

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Chevron Products  
Company,  
Richmond, California Facility

Major Facility Review Permit  
Facility No. A0010  
Issued by the Bay Area Air Quality  
Management District

Petition No. IX-2004-08

**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 Chevron Products Company to operate its petroleum refinery located in Richmond, 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 was deficient in its treatment of New Source Review (NSR) requirements. The Petition alleged that the Permit 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 Chevron Permit and related materials and information provided by the Petitioner in the Petition.<sup>1</sup> Based on this review, I

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<sup>1</sup>On March 7, 2005 EPA received a lengthy (over 250 pages, including appendices), detailed submission from Chevron Products Company regarding this Petition. Due to the fact that Chevron Products 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

partially deny and partially grant Petitioner's request that I object to issuance of the Chevron 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, record keeping, 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 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

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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 Chevron Products Company's submission when responding to the Petition via this Order.

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 Chevron 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 Permit from (i) Chevron Products Company; (ii) Communities for a Better Environment; and (iii) various unions represented by a law firm, Adams Broadwell Joseph & Cardozo (“Adams Broadwell”). EPA also received section 505(b)(2) petitions regarding three of the other BAAQMD refinery permits.

On December 1, 2003, BAAQMD issued its initial title V permits for the Bay Area refineries, including the Chevron facility. On December 12, 2003, EPA informed the District of EPA’s finding that cause existed to reopen the refinery 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, 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 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*

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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 Benicia facility.

*e.g.*, Letters from Deborah Jordan, Director, Air Division, EPA Region 9, to John Hansen, Pillsbury Winthrop (representing Chevron Products Company), 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 section 505(b)(2) petitions. The parties resolved this litigation by a settlement agreement under which EPA agreed to respond to new petitions (i.e., those submitted after EPA's receipt of BAAQMD's re-proposed permits, such as this Petition) from the litigants 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 Permit on one issue: 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 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 -11. Petitioner's concerns regarding the application are summarized as follows:

- BAAQMD did not incorporate into the application information submitted by Chevron after its submittal of its initial application in 1996. This information includes fourteen letters that "proposed title V permit limits for individual sources at the refinery." Also, BAAQMD excluded supporting documentation for these submittals on the basis of claims of trade secret asserted by Chevron, and this is "data necessary to determine if the correct permit requirement is applicable to the source."
- the application fails to list insignificant sources at the refinery, contrary to District Regulation 2-6-405.4 and failed to include emissions calculations for exempt sources.
- Chevron's application improperly identifies insignificant sources of hazardous air pollutants ("HAPs") as those that emit less than 1000 pounds per year, rather than the

BAAQMD regulatory threshold of 400 pounds per year.

- 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 “application updates,” the only information Petitioner describes or offers in support of its allegation is a simple reference in the Petition to fourteen letters from Chevron to the District. Petitioner did not describe these letters 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) (“Los Medanos”); In the Matter of Doe Run Company Buick Mill and Mine, Petition No. VII-1999-001, at 24-25 (July 31, 2002) (“Doe Run”).* Therefore, EPA finds that Petitioner has failed to demonstrate how the District’s alleged failure to incorporate these letters into the application resulted in or may have resulted in a deficiency in the Permit.

Moreover, EPA relies on the District’s response to Petitioner’s comment, in which it responds to a similar comment from Petitioner: “The District disagrees that these letters must be considered part of the application. The District and Chevron have engaged in a long-running discussion over whether and how to set throughput limits in issuing the Chevron title V permit. The information submitted by Chevron, much of which was submitted under a ‘trade secret’ label, was not necessarily solicited and will not necessarily be considered by the District as relevant to the permit as issued.” BAAQMD Consolidated Response to Comments, dated December 1, 2003 (“2003 CRTC”) at 22. According to the District, it imposed throughput limits on grandfathered sources for non-federally required reporting purposes only. 2003 CRTC 31-33. Therefore, the record indicates these fourteen letters concern reporting requirements enforceable only by the District. Petitioner includes nothing in its Petition to contradict BAAQMD’s

statement. For these reasons, EPA denies Petitioner’s request that we object to the Permit.<sup>3</sup>

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.

EPA denies Petitioner’s claim with respect to the use of a threshold for hazardous air pollutants (“HAPs”) other than that specified by District regulations. First, Petitioner has not demonstrated that BAAQMD failed to apply the 400 pound per year threshold. Second, even assuming that BAAQMD did not apply the threshold set forth in the District’s rules, we cannot conclude that the Permit is necessarily deficient if BAAQMD applied a 1000 pound per year threshold. Petitioner did not identify any specific change to the Permit that would have resulted if BAAQMD had applied the higher threshold. For example, Petitioner did not identify any equipment that should have been included in the Permit, but was not. Again, 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); Los Medanos*, at 11; *Doe Run*, at 24-25. Because Petitioner has not made such a demonstration, EPA denies the Petition on this issue.

Finally, EPA denies Petitioner’s claim regarding “information that should have been included in the application” such as stack discharge points, fuels, control equipment, installation dates and production and throughput rates. 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

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<sup>3</sup>“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).

Permit on this basis.

## B. Compliance with New Source Review Rules

Petitioner claims that since the District improperly excluded New Source Review (“NSR”)<sup>4</sup> requirements from the title V Permit, the Permit is not in compliance with appropriate laws and EPA must object to the Permit. Petition at 13. Petitioner claims to have identified three instances of noncompliance with applicable NSR rules, as follows: (i) permitting irregularities regarding the Alkylation and Butamer units; (ii) administrative increases in the maximum firing rate of several pieces of equipment at the refinery; and (iii) improper permitting of the fluid catalytic cracking unit (“FCCU”).<sup>5</sup> Petition at 13-16.

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 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>6</sup>

### 1. Administrative Increases in Firing Rates

Petitioner has failed to demonstrate that NSR permitting and BACT requirements have been triggered as the result of administrative increases in the maximum firing rate of several pieces of equipment at the refinery. Petitioner, in a footnote, states that its comments “are based

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<sup>4</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>5</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 12; 2003 CRTC, 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*.

<sup>6</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.”

on comments submitted by Adams Broadwell” and refers the reader to Adams Broadwell’s comments dated September 27, 2002 (“2002 AB Comments”)<sup>7</sup> “for a more detailed discussion of these issues.” Petition at 13. 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. Petitioner has provided only a short summary of the allegations set forth in the AB Comments. EPA finds that the Petition does not demonstrate a deficiency in the Permit and denies the Petition on that ground.

In the alternative, EPA has reviewed Petitioner’s allegations as set forth in the AB Comments, and is responding as follows.

The 2002 AB Comments claim that the District allowed more than 40 sources, consisting of furnaces, heaters, and boilers, to increase firing rates without submitting an application for a major modification under the NSR program. 2002 AB Comments, at 36. The AB Comments state that “the District concluded and the evidence demonstrates that the increase in firing rates was due to debottlenecking the Refinery’s fuel gas system in 1992, more than doubling fuel gas compressor capacity.” 2002 AB Comments, at 35-36. Assuming, for the moment, that the changes in the firing rates of the furnaces, heaters, and boilers constitute “modifications” under NSR rules,<sup>8</sup> the 2002 AB Comments offer no credible evidence as to whether refinery emissions were in any way affected by these changes in firing rates. First, in support of its claims, Adams Broadwell attaches to its comments several “Evaluation Reports” prepared by the District. These Reports evaluate about one-third of the sources referred to in the 2002 AB Comments, and in each one the District concludes that the proposed installation of ultra-low NOx burners on the furnaces neither increases combustion emissions nor increases cumulative emissions.<sup>9</sup>

Second, Adams Broadwell does not claim to have sufficient evidence to establish that these sources are subject to NSR permitting and the application of BACT. In its comments, Adams Broadwell admits that it “could not evaluate the magnitude of the emissions increase associated with this debottlenecking of the fuel gas system.” 2002 AB Comments at 38. Instead, Adams Broadwell merely “assum[es] a modest 5% refinery-wide increase in firing rates due to this debottlenecking.” 2002 AB Comments at 39 (emphasis added). Adams Broadwell then goes on to calculate the potential to emit due to this debottlenecking by taking “5% of the

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<sup>7</sup> These comments are attached to the Petition as Appendix 23.

<sup>8</sup> Based on the information provided by Petitioner, EPA is unable to conclude at this time that changes in the firing rates of the sources included in the AB Comments are “modifications” under NSR rules. Generally speaking, 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* SIP-approved BAAQMD Regulation 2-2-223 and 40 C.F.R. § 52.21(b)(2).

<sup>9</sup> One of these Reports (Application No. 1786) refers to furnaces S-4188 and S-4189, but does not discuss emissions calculations or plant cumulative increases.

average annual total refinery-emissions for the period 1993-2001.”<sup>10</sup> 2002 AB Comments at 39 (emphasis added). The result, Adams Broadwell concludes, is that, “[t]hese emissions exceed the NSR threshold of 40 ton/yr by a significant amount. Thus, all sources that were debottlenecked by the 1992 increase in compressor capacity should undergo NSR review.” 2002 AB Comments, at 39. But Adams Broadwell’s method of analysis, selecting an arbitrary percentage (i.e., 5%) and applying it to the average annual total refinery-emissions, is purely speculative and of no probative value. Thus, based on the information provided by Petitioner (i.e., the 2002 AB Comments), EPA is unable to conclude at this time that the increase in firing rates 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. Absent evidence regarding emissions, Petitioner has not met its burden to demonstrate that the Permit is not in compliance with NSR requirements.<sup>11</sup>

## 2. FCCU

Petitioner claims that the FCCU permitting process “has been riddled with improper permitting including the failure to require NSR” and “has set the throughput and emissions limits of the [FCCU] at extremely high levels, e.g. 1504.7 tons per year of NOx and 2199.4 tons per year of SOx.” Petition at 14. Relying on internal District memoranda to support its claims, Petitioner requests that the District correct these “overly inflated” NOx and SOx limits and establish a compliance plan that includes BACT and offset determinations for all criteria pollutants for the FCCU. Petition at 15.

Pursuant to EPA policy, the Agency generally will not object to the issuance of a title V permit due to concerns over BACT or related determinations made long ago during a prior preconstruction permitting process.<sup>12</sup> In this case, Petitioner is requesting that EPA object to the FCCU permitting process that occurred between 1992 and 1994, and that established the

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<sup>10</sup> For its calculation, Adams Broadwell uses a table it created and attached to its original comments. Petitioner, however, included this table in Appendix 28, rather than in Appendix 23. Adams Broadwell claims that this table includes a subset of units at the refinery, as well as corresponding District emissions inventories for these units for the years 1993 to 2001. 2002 AB Comments, at 60. Even assuming the data in the table are correct, some of the calculated amounts on Page 39 of the 2002 AB Comments appear inaccurate.] For example, it appears that the average annual CO and SOx amounts were obtained by dividing the total emissions for the years 1993 to 2001 by 8 and 6, respectively, rather than by 9 (i.e., by the number of years that make up the total emissions).

<sup>11</sup> EPA notes that with respect to the specific claims of NSR violations raised by this Petition, the District “intends to follow up with further investigation.” 2003 CRTC at 22. In particular, the District is investigating the allegation that several furnaces may have increased their firing rates without going through NSR. “If violations are discovered and new permits issued as a result, any new conditions imposed will be incorporated into the title V permit through the modification process.” As with EPA, the District finds that these “allegations [do not] provide sufficient evidence to support imposing a schedule of compliance.” 2003 CRTC at 37.

<sup>12</sup> For further discussion, *see* Pages 2 and 3 of Enclosure A to the Letter from John S. Seitz to Robert Hodanbosi and Charles Lagges, dated May 20, 1999. This letter is available on the Internet at <http://www.epa.gov/ttn/oarpg/t5/memoranda/hodan7.pdf> (last viewed on February 22, 2005).

following concentration, mass emission, and feed rate limits (reflected on Pages 308 and 309 of the Permit):

Concentration limits (corrected to 3% O<sub>2</sub> dry):

- SO<sub>2</sub> emitted shall not exceed 330 ppmv/24 hour
- NOx emitted shall not exceed 220 ppmv/24 hour or 180 ppmv/30 day or 150 ppmv/year
- CO emitted shall not exceed 67 ppmv/30 day or 50 ppmv/year

Mass emission limits:

- SOx — 2199.4 tons per year (for any consecutive 12-month period)
- NOx — 1504.7 tons per year (for any consecutive 12-month period)
- CO — 258.4 tons per year (for any consecutive 12-month period)
- POC — 6.1 tons per year (for any consecutive 12-month period)
- PM — 1092 tons per year (for any consecutive 12-month period)
- TSP — 21 lbs/hr (after abatement and averaged over any consecutive 365-day period)

Feed rate limits:

Feed rate to the FCCU reactor shall not exceed 80,000 barrels per day (averaged over any calendar year), nor 90,000 barrels per day (over any calendar day)

With regard to the above concentration limits and the mass emission limits for POC and TSP (“precursor organic compound” and “total suspended particulate,” respectively), Petitioner has failed to demonstrate that the Permit is not in compliance with applicable NSR requirements. Petitioner frankly admits that it “has not done an exhaustive analysis of BACT.” Petition at 15. Instead, Petitioner relies on the following excerpt from a one-page District staff memorandum to support its case that the Permit’s FCCU limits do not constitute BACT:

“Ultramar of Wilmington, CA, source tested at 8.7 ppm. Ultramar is a good comparison as they use the same UOP technology as Chevron plans to use.”

Petition, Appendix 26. Without further analysis, Petitioner assumes that 8.7 ppm of NOx constitutes BACT for Chevron’s FCCU because of the District’s “identification of the ability of the same equipment to meet 8.7 ppm at Ultramar.” Petition at 15. But this single sentence hardly constitutes an adequate BACT analysis. First, it is not clear from the memorandum how this source test result was derived, what averaging period was used, and even whether it was corrected to 3% or 0% oxygen. Second, it is also not clear how the result relates to the *emission limit* applicable to the Ultramar FCCU. And, third, there may be technical reasons why the same control device or technique results in a different emission limit. For example, differences in physical configurations of the FCCU or in air flows or in feedstocks may result in differences in

emission limits. This statement is not to say that, in 1993, an 8.7 ppm NOx limit *did not* constitute BACT and the District's final NOx limit *did* constitute BACT, but rather that Petitioner has failed to provide sufficient evidence that the District's final NOx limit violates NSR BACT requirements.

Petitioner also asserts that an electrostatic precipitator ("ESP") does not constitute BACT for a mid-1990 FCCU. Petitioner relies solely on a statement in another internal District memorandum (dated March 10, 2000) that "the ESP was (incorrectly, in my opinion) deemed to be BACT at the time." Petition at 15; and Petition, Appendix 27, at 6). Again, this conclusory statement is inadequate to demonstrate noncompliance with the requirement to install BACT. Moreover, Petitioner offers no evidence to support an alternative control technology that constituted BACT at the time Chevron "modernized" its FCCU.

Furthermore, Petitioner does not address the other concentration limits, the mass emission limits for POC and TSP, or the issue of offsets. Instead, Petitioner concludes that "[t]he District must also do a compliance plan the (*sic*) includes BACT and Offset determinations for all criteria pollutants including PM, SO<sub>x</sub>, and HAPs for the FCCU." Petition, Appendix 3, at 8. Especially absent evidence regarding the impropriety of these limits or the failure to require and obtain offsets, Petitioner has not met its burden to demonstrate that the Permit is not in compliance with NSR requirements.<sup>13</sup>

With regard to the mass emission limits for SO<sub>x</sub>, NO<sub>x</sub>, CO, and PM, Petitioner's position is more substantive. According to the internal District memoranda provided by Petitioner, it appears that the District allowed Chevron to carry over 90% of its previous baseline emissions into the permit for the "modernized" FCCU. Apparently, this carry over was allowed under District Regulation 2-2-113, which was never approved by EPA, and which provided an exemption from NSR for "modernizations":

**Exemption, Modernization:** Upon request, the APCO shall exempt an applicant from the offset requirements of Section 2-2-302 and/or 303 of this Regulation for a modernized source or group of sources, where the APCO determines that all of the following conditions are satisfied:

113.1 ....

113.2 ....

113.3 There is no increase in maximum production capacity, throughput, output,

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<sup>13</sup> Contrary to Petitioner's opinion, EPA does not agree that the Permit will "formalize" or legitimize improper permitting of the past. Petition, at 14. Although, in accordance with its policy, EPA has not "looked back" at the District's decade-old FCCU permitting decisions, EPA retains the authority to reopen the Permit if and when it determines that an emission unit has not gone through the proper NSR permitting process (and therefore one or more applicable requirements have not been incorporated into the Permit). By this order, EPA is merely stating that Petitioner has failed to provide sufficient evidence that the Permit lacks an applicable NSR requirement. Since EPA has not conducted a full analysis of the District's FCCU permitting decisions, EPA is making no determination as to whether the Permit limits on the FCCU accurately reflect BACT or that all NSR requirements, including offsets and permitting process requirements, were followed when the FCCU was permitted.

- or other rating of the modernized source or group of sources; and
- 113.4 Each modernized source or group of sources shall be equipped with current Best Available Control Technology (BACT) as required by Section 2-2-301; and
- 113.5 The maximum annual emissions from the modernized source or group of sources using BACT shall be no more than total actual annual emissions from the source or group of sources prior to the modernization averaged over the twelve (12) consecutive month period immediately preceding the application date (or alternative twelve (12) consecutive month period, approved by the APCO, occurring during the last five years immediately preceding the application date). *However, unless additional emission credits are provided as specified below, emissions from the modernized source or group of sources shall be limited to 90% of the actual annual emissions from the source or group of sources prior to the modernization determined above.* Additional emission credits, to allow the modernized source or group of sources to be permitted up to 100% of the total actual annual emissions, as determined above, from the source or group of sources prior to the modernization may be provided from:
- 5.1 Credits from the District's Emission Bank; and/or
- 5.2 Contemporaneous emission reductions calculated in accordance with Section 2-2-605.

Any surplus emission reductions achieved by the modernization of the source or group of sources beyond the provisions of this exemption, may not be banked or otherwise used as emission offsets. However, the new maximum permitted annual emission rate of the modernized source or group of sources shall be considered fully offset in accordance with the provision of Sections 2-2-604 and 605. (emphasis added).

BAAQMD adopted this rule exemption on November 20, 1991 (about 11 months before Chevron submitted its FCCU “modernization” permit application), and deleted it from the District’s rulebook on June 15, 1994 (less than two months after Chevron received its authority to construct the FCCU “modernization” project).

While the Permit states that the basis for the mass emission limits is “BACT,” it appears that the basis was actually to accommodate the 90% carry over provision of former rule exemption 2-2-113.5. (*See* Permit at 309; and Petition, Appendices 3, 24, 25, and 27). Similarly, the Permit also states that the basis for the feed rate limits is “BACT” when it appears to be based on securing a baseline pursuant to 2-2-113.5. (*See* Permit at 308; and Petition, Appendices 3, 24, 25, and 27). Thus, EPA is granting in part Petitioner’s request by objecting to the Permit regarding the basis for the above FCCU mass emission limits for SO<sub>x</sub>, NO<sub>x</sub>, CO, and PM, as well as the above feed rate limits.

In objecting to the basis for these limits, EPA is requesting either that the District

(i) amend the Statement of Basis to explain why BACT is the basis for these limits, (ii) revise the

Permit to provide an acceptable basis for these limits, (iii) revise these limits to more accurately reflect BACT, or (iv) remove these limits from the Permit.

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 FCCUs and 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. On October 16, 2003, the United States filed a complaint and lodged a consent decree alleging NSR violations at the FCCUs and certain heaters and boilers at Chevron's refineries.<sup>14</sup> Chevron's Richmond 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 FCCU, heater, and boiler at Chevron's refineries to identify potential NSR violations at individual units. The United States' claims are allegations that have not been subject to full adjudication, and Petitioner has failed to provide EPA sufficient additional information to establish conclusively that the FCCU, furnaces, heaters, or boilers referred to in its Petition are out of compliance with NSR requirements.

Since Petitioner has failed to show noncompliance with NSR requirements at (i) the Alkylation and Butamer units; (ii) the furnaces, heaters, and boilers; and (iii) the FCCU, EPA finds that Petitioner has not met its burden of demonstrating a deficiency in the Permit. Therefore, the Petition is denied on these issues. However, with regard to the Permit's basis for the FCCU feed rate limits and mass emission limits for SO<sub>x</sub>, NO<sub>x</sub>, CO, and PM, EPA finds that Petitioner has met its burden of demonstrating a deficiency in the Permit. Therefore, the Petition is granted on the sole issue of the basis for the FCCU feed rate limits and mass emission limits for SO<sub>x</sub>, NO<sub>x</sub>, CO, and PM.

### 3. Applicability of NSPS Subparts A and J to FCCU

Petitioner also claims that the source specific applicable requirements fail to include New Source Performance Standards ("NSPS") Subpart A, stating that since major changes were made to the FCCU, the FCCU is subject to NSPS Subparts A and J (the NSPS general provisions and the NSPS for Petroleum Refineries, respectively). Petition at 15-16. EPA agrees with Petitioner that NSPS Subparts A and J apply to the FCCU; we do not agree, however, that a re-opening of the Permit is necessary. First, the Permit, as proposed in February 2004 and as finalized in December 2004, includes the requirements of NSPS Subpart J in the source-specific applicable requirements table for the FCCU (see table IV.C.2.1 on page 126 of the final permit). Second, the requirements of NSPS Subpart A are included in the refinery-wide applicable requirements table (see table IV.D.1.1 on page 130 of the final permit).

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<sup>14</sup> The case was filed in the United States District Court for the Northern District of California, San Francisco Division (Civil Action No. C-03-4650 MEJ). The District is one of the Plaintiff-Intervenors in the case. The settlement is not effective until it is approved and entered by the District Court.

In some instances, EPA believes that incorporation of a standard in a facility-wide table is inappropriate without explicit demonstration of which units are subject to the standards. For instance, in a separate action also taken today, EPA is granting a petition from Our Children's Earth Foundation requesting that the EPA object to the title V permit for Tesoro's Martinez refinery on the basis that the permit fails to include the requirements of NESHAP Subpart FF in any unit-specific tables. However, in other instances, where applicability issues and compliance obligations are clear, EPA believes that incorporation of a standard in a facility-wide table is appropriate. In this instance, EPA believes it is clear that NSPS Subpart A applies to the unit since NSPS Subpart A applies to the owner or operator of any stationary source which contains any apparatus to which a New Source Performance Standard is applicable. Because this NSPS Subpart A contains general provisions for all of 40 C.F.R. Part 60, including detailed compliance obligations for specific units is typically not necessary.<sup>15</sup> Therefore, EPA is denying the Petition on this issue.

#### 4. Alkylation and Butamer Units

Based on the information provided by Petitioner, Petitioner has failed to demonstrate that the Permit is not in compliance with applicable requirements for the Alkylation and Butamer units. With regard to the Butamer unit, Petitioner claims that the District mistakenly issued a permit to operate in 1997 and Chevron mistakenly stated that "substantial use" of the unit's authority to construct had begun in 1998, when in fact the unit still had not been built in 2000. Petition, Appendix 3, at 14-16. Assuming that these claims are true, it is difficult to see what relevance these past permitting errors have for NSR since Petitioner offers no evidence regarding whether the Butamer unit constitutes a new or modified source under NSR rules, or whether refinery emissions were in any way affected by the Butamer unit. Furthermore, as far as the alleged past permitting errors are concerned, the District eventually canceled the unit's permit in 2000 and required Chevron to apply for a new authority to construct (Application No. 2719).<sup>16</sup>

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<sup>15</sup>In a letter from Deborah Jordan, Director, Air Division, EPA Region 9 to Jack Broadbent, Air Pollution Control Officer, BAAQMD, dated October 8, 2004, EPA noted that the Permit failed to include NSPS Subpart A as an applicable requirement for flares (Attachment 3 at 2). The reason EPA determined that it is necessary to include NSPS Subpart A in the source-specific applicable requirements table for flares is because of misleading statements in the Statements of Basis for some of the BAAQMD refinery permits. For instance, Shell's SOB as proposed in February 2004, states:

"40 C.F.R. 60 Subpart A has been deleted from Table IV-AXa for A101, A102 and A103. Table IV-CX for S4201 is correct (it is also not subject to 40 C.F.R. 60 Subpart A). All of these flares (A101, A102, A103, and S4201) are exempt from Subpart J, in accordance with 60.104(a)(1), because they are only used for process upset/malfunction." (P.6)

This statement indicated to EPA that the permits were unclear as to the applicability of NSPS Subpart A for certain flares and that the requirements of NSPS Subpart A should be included in flare-specific applicable requirements tables.

<sup>16</sup> Although outside the scope of this Petition, EPA notes that Page 17 of the Permit refers to Condition No. 18337 as applying to the Butamer unit (S-4354), but the Permit fails to include Condition No. 18337. The District should re-open the Permit to include this condition.

Petition, Appendix 3, at 14-16.

With regard to the Alkylation unit, Petitioner claims that since a 1994 permit (No. 9978), which authorized the unit's expansion and an increase in throughput from 21,000 to 36,000 barrels per day, had expired without the expansion being put in place, the original throughput amount should apply and the expansion project needs to undergo NSR. (Petition, at 16). Unlike with the Butamer unit, however, Petitioner admits that it lacks the evidence to prove that the Alkylation unit's expansion did not in fact take place prior to the expiration of the 1994 permit. In evaluating Chevron's letter to the District (dated September 2, 1998) regarding the status of the 1994 permit, Petitioner concludes as follows:

*"However, since this was a pre-existing unit, it is still unclear whether Chevron meant that the plant was operating as it always had, or whether the new modifications pursuant to #9978 had been put into place. There is no documentation in the file for application #9978 showing that the modifications to the Alkylation Unit went into place before the permit expired, and in fact there are statements by staff indicating that staff believed the changes (such as increased throughput) had not been put into place. There is no start-up letter in the file."* Petition, Appendix 3, at 15 (emphasis added).

The excerpts from the District Evaluation Reports that Petitioner relies on do not support its claim that District staff believed the increase in throughput had not been put into place. Rather, these excerpts focus on the need to address "the increase in organics from the wastewater," allegedly not accounted for in the 1994 permit. Petition, Appendix 3, at 17. One of the reports suggested that the District handle this increase by requiring offsets or a limit on the amount of alkaline wash water. Petitioner, however, does not offer to show that these suggestions were never carried out, but simply states that "[c]ertain emissions *may not have been* charged to the project, and the associated appropriate permit limits and conditions *may not be* in place." Petition, Appendix 3, at 18 (emphasis added). And, as with the Butamer unit, Petitioner offers no evidence to support its allegation that the Alkylation unit "needs to undergo NSR."

Since Petitioner has not established either that the Alkylation unit's throughput limit is improper or that the Butamer and Alkylation units failed to undergo proper NSR permitting, Petitioner has not met its burden to demonstrate that the Permit is not in compliance with applicable NSR requirements.<sup>17</sup>

## 5. Bubble Permit

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<sup>17</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 CRTC, at 22. In particular, the District is investigating alleged errors in the issuance of the Alkylation unit permit. "Any new conditions imposed as a result will be incorporated into the title V permit through the modification process." The District's view at this time, however, is "that the Alkylation plant was properly permitted." 2003 CRTC at 39.

Petitioner alleges that EPA must object to the Permit because it does not address Chevron's compliance with Condition #469,<sup>18</sup> which, according to Petitioner is at issue because the District's emissions inventory for the refinery indicates noncompliance with emissions caps for particulates, SO<sub>2</sub> and CO for 1993 - 2001.

EPA disagrees with Petitioner's claim that it must object to the Permit in response to this allegation. Even assuming the accuracy of Petitioner's calculations in compiling emission inventory data and comparing it to the emission limits in Condition #469, 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 CRTC 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

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<sup>18</sup>Condition #469 is emissions cap or "bubble" that covers several dozen emissions units. The bubble actually contains two sets of annual emissions limits for the refinery alone and for the refinery combined with Chevron's wharf operations. The emissions limits are for particulates, hydrocarbons, NO<sub>x</sub>, SO<sub>2</sub> and CO. The exact provenance of the bubble is unclear from the title V permitting record; however, it appears to have been established several years ago in connection with a new source review determination.

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 CRTC 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).

Although we do not agree that an objection to the Permit is warranted in this instance, EPA agrees with Petitioner's fundamental concern that the emissions inventory data indicates exceedances of Condition 469's emissions limits by several-fold. Nevertheless, Condition 469 contains extremely complicated, intertwining emissions limits and alternative limits that may be exceeded if certain conditions are met. Our consideration of this issue here is limited to whether Petitioner has demonstrated noncompliance with Condition 469 such that the Permit is deficient for lack of a compliance schedule. Because Petitioner relies solely on the use of emissions inventory data, we are denying the Petition. This determination, however, should in no way be taken as a finding of compliance.

## 6. 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 17.

EPA disagrees with Petitioner's allegation that it must object to the Permit for this reason. Petitioner incorrectly alleges that Chevron'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 Chevron'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, we must deny 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.

### 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 18.

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. Periodic Monitoring for Combustion Units and Asphalt Operations

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, internal combustion engines, and asphalt operations. Petition at 19. 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 and Furnaces

The District has cited the June 24, 1999 CAPCOA/CARB/EPA Periodic Monitoring Recommendations for Generally Applicable Requirements ("1999 Recommendations") as a justification for no periodic monitoring for boilers and furnaces pursuant to the opacity standard of Regulation 6-301. 2003 Statement of Basis, Appendix E at 26-28. 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." EPA finds, per the 1999 Recommendations, that the justifications provided in the Statements of Basis are adequate for a determination that no periodic monitoring is needed for these sources to assure compliance with Regulation 6-301. Therefore, EPA denies the Petition on this issue.

The District has also cited the 1999 Recommendations as justification that no periodic monitoring is needed for boilers and furnaces 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 combustion 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 combustion sources 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. Internal Combustion Engines

Petitioner alleges that no monitoring exists pursuant to SIP-approved BAAQMD Regulations 6-301 and 6-310 for twenty-four internal combustion engines. Petition at 19.

Engines S-4118, S-4119, and S-4126 are described as firewater pumps. S-4127 is described as an emergency engine electric generator. Engines S-7501, S-7507, S-7510- S-7518, S-7520-S-7526, S-7528, and S-7531 are all subject to non-federally enforceable limits on hours of operation, but the Permit contains no federally enforceable restriction on hours of operation for any of these engines.

Table III of Chevron's permit contains refinery-wide generally applicable requirements. SIP-approved BAAQMD Regulation 6-301 is one of these requirements that applies to the refinery as a whole. In some instances where the District has determined that in addition to being generally applicable, a requirement such as Regulation 6-301 is also specifically applicable to one or more source, the District will include the requirement in the source-specific applicable requirements section of the permit (Section IV). The District has apparently determined that there is no need to include the generally applicable Regulation 6-301 as a source-specific applicable requirement in Section IV of the Permit for these engines. According to the District's explanation of Section III, the District appears to have determined that Regulation 6-301 will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting is warranted to demonstrate compliance with Regulation 6-301 for these engines. Permit at 81. However, no analysis is given to justify why no periodic monitoring is required for these sources.

SIP-approved BAAQMD Regulation 6-310, on the other hand, is included as a source-specific applicable requirement in Section IV of the Permit for these units. Permit (Dec. 16, 2004) at 113. However, no monitoring is included in the Permit and the Statement of Basis does not set forth any explanation as to why no monitoring is needed pursuant to Regulation 6-310.

EPA grants the Petition on this issue. The District must reopen the Permit to include either periodic monitoring requirements to assure compliance with Regulations 6-301 and 6-310 for these twenty-four internal combustion engines or to provide adequate justification in the Statement of Basis explaining why no periodic monitoring is required. *See* 40 C.F.R. §§ 70.6(a)(3)(i)(B), 70.7(a)(5); *see also* *Fort James* at 8. In addition, although EPA notes that Table IV.A.4.1 implies that all these engines are less than 250 brake horsepower (see Table at Regulation 9-8-110.1, Exemptions), the District should, as part of its periodic monitoring analysis, update the permit equipment list to include the specific brake horsepower rating of each internal combustion engine.

### c. Asphalt Operations

As noted by Petitioner, the Permit does not contain monitoring for SIP-approved BAAQMD Regulation 6-301 opacity nor Regulation 6-310 grain loading limits for asphalt operations.<sup>19</sup> The District has justified the lack of monitoring as follows: "No monitoring since

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<sup>19</sup>S-4240 Asphalt Tank Truck Loading Rack abated by A-4241 Mist Eliminator, S-4241 Asphalt Tank Car Loading Racks abated by A-4241 Mist Eliminator, S-4415 Asphalt Tank Truck Loading Rack abated by A-37 Mist Eliminator in Table VII.B.1.1 Loading Terminals.

sources are abated by Mist Eliminators. Mist eliminators should reduce particulate emissions well below the visible threshold.” December 2003 Statement of Basis at 26. The Petitioner has not provided a basis for challenging the District’s monitoring determination that the specific emission controls do not need to be monitored for the opacity limit. Therefore, Petitioner has failed to demonstrate a permit deficiency regarding Regulation 6-301. The petition is denied on this issue.

EPA notes, however, that the District’s response to the grain loading limit monitoring issue references units firing natural gas. This response concerning asphalt operations is unclear. Therefore, EPA grants the petition on this issue. The District must reopen the Permit to include additional analysis in the Statement of Basis concerning grain loading periodic monitoring for asphalt operations. 40 C.F.R. § 70.7(a)(5); *see Fort James* at 8.

d. Cogeneration and Claus Units

Petitioner notes that the Permit requires monitoring on an event basis for the cogeneration and claus units to demonstrate compliance with SIP-approved BAAQMD Regulations 6-301 and 6-310, and claims that “monitoring based solely on ‘events’ at the facility is not adequate to assure compliance with applicable requirements.”

As Petitioner notes, the Permit requires visual inspections on an event basis for the cogeneration<sup>20</sup> and claus<sup>21</sup> units pursuant to Regulation 6. EPA agrees with Petitioner that the Permit does not explain what event triggers the monitoring requirements. As a result, the Permit is not practically enforceable because it does not establish a clear legal obligation for the source. Therefore, EPA is granting Petitioner’s request to object to the Permit. EPA notes that the December 2003 Statement of Basis does describe what events trigger the need for monitoring;<sup>22</sup> these descriptions should be incorporated into the Permit.

e. Ammonia Limits for Furnaces

Petitioner states that, “No monitoring exists for furnaces that have federally enforceable limits for ammonia pursuant to particular permit conditions.” Petition at 19.

EPA finds that it is in fact unclear whether there is a federally applicable requirement at issue. In support of its allegation, Petitioner cites to page 421 of the Proposed Permit (identified by Petitioner as the permit proposed to EPA on August 25, 2004 (see Petition at 14, n. 64)). Page 421 of the Proposed Permit contains Table VII.A.3.3., “Combustion Applicable Limits and

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<sup>20</sup>See Permit, Table VII.A.1.1, pp. 354.

<sup>21</sup>See Permit, Table VII.E.2.1, pp. 401.

<sup>22</sup>For sources S-4350 and S-4352, see “PM Sources” table on page 27 and Note 6 on page 28. For sources S-4227, S-4228, and S-4229, see “PM Sources” table on page 26 and Note 10 on page 28.

Compliance Monitoring Requirements.” The table describes emission limits and monitoring requirements for several different pieces of combustion equipment. The table contains several columns: type of limit; citation, federal enforceability; a brief description of the limit, monitoring frequency and monitoring type. One entry in the table is for an ammonia limit, which the table specifies is applicable to just one unit, S-4170. The table also specifies that the ammonia limit is imposed by Condition 16679, Part 1. BAAQMD included no designation as to the federal enforceability of the limit, although the District included entries for federal enforceability for each of the seven other limits in the table. The table states that no monitoring is required for the ammonia limit.

EPA has reviewed the revised Permit that was issued on December 16, 2004. Although Table VII.A.3.3 in the December 2004 Permit continues to lack an entry pertaining to the federal enforceability, Table IV.A.3.3., “Combustion Source-specific Applicable Requirements,” denotes the status of the ammonia limit in Condition 16679, part 1, as non-federally enforceable (as it did in the August 2004 Proposed Permit). EPA has also reviewed Condition 16679 of the final Permit, which identifies S-4170 as a furnace at the hydrogen plant. Condition 16679, part 1, prohibits ammonia emissions from exceeding 120 pounds per hour.<sup>23</sup> The Permit cites “toxic risk screen” as the basis for the ammonia limit.

EPA also reviewed the District’s 2003 Consolidated Response to Comments. The District stated that the ammonia limit is a state-only requirement and is therefore not subject to title V compliance monitoring requirements. 2003 CRTC at 67.

EPA finds that Petitioner has failed to demonstrate that the ammonia limit is a federally applicable requirement for which monitoring must be required. Although Table VII.A.3.3. does not address the issue directly, Table IV.A.3.3. does, by stating that the ammonia limit is not federally enforceable. Moreover, the basis cited in the Permit for the ammonia limit, “toxic risk screen” does not appear to be a federal requirement. Finally, we note the District’s own view of the matter, which is that the ammonia limit is a state-only requirement. Because the Petitioner has failed to show that the Permit lacks monitoring for a federally applicable requirement, we deny the Petitioner’s request to object to the Permit.<sup>24</sup> We recommend, however, that the District correct the omission in Table VII.A.3.3. at the next reopening of the Permit.

#### f. Cooling Towers

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<sup>23</sup>EPA notes that part 3 of Condition 16679 requires the furnace to have a selective catalytic reduction (“SCR”) system to reduce NOx emissions; the basis cited in the Permit for the NOx limit is Regulation 9, Regulation 10. Since an SCR system uses ammonia as a catalyst to reduce NOx emissions, it would appear that the ammonia limit has some relationship to the requirement to use SCR to control NOx emissions. Petitioner, however, makes no claim as to this point.

<sup>24</sup>As noted previously, “state-only” requirements are not subject to the requirements of Title V and generally are not evaluated by EPA. See, e.g., *In the Matter of Eastman Kodak Company*, Petition No. II-2003-02, at 37 (Feb. 18, 2005).

Petitioner claims that the Permit does not contain monitoring requirements to ensure that the cooling towers comply with SIP-approved BAAQMD Regulation 8-2, and that this deficiency should have resulted in an objection by EPA.

SIP-approved BAAQMD Regulation 8-2-301 prohibits miscellaneous operations from discharging into the atmosphere any emission that contains 15 pounds per day and a concentration of more than 300 ppm total carbon. Although the underlying applicable requirement does not contain periodic monitoring requirements, the District declined to impose monitoring on the sources to assure compliance with the emission limit. The lack of monitoring raises an issue as to consistency with the requirement that each permit contain monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit where the applicable requirement does not require periodic monitoring or testing. *See* 40 C.F.R. § 70.6(a)(3)(i)(B). EPA recognizes that there may be limited cases in which the establishment of a regular program of monitoring and/or record keeping would not significantly enhance the ability of the permit to assure compliance with an applicable requirement and where the status quo (i.e., no monitoring or record keeping) could meet the requirements of 40 C.F.R. § 70.6(a)(3). *See, Los Medanos*, at 16. That, however, is not the case in this instance.

The December 2003 Statement of Basis sets forth the grounds for the District's decision that monitoring is not necessary to assure compliance with the applicable requirement. First, the District stated that its monitoring decisions were made by balancing a variety of factors including (i) the likelihood of a violation given the characteristics of normal operation; (ii) the degree of variability in the operation and in the control device, if there is one; (iii) the potential severity of impact of an undetected violation; (iv) the technical feasibility and probative value of indicator monitoring; (v) the economic feasibility of indicator monitoring; and (vi) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question. In addition, the District provided calculations that purported to quantify the emissions from the facility's cooling towers. The calculations relied upon water circulation and exhaust airflow rates supplied by the refinery in addition to two AP-42 emission factors. The District found that the calculated emissions were much lower than the regulatory limit and concluded that monitoring was not necessary for any of the cooling towers. Although it is true that the results suggest there is a large margin of compliance, the nature of the emissions and the unreliability of the data used in the calculations render them inadequate to support a decision that no monitoring is needed over the entire life of the Permit.

An AP-42 emission factor is a value that roughly correlates the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. The use of these emission factors may be appropriate in some permitting applications, such as establishing operating permit fees. However, EPA has stated that AP-42 factors do not yield accurate emissions estimates for individual sources. *See In the Matter of Cargill, Inc.*, Petition IV-2003-7 (Amended Order) at 7, n.3 (Oct. 19, 2004). Because emission factors essentially represent an average of a range of facilities and of emission rates, they are not necessarily

indicative of the emissions from a given source at all times; with a few exceptions, use of these factors to develop source-specific permit limits or to determine compliance with permit requirements is generally not recommended. The District's reliance on the emission factors in making its monitoring decision is therefore problematic.

Atmospheric emissions from the cooling towers include fugitive VOCs and gases that are stripped from the cooling water as the air and water come into contact. In an attempt to develop a conservative estimate of the emissions, the District used the emission factor for "uncontrolled sources." For these sources, AP-42 Table 5.1.2 estimates the release of 6 pounds of VOCs per million gallons of circulated water. This emission factor carries a "D" rating, which means that it was developed from a small number of facilities, and there may be reason to suspect that the facilities do not represent a random or representative sample of the industry. In addition, this rating means that there may be evidence of variability within the source population. In this case the variability stems from the fact that (i) contaminants enter the cooling water system from leaks in heat exchangers and condensers, which are not predictable, and (ii) the effectiveness of cooling tower controls is itself highly variable, depending on refinery configuration and existing maintenance practices.<sup>25</sup> It is this variability that renders the emission factor incapable of assuring continued compliance with the applicable standard over the lifetime of the permit. For all practical purposes, a single emission factor that was developed to represent long-term average emissions can not forecast the occurrence and size of leaks in a collection of heat exchangers and is therefore not predictive of compliance at any specific time.

EPA has previously determined that annual reporting of NOx emissions using an equation that uses current production information along with emission factors based on prior source tests, was insufficient to assure compliance with an emission unit's annual NOx standard. See *In the Matter of Fort James Camas Mill*, Petition No. X-1999-1, at 17-18, (December 22, 2000). Even when presented with CEMs data which showed that actual NOx emissions for each of five years were consistently well below the standard, EPA found that a large margin of compliance alone was insufficient to demonstrate that the NOx emissions would not change over the life of the permit. *Id.* Consistent with its findings in regard to the Fort James Camas Mill permit, EPA finds in this instance that the District failed to demonstrate that a one-time calculation is representative of ongoing compliance with the applicable requirement, especially considering the unreliability of the data used in the calculations. Therefore, EPA is granting the Petitioner's request to object to the Chevron permit as the request pertains to cooling tower monitoring for SIP-approved BAAQMD Regulation 8-2-301.

As an alternative to meeting the emission limitation cited in Section 8-2-301, facilities may operate in accordance with an exemption under Section 8-2-114, which states, "emissions from cooling towers...are exempt from this Regulation, provided best modern practices are used." As a result, in the absence of periodic monitoring requirements adequate to assure compliance with the emission limit in Section 8-2-301, the Statement of Basis should include an

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<sup>25</sup>AP 42, Fifth Edition, Volume I, Chapter 5.

applicability determination with respect to Section 8-2-114 and the permit should be revised to reflect the use of best modern practices.

g. Federally enforceable SO<sub>2</sub> limit Pursuant to 9-1-302

Petitioner states that monitoring is included in the permit for SIP-approved BAAQMD Regulation 9-1-302, but the Statement of Basis says that no monitoring is required. Petitioner requests that the Statement of Basis be updated to reflect the current Permit's monitoring requirements.

The monitoring requirement referred to by Petitioner is not included in the current permit (as issued on December 16, 2004). Because the Petitioner's objection to the inconsistency between the Permit and the Statement of Basis is no longer valid, EPA is denying the Petition as to this issue. EPA notes that the District's decision not to require monitoring is appropriate because the facility utilizes continuous area monitoring to assure compliance with Section 9-1-301 and is subject to the monitoring, record keeping, and reporting requirements of SIP-approved BAAQMD Regulation 1.

2. Refinery Vessel Depressurization

BAAQMD Regulation 8-10 is intended to limit emissions of precursor organic compounds from depressurizing a process vessel during turnaround events. Petitioner alleges that the rule does not contain any monitoring or protocols for determining the partial pressure of gases in a vessel prior to opening in order to determine that the unit is in compliance with the vapor pressure limits in Regulation 8-10-301.4. Petitioner claims that, since neither the rule nor the permit specifies how facilities determine that they are meeting a maximum of 4.6 psig, the permit contains inadequate monitoring. Petitioner also claims that the Permit only requires monitoring on an "event" basis, and that the permit must "have adequate monitoring, not based on 'events'" to assure compliance with these requirements." Petition at 20.

The SIP-approved version of Regulation 8-10 (last amended in 1983) requires that organic compounds, after passing through a knockout pot to remove condensable fractions, must be (1) recovered and combusted in the fuel gas system, (2) controlled and piped to an appropriate firebox or incinerator, (3) flared, or (4) contained and treated, with venting to the atmosphere prohibited until the partial pressure of organic compounds in the vessel is less than 4.6 psig. The non-SIP version of Regulation 8-10 (last amended in 2004) requires that organic compounds be contained and treated, with venting to the atmosphere prohibited until the partial pressure of organic compounds in the vessel is less than 4.6 psig, and prohibits opening a process vessel to the atmosphere unless the internal concentration of total organic compounds has been reduced to less than 10,000 ppm, except as allowed by exceptions in the rule.

The SIP-approved version of Regulation 8-10 requires a source to keep records of the approximate process vessel hydrocarbon concentration when the organic emissions were first discharged into the atmosphere, and the approximate quantity of total precursor organic

compounds emitted into the atmosphere under Section 8-10-401. The non-SIP version of Regulation 8-10 requires monitoring of the actual concentration of organic compounds prior to vessel opening and once per day during the time the vessel is open to the atmosphere under sections 8-10-501 and 8-10-502. The monitoring must be conducted in accordance with EPA Method 21. The instruments used to determine concentration can also be used to determine the partial pressure of hydrocarbons in a vessel.

EPA has determined that the new monitoring requirements of District Regulation 8-10 are included as federally enforceable monitoring in the final revised Permit dated December 16, 2004. December 16, 2004 final revised Permit at 135 and 394. Because this monitoring method can be used to determine partial pressure of the gases, EPA finds that the permit does contain adequate monitoring to assure compliance with Regulation 8-10.<sup>26</sup> Because this rule applies to a specific event (*i.e.*, when a process vessel is depressurized during a turnaround), it is clear that the source must monitor anytime a process vessel is depressurized. Monitoring at any other time would not provide useful compliance information. Therefore, EPA additionally finds that “event” monitoring is in fact adequate to assure compliance with Regulation 8-10.

For the reasons stated above, EPA disagrees with Petitioner’s claim that the permit contains inadequate monitoring and denies the Petition on this issue.

### 3. Fugitives

Citing the report written by US Representative Henry Waxman entitled “Oil Refineries Fail to Report Millions of Pounds of Harmful Emissions,” Petitioner notes that during investigations of the Bay Area Chevron Richmond refinery, EPA found a 10.5% leak rate for valves, compared to a 2.3% rate reported by Chevron. Petitioner claims that a monitoring regime must be put in place to assure compliance with SIP-approved BAAQMD Regulation 8-18-300.

BAAQMD Regulation 8-18 regulates emissions of organic compounds, from leaking equipment at petroleum refineries, chemical plants, bulk plants, and bulk terminals. Leak detection and repair requirements for equipment components such as pumps and valves are included in section 8-18-300 of Regulation 8-18. Inspection, monitoring, and record keeping requirements are included in sections 8-18-400 and 8-18-500.

The “periodic monitoring rule,” 40 C.F.R. § 70.6(a)(3)(i)(B), requires that “[w]here the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring (which may consist of record keeping designed to serve as monitoring), [each title V 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....Record keeping provisions may be sufficient to meet the requirements of [40 C.F.R. § 70.6(a)(3)(i)(B)].” The

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<sup>26</sup>Even if EPA determined that the monitoring included in Regulation 8-10 was inadequate, title V provides no grounds to object to a permit if that monitoring is properly incorporated into the permit. See 69 Fed. Reg. 3202, 3204 (Jan. 22, 2004) and the discussion under “fugitives” in this order.

"umbrella monitoring" rule, 40 C.F.R. § 70.6(c)(1), requires that each title V permit contain, "[c]onsistent with [section 70.6(a)(3)], ...monitoring ... requirements sufficient to assure compliance with the terms and conditions of the permit." EPA has interpreted section 70.6(c)(1) as requiring that title V permits contain monitoring required by applicable requirements under the Act (e.g., monitoring required under federal rules such as MACT standards and monitoring required under SIP rules), and such monitoring as may be required under 40 C.F.R. § 70.6(a)(3)(B). 69 Fed. Reg. 3202, 3204 (Jan. 22, 2004); *see also, Appalachian Power Co. v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000); *In the Matter of Cargill, Inc.*, Petition IV-2003-7, (Amended Order) at 10-11 (October 19, 2004).

In this case, Regulation 8-18 contains periodic monitoring requirements consisting of periodic inspections of equipment components. The Permit has correctly incorporated the requirements of Regulation 8-18. EPA does not have authority to require BAAQMD to impose further monitoring to show compliance with Regulation 8-18-300. Petitioner has not demonstrated that the Permit is not in compliance with Part 70's monitoring requirements, and EPA is therefore denying the Petition on this issue.

#### 4. Storage Tanks

Petitioner claims that tank monitoring requirements imposed pursuant to District 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.

SIP-approved 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 in 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 8-5-117 or 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 it pertains to the use of look-up tables pursuant to District Regulation 8-5.

#### 5. Pressure Relief Valves

Petitioner states that District Regulation 8-28-304 is federally enforceable and must be marked as such in the Permit, and that appropriate limits and monitoring must be added to the permit. Petition at 21.

EPA finds that Petitioner is correct that Regulation 8-28-304 is incorrectly designated as non-federally enforceable in the Permit. See tables IV- and VII-H.2.1 at pages 253 and 437. Regulation 8-28-304 was adopted into the SIP on May 24, 2004 (*see* 69 Fed. Reg. 29541) and must now be included in the permit as federally enforceable, with federally enforceable monitoring. *See* 40 C.F.R. § 70.6(a)(3)(i). Therefore, EPA grants the Petition on this issue. EPA also advises the District to determine whether other updates to the Permit are appropriate now that the SIP version of Regulation 8-28 has been updated.<sup>27</sup>

#### 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 record keeping. 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 "Chevron'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 J and A requirements (the NSPS general provisions and the NSPS for Petroleum Refineries, respectively) and that the Permit fails to include SIP-approved BAAQMD Regulation 8-2 and appropriate monitoring. These issues, as

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<sup>27</sup>For instance, the Permit currently references a June 15, 1994 version of the rule that was previously in the State Implementation Plan. This should be replaced with a citation to the more recent version.

well as others related to flares and flaring, are addressed below.

1. Exemption of Flares from Subpart J on the Basis That They Have Not Been Modified Since 1973

Petitioner alleges that the Permit illegally exempts all but two of Chevron's flares from NSPS Subpart J. Petitioner accuses BAAQMD of falsely reasoning that the refinery has not modified these flares, because, Petitioner claims, the Statement of Basis construes modifications too narrowly, and fails to include information that would reveal whether or not modifications had occurred.<sup>28</sup> Petition at 23-24.

Petitioner also claims that the Statement of Basis construes modifications at flares too narrowly. Petitioner alleges that the Statement of Basis says: "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. Petitioner also alleges that the District must either indicate in the Statement of Basis that none of the flare burner tips have been replaced or inspect the flares for these modifications.

First, Petitioner appears to think that any replacement of a flare burner tip after the threshold date in NSPS Subpart J would trigger the requirements of NSPS Subpart J. Pursuant to the criteria defining a modification in 40 C.F.R. §§ 60.2 and 60.14, however, such a replacement would have to result in an increase in the emissions rate. Further, the Statement of Basis indicates the applicability of NSPS Subpart J for all flares. For flares not subject to NSPS Subpart J, the District explicitly states that the flare has not been modified since the rule's effective date. 2004 Statement of Basis at 12. Since Petitioner is concerned that flares could be modified in ways other than the replacement of a burner tip, it is contradictory for Petitioner to ask that the Statement of Basis limit determinations of non-applicability to flare burner tip modifications. Furthermore, EPA finds that the issuance of a title V permit imposes no requirement for the District to inspect each flare for modifications.

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

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<sup>28</sup>Petitioner incorrectly states that the Statement of Basis omits NSPS J for flares S-6015 and S-6039. The December 2004 Statement of Basis indicates that these flares are subject to NSPS Subpart J, as does the final revised Permit. 2004 Statement of Basis at 13, 14; Permit (Dec. 16, 2004) at 89. Therefore, the Petition is denied on this issue for flares S-6015 and S-6039.

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 as to these issues.

## 2. NSPS Subpart J H2S Requirements

Petitioner alleges that the Permit violates title V by weakening the language in 40 C.F.R. § 60.104(a)(1) where the Permit appears to apply the provision and that the Permit assumes that the exception to the regulation applies continuously. Petition at 24-25.

Petitioner first notes that the Permit exempts flares from 60.104(a)(1), the fuel gas H2S limit, so long as the flare is “used only for upsets or emergency malfunctions.” Petitioner goes on to state that 40 C.F.R. § 60.104 does not exempt flaring that results generally from an “upset,” but rather “the *combustion* that is released to the flare is exempt if it is a result of a ‘*relief valve leakage or other emergency malfunction*.’” Petitioner appears to be implying that the scope of the exemption is being applied to broadly, i.e. to “upsets.” If this is the case, Petitioner is stating the exemption incorrectly. Verbatim, the exemption of 60.104(a)(1) states: “The combustion in a flare of *process upset gases or* fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt...” Process upset gas is defined in NSPS Subpart J as “any gas generated by a petroleum refinery process unit as a result of start-up, shutdown, upset or malfunction.” The standard very clearly exempts flaring that results generally from an ‘upset.’ Therefore, EPA denies the petition on this issue.

Petitioner goes on, noting that the Statement of Basis exempts Chevron’s flares from 40 C.F.R. § 60.104 based on the assumption that Chevron’s flares are incapable of discharging gases that do not result from emergency breakdowns, and that if these flares do discharge other types of gases, that the District will learn this later, from monitoring reports. Petitioner states that the permit allows Chevron to circumvent 40 C.F.R. § 60.104 by presuming that each flaring event will be exempt from the rule without adequate justification. Petitioner concludes, stating that this is not what the rule allows, and that NSPS Subpart J should apply to these flares, including 40 C.F.R. § 60.104(a)(1).

NSPS Subpart J applies to all flares built or modified after June 11, 1973. Affected flares (*i.e.*, those built or modified after June 11, 1973) are prohibited from combusting fuel gas containing H2S in excess 230 mg/dscm (0.10 gr/dscf) except when combusting process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions. The standard applies to acts of combustion and not to flares (hence, the standard exempts “combustion...of process upset gases...” not flares that combust process upset gases). Therefore, the blanket exemption approach taken by the District in the draft permit issued for public comment in February 2004, was inappropriate. In response to EPA’s comments submitted on July 28, 2004 on this issue, BAAQMD revised the Permit to indicate that a flare is exempt from the H2S limit if it is used only for upsets or emergency malfunctions. *See* Permit (Dec. 16, 2004) at 89. The District, however, did not include requirements for continuous monitoring in 40 C.F.R. § 60.105(a)(3) and (4) on the basis that flares S-6015 and S-6039 are

never used in a manner that would trigger the H<sub>2</sub>S standard and the requirement to install continuous monitors.

The Permit requires non-federally enforceable monitoring to show compliance with a federally enforceable condition prohibiting the combustion of routinely-released gases in a flare. Specifically, the Permit states: The owner/operator shall operate S-6015 and S-6039 Flare to burn only process upset gases as defined by 60.101(e) or fuel gas as defined by 60.101(d) that is released to it as a result of relief valve leakage or other emergency malfunctions. Permit (Dec. 16, 2004) at Condition 18656, #7. The Permit, however, contains no federally enforceable monitoring requirement to assure compliance with this condition or with NSPS Subpart J, a federally enforceable applicable requirement. Because NSPS Subpart J is an applicable requirement, the Permit must contain periodic monitoring to assure compliance with the regulation.

Therefore, EPA is granting the Petition on the basis that the Permit does not assure compliance with the requirements of NSPS Subpart J as to flares S-6015 and S-6039. BAAQMD must reopen the Permit to either include the monitoring under sections 60.105(a)(3) or (4), or, for example, to include adequate federally enforceable monitoring to show compliance with Condition 18656, #7.

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

Petitioner alleges that the District failed to include generally applicable federal NSPS Subpart A requirements in the permit, such as 60.11(d). Petitioner states that, unlike 40 C.F.R. § 60.104(a), 40 C.F.R. § 60.11(d) applies even when process upset gases are legitimately exempt from the H<sub>2</sub>S standard. Petitioner also states that EPA established non-compliance but failed to object to the Permit on that basis, and that frequent flaring is not consistent with good air pollution control practice, citing to numerous instances of flaring at the Chevron refinery. Petitioner, however, made no specific request other than to include NSPS Subpart A in the title V permit as an applicable requirement.

EPA agrees that section 60.11(d) applies to all flares subject to NSPS Subpart J. EPA has determined that the District has revised the Permit to include this requirement. The final revised Permit, issued on December 16, 2004, includes the requirements of NSPS Subpart A, including the requirement of section 60.11(d) to operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. *See* Permit (Dec. 16, 2004) at 88.

Therefore, this issue is denied as moot.

### 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 Chevron 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>29</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 18656 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 18656 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 flares be operated consistent with the design basis."

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<sup>29</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.

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 Chevron'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>30</sup>

EPA also agrees with Petitioner that federally enforceable monitoring is necessary to assure compliance with the federally enforceable requirements of Condition 18656. 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 Chevron's flares consistently meet a 90% control efficiency. BAAQMD must conduct a design review for Chevron'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 18656.

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

Petitioner alleges that EPA must object to the Permit because it exempts flares from 40 C.F.R. Part 63, Subpart CC, which includes requirements for testing, monitoring, record keeping

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<sup>30</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.

and reporting. Petition at 29.

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 indicates that the facility’s flares are not subject to MACT Subpart CC pursuant to the exemption set forth in 40 C.F.R. § 63.640(d)(5). *See* 2004 Statement of Basis at 12. In a letter from Jack Broadbent, Air Pollution Control Officer, BAAQMD to Deborah Jordan, Director, Air Division, EPA Region 9, dated February 15, 2005, BAAQMD again asserted section 63.640(d)(5) as a basis for finding that the refinery’s flares are not required to meet the standards in Subpart CC. EPA continues to believe that a detailed analysis of the configuration of the flare and compressor is required to exempt a flare on the basis that it is part of the fuel gas system.

BAAQMD’s February 15, 2005 letter also provides an alternative rationale that gases vented to the refinery’s flares are not within the definition of “miscellaneous process vents.” Specifically, BAAQMD asserts that the flares are not miscellaneous process vents because they are used only to control “episodic and nonroutine” releases. As BAAQMD states:

At all of the affected refineries, process gas collected by the gas recovery system are routed to flares only under two circumstances: (1) situations in which, due to process upset or equipment malfunctions, the gas pressure in the flare header rises to a level that breaks the water seal leading to the flares; or (2) situations in which, during process startups, shutdown, malfunction, maintenance, depressuring [sic], and catalyst transfer operations are, by definition, not miscellaneous process vents, and are not subject to Subpart CC.

EPA agrees that a flare used only under the two circumstances described by the District

would not be subject to Subpart CC because such flares are not used to control miscellaneous process vents as that term is defined in § 63.641. According to BAAQMD's February 15, 2005 letter, BAAQMD intends to revise the Statement of Basis to further explain its rationale that Subpart CC does not apply to the Bay Area refinery flares, and intends to solicit public comment on its rationale.

While Petitioner claims that the Permit illegally exempts flares from 40 C.F.R. Part 63, Subpart CC, Petitioner provides no analysis to demonstrate why Petitioner believes Subpart CC applies to the facility's flares. Further, contrary to Petitioner's claim, EPA never established noncompliance with title V in its previous comments to the District. EPA's statement that flares are not categorically exempt from Subpart CC when used as an alternative to a fuel gas system does not mean that the facility's flares are subject to Subpart CC, but rather that the rationale used to establish non-applicability was incomplete. Absent additional information from the Petitioner regarding the applicability or non-applicability of Subpart CC, EPA denies the petition on this issue.

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

Petitioner claims that the Permit creates improper emission limits for flares to support a flare exemption from SIP-approved BAAQMD Regulation 8-2, "Miscellaneous Operations." Petition at 29.

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 **are** 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.

Petitioner further claims that the Statement of Basis fails to provide a basis for higher throughput values listed in the title V permit, and provides no basis for the conversion from BTU

(British Thermal Units) to pounds. The limits, according to BAAQMD, are not based on the throughput limits in the title V permits, which are expressed in terms of BTUs but were provided to the District by the refineries. *See id.*

Finally, Petitioner claims that it is not appropriate to set such pound per limits. EPA is unclear why Petitioner believes it is inappropriate to set such limits, or even in what way Petitioner believes it is inappropriate. It is therefore impossible for EPA to respond to this issue.

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

#### 7. Flare Purge Gas and Pilot Emissions

Petitioner claims that the Permit omits calculations for flare purge gas and combustion emissions and that flare pilot emissions constitute the entire calculation for flare emissions, citing to Appendix I of the permit. Petitioner states that flare emission calculations should include not only flare pilot flame emissions, but also flare purge gas emissions and combustion emissions from the volumes of gases routed from refinery process units to the flares. Petition at 31.

Petitioner fails to cite to where in the Permit Appendix I can be found. EPA was unable to find this part of the Permit. Further, Petitioner fails to demonstrate how the Permit is out of compliance with the requirements of title V. Petitioner must demonstrate that an alleged flaw resulted in, or may have resulted in, a deficiency in the Permit's content. *See* 42 U.S.C. § 7661d(b)(2). Petitioner has not met this burden. EPA therefore denies the Petition on this issue.

#### 8. 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 is not a federally enforceable requirement; therefore, Petitioner's issue has no legal basis from a federal standpoint. As noted previously, "state-only" requirements are not subject to the requirements of Title V and generally are not evaluated by EPA. *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.

#### 9. 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 Chevron to identify any smoking of flares over three minutes, regardless of whether a video monitoring inspection has previously been

done. Petition at 32.

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 superseded 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. EPA is unclear what Petitioner means in claiming that the language conflicts with 40 C.F.R. § 60.18, particularly since the refinery's flares do not appear to be subject to the requirements of § 60.18.

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.

#### 10. 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 comments dated September 27, 2002 (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.

Nevertheless, 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, in Petitioner's view, the Permit should be revised to contain the basis for the District's decisions and be recirculated for public review.

EPA has determined that this information was provided in Chevron's permit application, Appendix B. 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 therefore would 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. The final revised Permit, 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.

Subsequent to the submittal of the 2002 AB Comments, the District has explained its Subpart R applicability determinations for each of the units identified in the comments. 2003 CRTC at 38. Petitioner has neither indicated that the District's responses are flawed, nor that there is new information that should be considered with respect to applicability of this standard to Chevron's operations. Even if Petitioner's allegations were procedurally sound, EPA therefore would deny the Petition on 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, for Marine Tank Vessel Loading Operations, to the Long Wharf.

Subsequent to the submittal of the 2002 AB Comments, the District has explained that, "Subpart Y does not apply the Chevron Long Wharf because it is an offshore loading facility." 2003 CRTC at 38. Subpart Y exempts marine tank vessel loading operations at existing "offshore loading terminals." 40 C.F.R. § 63.560(d)(6). Because the Petitioner has neither indicated that the District's responses are flawed, nor that there is new information that should be considered with respect to applicability of this standard to Chevron's operations, EPA would deny the Petition on this issue even if Petitioner's allegations were procedurally sound.

### 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.

The District has indicated that the requirements of MACT Subpart CC were incorporated into the Permit in response to public comments. CRTC at 38. 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.

Subsequent to the submittal of the 2002 AB Comments, the District has stated that the "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 CRTC 34. Additionally, EPA has promulgated MACT standards for the source categories at issue; case-by-case MACT determinations are no longer required. Even if Petitioner's allegations were procedurally sound, EPA therefore would deny the Petition on this issue.

## G. Permit Shield

### 1. Subsuming NSPS 60.484 into District Regulation 8-18-308

Petitioner claims that BAAQMD improperly subsumed several applicable regulations, thereby improperly shielding the facility from applicable requirements. Petitioner alleges that BAAQMD improperly subsumed 40 C.F.R. § 60.484 into District Regulation 8-18-308, and 40 C.F.R. § 60.115b(b) into "refinery MACT requirements." Petition at 33.

Section 60.484 allows a source to apply to the EPA Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction achieved by the controls required by NSPS Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. As Petitioner notes, § 60.484(e)(1) requires that an opportunity for public hearing be provided. Regulation 8-18 does not require that such an opportunity be

provided. Therefore, with respect to this issue, EPA grants the Petition.

Petitioner also alleges, “The District improperly subsumed 40 C.F.R. § 60.115b(b) (which requires reporting in a specific time frame) into the Refinery MACT requirements (which only requires periodic monitoring).” *Id.* In this case, Petitioner did not provide sufficient information as to how, specifically, the refinery MACT requirements are less stringent than § 60.115b(b); therefore, Petitioner has not met its burden under CAA section 505(b)(2) and EPA is denying the Petition on this issue.

## 2. Tables

Petitioner also alleges that the permit shield tables contained on pages 499-504 of the proposed permit are improperly drafted, stating the tables fail to include an explanation of why particular requirements are non-applicable or subsumed. Petition at 34. As an example, Petitioner notes that several requirements have been subsumed into “refinery MACT record keeping requirements” but neither the shields nor the statements of basis indicate where or what the MACT requirements are, nor is there an explanation of why the subsumed requirement is equivalent or less stringent than the refinery MACT.

EPA has reviewed the final revised Permit issued on December 16, 2004. EPA agrees with Petitioner that the basis for shielded SIP and NSPS requirements in Tables IX-B-1, B-2, and B-3 has not been adequately addressed in the Permit or in the statement of basis. Therefore, EPA is granting the Petition on this issue. The District must re-open the Permit and provide a more specific explanation for streamlining SIP and NSPS requirements into MACT requirements. 40 C.F.R. § 70.7(a)(5).<sup>31</sup> In particular, the District should provide a more specific reference for the MACT requirement into which the other requirements are being streamlined.

## 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

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<sup>31</sup>For further discussion of streamlining, *see generally White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (Mar. 5, 1996).

deny in part and grant in part CBE's petition requesting that the Administrator object to the Chevron 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