 70.6(a)(1), which requires that a title V permit include operational requirements and limitations that assure compliance with all applicable requirements. Therefore, in a process separate from this Order, EPA will require the District to reopen the Permit to address this issue.

4. 40 C.F.R. Part 63, Subpart Y

Through the 2002 AB Comments, Petitioner contends that neither the Permit nor the Statement of Basis contain sufficient information to determine applicability of 40 C.F.R. Part 63, Subpart Y, "Marine Tank Vessel Loading Operations," to Conoco's marine loading berths.

EPA has determined that the final revised Permit issued on December 16, 2004 contains the requirements of MACT Subpart Y for Conoco's marine loading berths. Permit (Dec. 16, 2004) at 155. Therefore, even if Petitioner's allegation was procedurally sound, EPA would deny the Petition on this issue.

5. 40 C.F.R. Part 63, Subpart CC

Through the 2002 AB Comments, Petitioner contends that the Permit imposes Subpart CC requirements on only a few sources of wastewater and fugitive emissions, and fails to provide an explanation for why other sources have been excluded. Subpart CC is the NESHAP

for Petroleum Refineries. According to the comments, the Permit also fails to identify the specific sources on which it has imposed Subpart CC requirements making it impossible to identify the equipment to which Subpart CC applies. Additionally, the Permit allegedly fails to describe how the refinery complies with the requirements of Subpart CC.

Subsequent to the submittal of the 2002 AB Comments, the District has indicated that the requirements of MACT Subpart CC were incorporated into the Permit in response to public comment. Because the Petition is based on comments from 2002, it is unclear if Petitioner reviewed the most recently proposed permit, or if the Petitioner has further concerns than those raised in 2002 and addressed by the District in 2003. Because Petitioner has not adequately demonstrated noncompliance with the requirements of title V, EPA would deny the Petition on this issue even if Petitioner's allegations were procedurally sound.

#### 6. Case-by-Case MACT Determinations

Through the 2002 AB Comments, Petitioner contends that the District should have made a case-by-case MACT determination in the Title V permit for the refinery's combustion turbines and industrial, commercial and institutional boilers and process heaters but did not, and that the District must correct this error and recirculate a revised permit.

Under section 112(j) of the Act, permitting authorities are required to establish case-by-case maximum achievable control technology in a source's permit if EPA does not finalize the air toxics standard that applies to the source before the permit is issued. EPA has promulgated MACT standards for the source categories at issue, therefore, case-by-case MACT determinations are no longer required. Additionally, subsequent to the submittal of the 2002 AB Comments, the District has responded, "Each of the facilities is in compliance with this requirement. The requirement to meet future milestones has been added to the generally applicable requirements section (Section III)." 2003 CRTS at 34. Therefore, even if Petitioner's allegations were procedurally sound, EPA would deny the Petition on these issues.

#### IV. TREATMENT, IN THE ALTERNATIVE, AS A PETITION TO REOPEN

As explained in the Procedural Background section of this Order, EPA received and dismissed a prior petition ("2003 CBE Petition") from this Petitioner on a previous version of the Permit at issue in this Petition. EPA's response in this Order to issues raised in this Petition that were also included in the 2003 CBE Petition also constitutes the Agency's response to the 2003 Petition. Furthermore, EPA considers the Petition validly submitted under CAA section 505(b)(2). However, if the Petition should be deemed to be invalid under that provision, EPA also considers, in the alternative, the Petition and Order to be a Petition to Reopen the Permit and a response to a Petition to Reopen the Permit, respectively.

#### V. CONCLUSION

For the reasons set forth above, and pursuant to section 505(b)(2) of the Clean Air Act, I

deny in part and grant in part CBE's petition requesting that the Administrator object to the Conoco Permit. This decision is based on a thorough review of the draft permit, the final Permit issued December 16, 2004, and other documents pertaining to the issuance of the Permit.

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Date

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Stephen L. Johnson  
Acting Administrator