BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Valero Refining Co. Benicia, California Facility	Petition No. IX-2004-07
Major Facility Review Permit Facility No. B2626 Issued by the Bay Area Air Quality Management District	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 7, 2004, the Environmental Protection Agency ("EPA") received a petition ("Petition") from Our Children's Earth Foundation ("OCE" 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 Valero Refining Co. to operate its petroleum refinery located in Benicia, 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. In particular, Petitioner alleged that the Permit failed to properly require compliance with applicable requirements pertaining to, *inter alia*, flares, cooling towers, process units, electrostatic precipitators, and other waste streams and units. Petitioner identified several alleged flaws in the Permit application and issuance, including a deficient Statement of Basis. Finally, Petitioners alleged that the permit impermissibly lacked a compliance schedule and failed to include monitoring for several applicable 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 Permit and related materials and information provided by the Petitioner in the Petition.[1] Based on this review, I partially deny

[1]On March 7, 2005 EPA received a lengthy (over 250 pages, including appendices), detailed submission from Valero Refining Company regarding this Petition. Due to the fact that Valero Refining 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

and partially grant the Petitioner's request that I object to issuance of the Permit for the reasons described below.

I. STATUTORY AND REGULATORY FRAMEWORK

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

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

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

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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 Valero Refining Company's submission when responding to the Petition via this Order.

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 Valero permit, as well as BAAQMD's other title V refinery permits from June through September 2002.[2] 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 Valero Permit from Valero Refining Company and from Our Children's Earth Foundation. EPA also received section 505(b)(2) petitions regarding three of BAAQMD's other refinery permits.

On December 1, 2003, BAAQMD issued its initial title V permits for the Bay Area refineries, including the Valero 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 e.g.,* Letters from Deborah Jordan, Director, Air Division, EPA Region 9, to John T. Hansen, Pillsbury Winthrop, LLP (representing Valero) and to Marcelin E. Keever, Environmental Law

[2]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.

and Justice Clinic, Golden Gate University School of Law (representing Our Children's Earth Foundation and other groups) 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 a new proposed permit for Valero to EPA on August 26, 2004; EPA's 45-day review period ended on October 10, 2004. EPA objected to the Valero Permit under CAA section 505(b)(1) 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 filing section 505(b)(2) petitions expired on December 9, 2004. EPA finds that the Petition was submitted on December 7, 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. Compliance with Applicable Requirements

Petitioner alleges that EPA must object to the Permit on the basis of alleged deficiencies Petitioner claims EPA identified in correspondence with the District dated July 28, August 2, and October 8, 2004. Petitioner alleges that EPA and BAAQMD engaged in a procedure that allowed issuance of a deficient Permit. Petition at 6-10. EPA disagrees with Petitioner that it was required to object to the Permit under section 505(b)(1) or that it followed an inappropriate procedure during its 45-day review period.

As a threshold matter, EPA notes that Petitioner's claims addressed in this section are limited to a mere paraphrasing of comments EPA provided to the District in the above-referenced correspondence. Petitioner did not include in the Petition any additional facts or legal analysis to support its claims that EPA should object to the Permit. Section 505(b)(2) of the Act 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); *NYPIRG*, 321 F.3d at 333 n.11. Furthermore, 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*"). Petitioner bears the burden of demonstrating a deficiency in the permit whether the alleged flaw was first identified by Petitioner or by EPA. *See* 42 U.S.C. § 7661d(b)(2). Because this section of the Petition is little more than a summary of EPA's comments on the Permit, with no additional information or analysis, it does not demonstrate that there is a deficiency in the Permit.

1. EPA's July 28 and August 2, 2004 Correspondence

Petitioner overstates the legal significance of EPA's correspondence to the District dated July 28 and August 2, 2004. This correspondence, which took place between EPA and the District during the permitting process but before BAAQMD submitted the proposed Permit to EPA for review, was clearly identified as "issues for discussion" and did not have any formal or legal effect. Nonetheless, EPA is addressing the substantive aspects of Petitioner's allegation regarding the applicability and enforceability of provisions relating to 40 C.F.R. § 60.104(a)(1) in Section III.G.1.

2. Attachment 2 of EPA's October 8, 2004 Letter

EPA's letter to the District dated October 8, 2004 contained the Agency's formal position with respect to the proposed Permit. *See* Letter from Deborah Jordan, Director, Air Division, EPA Region 9 to Jack Broadbent, Air Pollution Control Officer, BAAQMD, dated October 8, 2004 ("EPA October 8, 2004 Letter"). Attachment 2 of the letter requested the District to review whether the following regulations and requirements were appropriately handled in the Permit:

- Applicability of 40 C.F.R. Part 63, Subpart CC to flares
- Applicability of Regulation 8-2 to cooling towers
- Applicability of NSPS Subpart QQQ to new process units
- Applicability of NESHAP Subpart FF to benzene waste streams according to annual average water content
- Compliance with NESHAP Subpart FF for benzene waste streams
- Parametric monitoring for electrostatic precipitators

EPA and the District agreed that this review would be completed by February 15, 2005 and that the District would solicit public comment for any necessary changes by April 15, 2005. Contrary to Petitioner's allegation, EPA's approach to addressing these uncertainties was appropriate. The Agency pressed the District to re-analyze these issues and obtained the District's agreement to follow a schedule to bring these issues to closure. EPA notes again that the Petition itself provides no additional factual or legal analysis that would resolve these applicability issues and demonstrate that the Permit is indeed lacking an applicable requirement. Progress in resolving these issues is attributable solely to the mechanism set in place by EPA and the District.

EPA has received the results of BAAQMD's review, *see*, Letter from Jack Broadbent, Air Pollution Control Officer, BAAQMD, to Deborah Jordan, Director, Air Division, EPA Region 9, dated February 15, 2005 ("BAAQMD February 15, 2005 Letter"), and is making the following findings.

a. Applicability of 40 C.F.R. Part 63, Subpart CC to Flares

This issue is addressed in Section III.H.

b. Cooling Tower Monitoring

This issue is addressed at Section III.G.3.

c. Applicability of NSPS Subpart QQQ to New Process Units

Petitioner claims EPA determined that the Statement of Basis failed to discuss the applicability of NSPS Subpart QQQ for two new process units at the facility.

In an applicability determination for Valero's sewer collection system (S-161), the District made a general reference to two new process units that had been constructed since 1987, the date after which constructed, modified, or reconstructed sources became subject to New Source Performance Standard ("NSPS") Subpart QQQ. The District further indicated that process wastewater from these units is hard-piped to an enclosed system. However, the District did not discuss the applicability of Subpart QQQ for these units or the associated piping. As a result, it was not clear whether applicable requirements were omitted from the proposed Permit.

In response to EPA's request for more information on this matter, the District stated in a letter dated February 15, 2005[3] that the process units are each served by separate storm water and sewer systems. The District has concluded that the storm water system is exempt from Subpart QQQ pursuant to 40 C.F.R. 60.692-1(d)(1). However, with regard to the sewer system, the District stated the following:

> The second sewer system is the process drain system that contains oily water waste streams. This system is "hard-piped" to the slop oil system where the wastewater is separated and sent to the sour water stripper. From the sour water stripper, the wastewater [is] sent directly to secondary treatment in the WWTP where it is processed in the Biox units.
>
> The District will review the details of the new process drain system and determine the applicable standards. A preliminary review indicates that, since this system is hard-piped with no emissions, the new process drain system may have been included in the slop oil

[3]*See* Letter from Jack Broadbent, Executive Office/APCO, Bay Area Air Quality Management District to Deborah Jordan, Director, Air Division, EPA Region 9.

system, specifically S-81 and/or S104. If this is the case, Table IV-J33 will be reviewed and updated, as necessary, to include the requirements of the new process drain system.

The District's response indicates that the Permit may be deficient because it may lack applicable requirements. Therefore, EPA is granting Petitioner's request to object to the Permit. The District must determine what requirements apply to the new process drain system and add any applicable requirements to the Permit as appropriate.

d. Management of Non-aqueous Benzene Waste Streams Pursuant to 40 C.F.R. Part 61, Subpart FF

Petitioner claims that EPA identified an incorrect applicability determination regarding benzene waste streams and NESHAP Subpart FF. Referencing previous EPA comments, Petitioner notes that the restriction contained in 40 C.F.R. § 61.342(e)(1) was ignored by the District in the applicability determination it conducted for the facility.

The Statement of Basis for the proposed Permit included an applicability determination for Valero's Sewer Pipeline and Process Drains, which stated the following:

> Valero complies with FF through 61.342(e)(2)(i), which allows the facility 6 Mg/yr of uncontrolled benzene waste. Thus, facilities are allowed to choose whether the benzene waste streams are controlled or uncontrolled as long as the uncontrolled stream quantities total less than 6 Mg/yr...Because the sewer and process drains are uncontrolled, they are not subject to 61.346, the standards for individual drain systems.

In its October 8, 2004 letter, EPA raised concerns over this applicability determination due to the District's failure to discuss the control requirements in 40 C.F.R. § 61.342(e)(1). Under the chosen compliance option, only wastes that have an average water content of 10% or greater may go uncontrolled (*see* 40 C.F.R. § 61.342(e)(2)) and it was not clear from the applicability determination that the emission sources met this requirement. In response to EPA's request for more information on this matter, the BAAQMD stated in its February 15, 2005 letter, "In the Revision 2 process, the District will determine which waste streams at the refineries are non-aqueous benzene waste streams. Section 61.342(e)(1) will be added to the source-specific tables for any source handling such waste. The District has sent letters to the refineries requesting the necessary information."

The District's response indicates that the Permit may be deficient because it may lack an applicable requirement, specifically Section 61.342(e)(1). Therefore, EPA is granting Petitioner's request to object to the Permit. The District must reopen the Permit to add Section 61.342(e)(1) to the source-specific tables for all sources that handle non-aqueous benzene waste streams or explain in the Statement of Basis why Section 61.342(e)(1) does not apply.

e. 40 C.F.R. Part 61, Subpart FF - 6BQ Compliance Option

Referencing EPA's October 8, 2004 letter, Petitioner claims that EPA identified an incorrect applicability determination regarding the 6BQ compliance option for benzene waste streams under 40 C.F.R. § 61.342(e). Petitioner claims that this should have resulted in an objection by EPA.

The EPA comment referenced by Petitioner is issue #12 in Attachment 2 of the Agency's October 8, 2004 letter to the BAAQMD. In that portion of its letter, EPA identified incorrect statements regarding the wastes that are subject to the 6 Mg/yr limit under 40 C.F.R. § 61.342(e)(2)(i). Specifically, the District stated that facilities are allowed to choose whether the benzene waste streams are controlled or uncontrolled as long as the uncontrolled stream quantities total less than 6 Mg/yr. In actuality, the 6 Mg/yr limit applies to all aqueous benzene wastes (both controlled and uncontrolled).

The fundamental issues raised by the EPA October 8, 2004 Letter were 1) whether or not the refineries are in compliance with the requirements of the benzene waste operations NESHAP, and 2) the need to remove the incorrect language from the Statement of Basis. The first issue is a matter of enforcement and does not necessarily reflect a flaw in the Permit. Absent information indicating that the refinery is actually out of compliance with the NESHAP, there is no basis for an objection by EPA. The second issue has already been corrected by the District. In response to EPA's comment, the District revised the Statement of Basis to state that the 6 Mg/yr limit applies to the benzene quantity in the total aqueous waste stream. *See* December 16, 2004 Statement of Basis at 26. Therefore, EPA is denying Petitioner's request to object to the Permit. However, in responding to this Petition, EPA identified additional incorrect language in the Permit. Specifically, Table VII-Refinery states, "Uncontrolled benzene <6 megagrams/year." *See* Permit at 476. As discussed above, this is clearly inconsistent with 40 C.F.R. § 61.342(e)(2). In addition, Table IV-Refinery contains a similar entry that states, "Standards: General; [Uncontrolled] 61.342(e)(2) Waste shall not contain more than 6.0 Mg/yr benzene." *See* Permit at 51. As a result, under a separate process, EPA is reopening the Permit pursuant to its authority under 40 C.F.R. § 70.7(g) to require that the District fix this incorrect language.

f. Parametric Monitoring for Electrostatic Precipitators

Petitioner claims EPA found that the Permit contains deficient particulate monitoring for sources that are abated by electrostatic precipitators (ESPs) and that are subject to limits under SIP-approved District Regulations 6-310 and 6-311. Petitioner requests that EPA object to the Permit to require appropriate monitoring.

BAAQMD Regulation 6-310 limits particulate matter emissions to 0.15 grains per dry standard cubic foot, and Regulation 6-311 contains a variable limit based on a source's process weight rate. Because Regulation 6 does not contain monitoring provisions, the District relied on its periodic monitoring authority to impose monitoring requirements on sources S-5, S-6, and S-10 to ensure compliance with these standards. See 40 C.F.R. § 70.6(a)(3)(i)(B); BAAQMD Reg.

6-503; BAAQMD Manual of Procedures, Vol. III, Section 4.6. For sources S-5 and S-6, the Permit requires annual source tests for both emission limits. For S-10, the Permit requires an annual source test to demonstrate compliance with Regulation 6-310 but no monitoring is required for Regulation 6-311.

With regard to monitoring for Regulation 6-311 for source S-10, the Permit is inconsistent with the Statement of Basis. The final Statement of Basis indicates that Condition 19466, Part 9 should read, "The Permit Holder shall perform an annual source test on Sources S-5, S-6, S-8, S-10, S-11, S-12, S-176, S-232, S-233 and S-237 to demonstrate compliance with Regulation 6-311 (PM mass emissions rate not to exceed 4.10P0.67 lb/hr)." *See* December 16, 2004 Statement of Basis at 84. However, Part 9 of Condition 19466 in the Permit states that the monitoring requirement only applies to S-5 and S-6. December 16, 2004 Permit at 464. In addition, Table VII-B1 states that monitoring is not required. Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to monitoring S-10 for compliance with Regulation 6-311. The District must reopen the Permit to add monitoring requirements adequate to assure compliance with the emission limit or explain in the Statement of Basis why it is not needed.

Regarding the annual source tests for sources S-5, S-6, and S-10, EPA believes that an annual testing requirement is inadequate in the absence of additional parametric monitoring because proper operation and maintenance of the ESPs is necessary in order to achieve compliance with the emission limits. In the BAAQMD February 15, 2005 Letter, the District stated that it intends to "propose a permit condition requiring the operator to conduct an initial compliance demonstration that will establish a correlation between opacity and particulate emissions." Thus, EPA concludes the Permit does not meet the Part 70 standard that it contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. *See* 40 C.F.R. § 70.6(a)(3)(i)(B). Therefore, EPA is granting Petitioner's request to object to the Permit. At a minimum, the Permit must contain monitoring which yields data that are representative of the source's compliance with its permit terms and conditions.

3. Attachment 3 of EPA's October 8, 2004 Letter

Attachment 3 of EPA's October 8, 2004 Letter memorialized the District's agreement to address two issues related to the Valero Permit. One issue pertains to applicability determinations for support facilities. EPA does not have adequate information demonstrating that the Valero facility has support facilities, nor has Petitioner provided any such information. EPA therefore finds no basis to object to the Permit and denies the Petition as to this issue.

The second issue pertains to the removal of a permit shield from BAAQMD Regulation 8-2. EPA has reviewed the most recent version of the Permit and determined that the shield was removed. Therefore, EPA is denying Petitioner's request to object to the permit as this issue is moot.

B. Permit Application

1. Applicable Requirements

Petitioner alleges that EPA must object to the Permit because it contains unresolved applicability determinations due to "deficiencies in the application and permit process" as identified in Attachment 2 to EPA's October 8, 2004 letter to the District.

During EPA's review of the Permit, BAAQMD asserted that, notwithstanding any alleged deficiencies in the application and permit process, the Permit sufficiently addressed these items or the requirements were not applicable. EPA requested that the District review some of the determinations of adequacy and non-applicability that it had already made. EPA believes that this process has resulted in improved applicability determinations. Petitioners have failed to demonstrate that such a generalized allegation of "deficiencies in the application and permit process" actually resulted in or may have resulted in a flaw in the Permit. Therefore, EPA denies the Petition on this basis.

2. Identification of Insignificant Sources

Petitioner contends that the permit application failed to list insignificant sources, resulting in a "lack of information ... [that] inhibits meaningful public review of the Title V permit." Petitioner further contends that, contrary to District permit regulations, the application failed to include a list of all emission units, including exempt and insignificant sources and activities, and failed to include emissions calculations for each significant source or activity. Petitioner lastly alleges that the application lacked an emissions inventory for sources not in operation during 1993.

Under Part 70, applications may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate a required fee amount. 40 C.F.R. § 70.5(c). Emission calculations in support of the above information are required. 40 C.F.R. § 70.5(c)(3)(viii). An application must also include a list of insignificant activities that are exempted because of size or production rate. 40 C.F.R. § 70.5(c).

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 also denies Petitioner's claim because Petitioner fails to substantiate its generalized contention that the Permit is flawed. The Statement of Basis unambiguously explains that Section III of the Permit, *Generally Applicable Requirements*, applies to all sources at the facility, including insignificant sources:

> This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit....[S]tandards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound), are placed in this section.

Thus, all insignificant sources subject to applicable requirements are properly covered by the Permit.

Petitioner also fails to explain how meaningful public review of the Permit was "inhibited" by the alleged lack of a list of insignificant sources from the permit application.[4] We find no permit deficiency otherwise related to missing insignificant source information in the Permit application.

In addition, Petitioner fails to point to any defect in the Permit as a consequence of any missing significant emissions calculations in the permit application. The Statement of Basis for Section IV of the Permit states, "This section of the Permit lists the applicable requirements that apply to permitted or significant sources." Therefore, all significant sources and activities are properly covered by the Permit.

With respect to a missing emissions inventory for sources not in operation during 1993, Petitioner again fails to point to any resultant flaw in the Permit. These sources are appropriately addressed in the Permit.

For the foregoing reasons, EPA is denying the Petition on these issues.

3. Identification of Non-Compliance

Petitioner argues that the District should have compelled the refinery to identify non-compliance in the application and provide supplemental information regarding non-compliance during the application process prior to issuance of the final permit on December 1, 2003. In

[4] In another part of the Petition, addressed below, Petitioner argues that the District's delay in providing requested information violated the District's public participation procedures approved to meet 40 C.F.R. § 70.7.

support, Petitioner cites the section of its Petition (III.D.) alleging that the refinery failed to properly update its compliance certification.

Title V regulations do not require an applicant to supplement its application with information regarding non-compliance,[5] unless the applicant has knowledge of an incorrect application or of information missing from an application. Pursuant to 40 C.F.R. § 70.5(c)(8)(i) and (iii)(C), a standard application form for a title V permit must contain, *inter alia*, a compliance plan that describes the compliance status of each source with respect to all applicable requirements and a schedule of compliance for sources that are not in compliance with all applicable requirements at the time the permit issues. Section 70.5(b), *Duty to supplement or correct application*, provides that any applicant who fails to submit any relevant facts, or who has submitted incorrect information, in a permit application, shall, upon becoming aware of such failure or incorrect submission, promptly submit such supplemental or corrected information. In addition, Section 70.5(c)(5) requires the application to include "[o]ther specific information that may be necessary to implement and enforce other applicable requirements ... or to determine the applicability of such requirements."

Petitioner does not show that the refinery had failed to submit any relevant facts, or had submitted incorrect information, in its 1996 initial permit application. Consequently, the duty to supplement or correct the permit application described at 40 C.F.R. § 70.5(b) has not been triggered in this case.

Moreover, EPA disagrees that the requirement of 40 C.F.R. § 70.5(c)(5) requires the refinery to update compliance information in this case. The District is apprised of all new information arising after submittal of the initial application – such as NOVs, episodes and complaints – that may bear on the implementation, enforcement and/or applicability of applicable requirements. In fact, the District has an inspector assigned to the plant to assess compliance at least on a weekly basis. Therefore, it is not necessary to update the application with such information, as it is already in the possession of the District. Petitioner has failed to demonstrate that the alleged failure to update compliance information in the application resulted in, or may have resulted in, a deficiency in the Permit. For the foregoing reasons, EPA denies the Petition on this issue.

C. Assurance of Compliance with All Applicable Requirements Pursuant to the Act, Part 70 and BAAQMD Regulations

1. Compliance Schedule

In essence, Petitioner claims that the District's consideration of the facility's compliance history during the title V permitting process was flawed because the District decided not to include a compliance schedule in the Permit despite a number of NOVs and other indications, in

[5] As discussed *infra*, title V regulations also do not require permit applicants to update their compliance certifications pending permit issuance.

Petitioner's view, of compliance problems, and the District did not explain why a compliance schedule is not necessary. Specifically, Petitioner alleges that EPA must object to the Permit because the "District ignored evidence of recurring or ongoing compliance problems at the facility, instead relying on limited review of outdated records, to conclude that a compliance schedule is unnecessary." Petition at 11-19. Petitioner further alleges that a compliance schedule is necessary to address NOVs issued to the plant (including many that are still pending)[6], one-time episodes[7] reported by the plant, recurring violations and episodes at certain emission units, complaints filed with the District, and the lack of evidence that the violations have been resolved. The relief sought by Petitioner is for the District to include "a compliance schedule in the Permit, or explain why one was not necessary." *Id.* Petitioner additionally charges that, due to the facility's poor compliance history, additional monitoring, recordkeeping and reporting requirements are warranted to assure compliance with all applicable requirements. *Id.*

Section 70.6(c)(3) requires title V permits to include a schedule of compliance consistent with Section 70.5(c)(8). Section 70.5(c)(8) prescribes the requirements for compliance schedules to be submitted as part of a permit application. For sources that are not in compliance with applicable requirements at the time of permit issuance, compliance schedules must include "a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance." 40 C.F.R. § 70.5(c)(8)(iii)(C). The compliance schedule should "resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject." *Id*.

In determining whether an objection is warranted for alleged flaws in the procedures leading up to permit issuance, such as Petitioner's claims that the District improperly considered the facility's compliance history, EPA considers whether a Petitioner has demonstrated that the alleged flaws resulted in, or may have resulted in, a deficiency in the permit's content. See CAA § 505(b)(2) (requiring an objection "if the petitioner demonstrates ... that the permit is not in compliance with the requirements of this Act...."). In Petitioner's view, the deficiency that resulted here is the lack of a compliance schedule. For the reasons explained below, EPA grants the Petition to require the District to address in the Permit's Statement of Basis the NOVs that the District has issued to the facility and, in particular, NOVs that have not been resolved because they may evidence noncompliance at the time of permit issuance. EPA denies the Petition as to Petitioner's other compliance schedule issues.

a. Notices of Violation

[6]BAAQMD Regulation 1:401 provides for the issuance of NOVs: "Violation Notice: A notice of violation or citation shall be issued by the District for all violations of District regulations and shall be delivered to persons alleged to be in violation of District regulations. The notice shall identify the nature of the violation, the rule or regulation violated, and the date or dates on which said violation occurred."

[7]According to BAAQMD, "episodes" are "reportable events, but are not necessarily violations." Letter from Adan Schwartz, Senior Assistant Counsel, BAAQMD to Gerardo Rios, EPA Region IX, dated January 31, 2005.

In connection with its claim that the Permit is deficient because it lacks a compliance schedule, Petitioner states that the District issued 85 NOVs to Valero between 2001 and 2004 and 51 NOVs in 2003 and 2004. Petitioner highlights that, as of October 22, 2004, all 51 NOVs issued in 2003 and 2004 were unresolved and still "pending." Petition at 14-15. To support its claims, Petitioner attached to the Petition various District compliance reports and summaries, including a list of NOVs issued between January 1, 2003 and October 1, 2004. Thus, Petitioner essentially claims that the District's consideration of these NOVs during the title V permitting process was flawed, because the District did not include a compliance schedule in the Permit and did not explain why a compliance schedule is not necessary.

As noted above, EPA's Part 70 regulations require a compliance schedule for "applicable requirements for sources that are not in compliance with those requirements at the time of permit issuance." 40 C.F.R. §§ 70.6(c)(3), 70.5(c)(8)(iii)(C). Consistent with these requirements, EPA has stated that a compliance schedule is not necessary if a violation is intermittent, not on-going, and has been corrected before the permit is issued. *See In the Matter of New York Organic Fertilizer Company*, Petition Number II-2002-12 at 47-49 (May 24, 2004). EPA has also stated that the permitting authority has discretion not to include in the permit a compliance schedule where there is a pending enforcement action that is expected to result in a compliance schedule (i.e., through a consent order or court adjudication) for which the permit will be eventually reopened. *See In the Matter of Huntley Generating Station*, Petition Number II-2002-01, at 4-5 (July 31, 2003); *see also In the Matter of Dunkirk Power, LLC*, Petition Number II-2002-02, at 4-5 (July 31, 2003).[8]

Using the District's own enforcement records, Petitioner has demonstrated that approximately 50 NOVs were pending before the District at the time it proposed the revised Permit. The District's most recent statements, as of January 2005, do not dispute this fact.[9] The permitting record shows that the District issued the initial Permit on December 1, 2003 and the revised Permit on December 16, 2004. According to the District, the facility did not have noncompliance issues at the time it issued the initial and revised permits. The permitting record contains the following statements:

- July 2003 Statement of Basis,"Compliance Schedule" section: "The BAAQMD

[8]These orders considered whether a compliance schedule was necessary to address (i) opacity violations for which the source had included a compliance schedule with its application; and (ii) PSD violations that the source contested and was litigating in federal district court. As to the uncontested opacity violations, EPA required the permitting authority to reopen the permits to either incorporate a compliance schedule or explain that a compliance schedule was not necessary because the facility was in compliance. As to the contested PSD violations, EPA found that "[i]t is entirely appropriate for the [state] enforcement process to take its course" and for a compliance schedule to be included only after the adjudication has been resolved.

[9]As stated in a letter from Adan Schwartz, Senior Assistant Counsel, BAAQMD, to Gerardo Rios, Air Division, U.S. EPA Region 9, dated January 31, 2005, "The District is following up on each NOV to achieve an appropriate resolution, which will likely entail payment of a civil penalty." EPA provided a copy of this letter to Petitioner on February 23, 2005.

Compliance and Enforcement Division has conducted a review of compliance over the past year and has no records of compliance problems at this facility." July 2003 Statement of Basis at 12.

- July 2003 Statement of Basis, "Compliance Status" section: "The Compliance and Enforcement Division has prepared an Annual Compliance Report for 2001. . . The information contained in the compliance report has been evaluated during the preparation of the Statement of Basis for the proposed major Facility Review permit. The main purpose of this evaluation is to identify ongoing or recurring problems that should be subject to a schedule of compliance. No such problems have been identified." July 2003 Statement of Basis at 35. This section also noted that the District issued eight NOVs to the refinery in 2001, but did not discuss any NOVs issued to the refinery in 2002 or the first half of 2003. EPA notes that there appear to have been approximately 36 NOVs issued during that time, each of which is identified as pending in the documentation provided by Petitioner.

- December 16, 2004 Statement of Basis: "The facility is not currently in violation of any requirement. Moreover, the District has updated its review of recent violations and has not found a pattern of violations that would warrant imposition of a compliance schedule." December 2004 Statement of Basis at 34.

- 2003 Response to Comments ("RTC") (from Golden Gate University): "The District's review of recent NOV's failed to reveal any evidence of current ongoing or recurring noncompliance that would warrant a compliance schedule." 2003 RTC (GGU) at 1.

EPA finds that the District's statements at the time it issued the initial and revised Permits do not provide a meaningful explanation for the lack of a compliance schedule in the Permit. Using the District's own enforcement records, Petitioner has demonstrated that there were approximately 50 unresolved NOVs at the time the revised Permit was issued in December 2004. The District's statements in the permitting record, however, create the impression that no NOVs were pending at that time. Although the District acknowledges that there have been "recent violations," the District fails to address the fact that it had issued a significant number of NOVs to the facility and that many of the issued NOVs were still pending. Moreover, the District provides only a conclusory statement that there are no ongoing or recurring problems that could be addressed with a compliance schedule and offers no explanation for this determination. The District's statements give no indication that it actually reviewed the circumstances underlying recently issued NOVs to determine whether a compliance schedule was necessary. The District's mostly generic statements as to the refinery's compliance status are not adequate to support the District's decision that no compliance schedule was necessary in

light of the NOVs.[10]

Because the District failed to include an adequate discussion in the permitting record regarding NOVs issued to the refinery, and, in particular, those that were pending at the time the Permit was issued, and an explanation as to why a compliance schedule is not required, EPA finds that Petitioner has demonstrated that the District's consideration of the NOVs during the title V permitting process may have resulted in a deficiency in the Permit. Therefore, EPA is granting the Petition to require the District to either incorporate a compliance schedule in the Permit or to provide a more complete explanation for its decision not to do so.

When the District reopens the Permit, it may consider EPA's previous orders in the Huntley, Dunkirk, and New York Organic Fertilizer matters to make a reasonable determination that no compliance schedule is necessary because (i) the facility has returned to compliance; (ii) the violations were intermittent, did not evidence on-going non-compliance, and the source was in compliance at the time of permit issuance; or (iii) the District has opted to pursue the matter through an enforcement mechanism and will reopen the permit upon a consent agreement or court adjudication of the noncompliance issues. Consistent with previous EPA orders, the District must also ensure that the permit shield will not serve as a bar or defense to any pending enforcement action.[11] *See Huntley* and *Dunkirk* Orders at 5.

b. Episodes

Petitioner also cites the number of "episodes" at the plant in the years 2003 and 2004 as a basis for requiring a compliance schedule. Episodes are events reported by the refinery of equipment breakdown, emission excesses, inoperative monitors, pressure relief valve venting, or other facility failures. Petition at 15, n. 21. According to the District, "[e]pisodes are reportable events, but are not necessarily violations. The District reviews each reported episode. For those that represent a violation, an NOV is issued." Letter from Adan Schwartz, Senior Assistant Counsel, BAAQMD to Gerardo Rios, EPA Region IX, dated January 31, 2005. The summary chart entitled "BAAQMD Episodes" attached to the Petition shows that the District specifically records for each episode, under the heading "Status," its determination for each episode: (i) no action; (ii) NOV issued; (iii) pending; and (iv) void. This document supports the District's statement that it reviews each episode to see whether it warrants an NOV. Because not every episode is evidence of noncompliance, the number of episodes is not a compelling basis for determining whether a compliance schedule is necessary. Moreover, Petitioner did not provide

[10]In contrast, EPA notes that the state permitting authority in the Huntley and Dunkirk Orders provided a thorough record as to the existence and circumstances regarding the pending NOVs by describing them in detail in the permits and acknowledging the enforcement issues in the public notices for the permits. Huntley at 6, Dunkirk at 6. In addition, EPA found that the permits contained "sufficient safeguards" to ensure that the permit shields would not preclude appropriate enforcement actions. *Id.*

[11]After reviewing the permit shield in the Permit, EPA finds nothing in it that could serve as a defense to enforcement of the pending NOVs. The District, however, should still independently perform this review when it reopens the Permit.

additional facts, other than the summary chart, to demonstrate that any reported episodes are violations. EPA therefore finds that Petitioner has not demonstrated that the District's consideration of the various episodes may have resulted in a deficiency in the Permit, and EPA denies the Petition as to this issue.

c. Repeat Violations and Episodes at Particular Units

Petitioner claims that certain units at the plant are responsible for multiple episodes and violations, "possibly revealing serious ongoing or recurring compliance issues." Petition at 16. The Petition then cites, as evidence, the existence of 16 episodes and 8 NOVs for the FCCU Catalytic Regenerator (S-5), 9 episodes and 4 NOVs for a hot furnace (S-220), 9 episodes and 2 NOVs for the Heat Recovery Steam Generator (S-1031), and 3 episodes and 2 NOVs for the South Flare (S-18).

A close examination of the BAAQMD Episodes chart relied upon by Petitioner, however, reveals that the failures identified for these episodes and NOVs are actually quite distinct from one another, often covering different components and regulatory requirements. This fact makes sense as emission and process units at refineries tend to be very complex with multiple components and multiple applicable requirements. When determining whether a compliance schedule is necessary for ongoing violations at a particular emission unit based on multiple NOVs issued for that unit, it would be reasonable for a permitting authority to consider whether the violations pertain to the same component of the emission unit, the cause of the violations is the same, and the cause has not been remedied through the District's enforcement actions. Again, Petitioner has failed to demonstrate that the District's consideration of the various repeat episodes and alleged violations may have resulted in a deficiency in the Permit. EPA therefore denies the Petition as to this issue.

d. Complaints

Petitioner contends that the "numerous complaints" received by the District between 2001 and 2004 also lay a basis for the need for a compliance schedule. These complaints were generally for odor, smoke or other concerns. As with the episodes discussed above, the mere existence of a complaint does not evidence a regulatory violation. Moreover, where the District has verified certain complaints, it has issued an NOV to address public nuisance issues. As such, even though complaints may indicate problems that need additional investigation, they do not necessarily lay the basis for a compliance schedule. Because Petitioner has not demonstrated that the complaints received by the District may have resulted in a deficiency in the Permit, EPA denies the Petition as to this issue.

e. Allegation that Problems are not Resolved

Petitioner proposes three "potential solutions to ensure compliance:" (1) the District should address recurring compliance at specific emission units, namely S-5, S-220 and S-1030, (2) the District should impose additional maintenance or installation of monitoring equipment, or

new monitoring methods to address the 30 episodes involving inoperative monitors; and (3) the District should impose additional operational and maintenance requirements to address recurring problems since the source is not operating in compliance with the NSPS requirement to maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Petition at 18-19.

In regard to Petitioner's first claim for relief, EPA has already explained that Petitioner has not demonstrated that the District's consideration of the various 'recurring' violations for particular emission units may have resulted in a deficient permit or justifies the imposition of a compliance schedule. In regard to the second claim for relief, the 30 episodes cited by Petitioner are for different monitors, and spread over a multi-year period. As long as the District seeks prompt corrective action upon becoming aware of inoperative monitors, EPA does not see this as a basis for additional maintenance and monitoring requirements for the monitors. Moreover, EPA could only require additional monitoring requirements to the extent that the underlying SIP or some other applicable requirement does not already require monitoring. *See* 40 C.F.R. § 70.6(a)(3)(i)(B). Lastly, in response to Petitioner's third claim for relief seeking imposition of additional operation and maintenance requirements due to an alleged violation of the "good air pollution control practice" requirements of the NSPS, EPA believes that such an allegation of noncompliance is too speculative to warrant a compliance schedule without further investigation. As such, EPA finds that Petitioner has not demonstrated that the District's failure to include any of the permit requirements Petitioner requests here resulted in, or may have resulted in, a deficient permit, and EPA denies the Petition on this ground.

2. Non-Compliance Issues Raised by Public Comments

Petitioner claims that since the District failed to resolve New Source Review ("NSR")[12] compliance issues, EPA should object to the issuance of the Permit and require either a compliance schedule or an explanation that one is not necessary. Petition at 21. Petitioner claims to have identified four potential NSR violations at the refinery, as follows: (i) an apparent substantial rebuild of the fluid catalytic cracking unit ("FCCU") regenerator (S-5) without NSR review,[13] based on information that large, heavy components of the FCCU were recently replaced; (ii) apparent emissions increases at two boiler units (S-3 and S-4) beyond the NSR significance level for modified sources of NOx, based on the District's emissions inventory indicating dramatic increases in NOx emissions between 1993 and 2001; and (iii) an apparent significant increase in SO_2 emissions at a coker burner (S-6), based on the District's emissions inventory indicating a dramatic increase in SO_2 emissions in 2001 over the highest emission rate

[12] "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.

[13] Petitioner also alleges that S-5 went through a rebuild without imposition of emission limitations and other requirements of 40 C.F.R. § 63 Subpart UUU. EPA notes that the requirements of Subpart UUU are included in the Permit with a future effective date of April 11, 2005. Permit at 80.

during 1993 to 2000.[14] Petition at 20.

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.[15]

Based on the information provided by Petitioner, Petitioner has failed to demonstrate that NSR permitting and BACT requirements have been triggered at the FCCU catalytic regenerator S-5, boilers S-3 or S-4, or coke burner S-6. With regard to the FCCU catalytic regenerator, Petitioner's only evidence in support of its claim is (i) an April 8, 1999, Energy Information Administration press release that states that the refinery announced the shutdown of its FCCU on March 19, 1999, and announced the restarting of the FCCU on April 1, 1999;[16] and (ii) information posted at the Web site of Surface Consultants, Inc., stating that "several large, heavy components on [the FCCU] needed replacement." *See* Petition, Exhibit A. Petitioner offers no evidence regarding the nature of these activities, whether the activities constitute a new or modified source under the NSR rules, or whether refinery emissions were in any way affected by these activities.

With regard to the two boilers and the coke burner, Petitioner's only evidence in support of its claims are apparent "dramatic" increases in each of these unit's emissions inventory. However, as the District correctly notes:

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[14] 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 21; December 2003 Consolidated Response to Comments ("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*.

[15] 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."

[16] This press release is available on the Internet at http://www.eia.doe.gov/neic/press/press123.html (last viewed on February 1, 2005).

> "...the principal purpose of the inventory is planning; the precision needed for this purpose is fairly coarse. The inventory emissions are based, in almost all cases, on *assumed* emission factors, and *reported* throughputs. An increase in emissions from one year to the next as reflected in the inventory may be an indication that reported throughput has increased, however it does not automatically follow that the source has been modified. Unless the throughput exceeds permit limits, the increase usually represents use of previously unused, but authorized, capacity. An increase in reported throughput amount could be taken as an indication that further investigation is appropriate to determine whether a modification has occurred. However, the District would not conclude that a modification has occurred simply because reported throughput has increased."

December 1, 2003 Consolidated Response to Comments ("2003 CRTC"), at 22. Moreover, Petitioner does not claim to have sufficient evidence to establish that these units are subject to NSR permitting and the application of BACT. The essence of Petitioner's objection is the need for the District to "determine whether the sources underwent a physical change or change in the method of operation that increased emissions, which would trigger NSR." Petition at 20. Not only is Petitioner unable to establish that these units triggered NSR requirements, Petitioner is not even alleging that NSR requirements have in fact been triggered. Petitioner is merely requesting that the District make an NSR applicability determination based on Petitioner's "well-documented *concerns* regarding *potential* non-compliance." Petition at 20 (*emphasis added*).

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 NOx and SO_2 emissions without complying with NSR requirements. However, based on the information provided by Petitioner, EPA is not prepared to conclude at this time that these units at the Valero refinery are out of compliance with NSR requirements. If EPA later determines that these units are in violation of NSR requirements, EPA may object to or reopen the title V permit to incorporate the applicable NSR requirements.[17]

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

3. Intermittent and Continuous Compliance

Petitioner contends that EPA must object to the Permit because the District has

[17] 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." December 1, 2003 CRTC, at 22. EPA encourages the District to do so, especially where, as in this case, the apparent changes in the emissions inventories are substantial.

interpreted the Act to require only intermittent rather than continuous compliance. Petition at 21-22. Petitioner contends that the District has a "fundamentally flawed philosophy." Petitioner points to a statement made by the District in its Response to Public Comments, dated December 1, 2003, that "[c]ompliance by the refineries with all District and federal air regulations will not be continuous." Petitioner contends that the District "expects only intermittent compliance" and that the District's belief "that it need only assure 'reasonable intermittent' compliance" means that it failed to see the need for a compliance plan in the Permit.

EPA disagrees with Petitioner's suggestion that the District's view of intermittent compliance has impaired its ability to properly implement the title V program. As stated above, EPA has not concluded that a compliance plan is necessary to address the instances of non-compliance at this Facility. Moreover, the Agency disagrees with Petitioner's interpretations of the District's comments on the issue. For instance, EPA finds nothing in the record stating that the District's view of the Permit, as a legal matter, is that it need assure only intermittent compliance. Rather, a fairer reading of the District's view is that, realistically, intermittent non-compliance can be expected. As the District stated:

> The District cannot rule out that instances of non-compliance will occur. Indeed at a refinery, at least occasional events of non-compliance can be predicted with a high degree of certainty. . . . Compliance by the refineries with all District and federal air regulations will not be continuous. However, the District believes the compliance record at this [Shell] and other refineries is well within a range to predict reasonable intermittent compliance. December 1, 2003 RTC at 15.

The District's view appears to be based on experience and the practical reality that complex sources with thousands of emission points which are subject to hundreds of local and federal requirements will find themselves out of compliance, not necessarily because their permits are inadequate but because of the limits of technology and other factors. Even a source with a perfectly-drafted permit – one that requires state of the art monitoring, scrupulous recordkeeping, and regular reporting to regulatory agencies – may find itself out of compliance, not because the permit is deficient, but because of the limitations of technology and other factors.

EPA also believes that, far from sanctioning intermittent compliance, as Petitioner suggests, *see* Petition at 22, n. 36, the District appears committed to address it through enforcement of the Permit, when appropriate: "when non-compliance occurs, the Title V permit will enhance the ability to detect and enforce against those occurrences." *Id*. Although the District may realistically expect instances of non-compliance, it does not necessarily excuse them. Non-compliance may still constitute a violation and may be subject to enforcement action.

For the reasons stated above, EPA denies the Petition on this ground.

4. Compliance Certifications

Initial compliance certifications must be made by all sources that apply for a title V permit at the time of the permit application. *See* 40 C.F.R. § 70.5(c)(9). The Part 70 regulations do not require applicants to update their compliance certification pending issuance of the permit. Petitioner correctly points out that the District's Regulation 2-6-426 requires annual compliance certifications on "every anniversary of the application date" until the permit is issued. Petitioner claims that, other than a truncated update in 2003, the plant has failed to provide annual certifications between the initial permit application submittal in 1996 and issuance of the permit in December 2004. Petitioner believes that "defects in the compliance certification procedure have resulted in deficiencies in the Permit." Petition at 24.

In determining whether an objection is warranted for alleged flaws in the procedures leading up to permit issuance, including compliance certifications, EPA considers whether the petitioner has demonstrated that the alleged flaws resulted in, or may have resulted in, a deficiency in the permit's content. *See* CAA Section 505(b)(2) (objection required "if the petitioner demonstrates ... that the permit is not in compliance with the requirements of this Act, including the requirements of the applicable [SIP]"); 40 C.F.R. § 70.8(c)(1); *See also In the Matter of New York Organic Fertilizer Company*, Petition No. II-2002-12 (May 24, 2004), at 9. Petitioner assumes, in making its argument, that the District needs these compliance certifications to adequately review compliance for the facility. This is not necessarily true. Sources often certify compliance based upon information that has already been presented to a permitting authority or based upon NOVs or other compliance documents received from a permitting authority. The requirement for the plant to submit episode and other reports means that the District should be privy to all of the information available to the source pertaining to compliance, regardless of whether compliance certifications have been submitted annually. Finally, the District has a dedicated employee assigned as an inspector to the plant who visits the plant weekly and sometimes daily. In this particular instance, the compliance certification would likely not add much to the District's knowledge about the compliance status of the plant. EPA believes that in this case, Petitioner has failed to demonstrate that the lack of a proper initial compliance certification, or the alleged failure to properly update that initial compliance certification, resulted in, or may have resulted in, a deficiency in the permit.

D. Statement of Basis

Petitioner alleges that the Statements of Basis for the Permit issued in December 2003 and for the revised Permit, as proposed in August 2004, are inadequate. Specifically, Petitioner alleges the following deficiencies:

- Neither Statement of Basis contains detailed facility descriptions, including comprehensive process flow information;

- Neither Statement of Basis contains sufficient information to determine applicability of "certain requirements to specific sources." Petitioner specifically identifies exemptions from permitting requirements that BAAQMD allowed for tanks. Petitioner also references Attachments 2 and 3 to EPA's October 8, 2004 letter as

support for its allegation that the Statements of Basis were deficient because they did not address applicability of 40 C.F.R. Part 63, Subpart CC to flares and BAAQMD Regulation 8-2 to hydrogen plant vents.

- Neither Statement of Basis addresses BAAQMD's compliance determinations

- The 2003 Statement of Basis was not made available on the District's Web site during the April 2004 public comment period and does not include information about permit revisions in March and August 2004

- The 2004 Statement of Basis does not discuss changes BAAQMD made to the Permit between the public comment period in August 2003 and the final version issued in December 2003, despite the District's request for public comment on such changes.

EPA's Part 70 regulations require permitting authorities, in connection with initiating a public comment period prior to issuance of a title V permit, to "provide a statement that sets forth the legal and factual basis for the draft permit conditions." 40 C.F.R. § 70.7(a)(5). EPA's regulations do not require that a statement of basis contain any specific elements; rather, permitting authorities have discretion regarding the contents of a statement of basis. EPA has recommended that statements of basis contain the following elements: (1) a description of the facility; (2) a discussion of any operational flexibility that will be utilized at the facility; (3) the basis for applying the permit shield; (4) any federal regulatory applicability determinations; and (5) the rationale for the monitoring methods selected. EPA Region V has also recommended the inclusion of the following: (1) monitoring and operational restrictions requirements; (2) applicability and exemptions; (3) explanation of any conditions from previously issued permits that are not being transferred to the title V permit; (4) streamlining requirements; and (5) certain other factual information as necessary. *See, Los Medanos*, at 10, n.16.

There is no legal requirement that a permitting authority include information such as a specific facility description and process flow diagrams in the Statement of Basis, and Petitioner has not shown how the lack of this information resulted in, or may have resulted in, a deficiency in the Permit. Thus, while a facility description and process flow diagrams might provide useful information, their absence from the Statement of Basis does not constitute grounds for objecting to the Permit.

EPA agrees, in part, that Petitioner has demonstrated the Permit is deficient because the Statement of Basis does not explain exemptions for certain tanks. This issue is addressed more specifically in Section III.H.3.

EPA agrees with Petitioner's allegation that the Statement of Basis should have included a discussion regarding applicability of 40 C.F.R. Part 63, Subpart CC to flares and BAAQMD Regulation 8-2 to hydrogen plant vents. Applicability determinations are precisely the type of information that should be included in a Statement of Basis. This issue is addressed more specifically in Section III.H.1.

EPA addressed Petitioner's allegations relating to the sufficiency of the discussion in the Statement of Basis on the necessity of a compliance schedule in Section III.C.

EPA does not agree with Petitioner's allegations that the 2003 Statement of Basis was deficient because it was not available on the District's Web site during the 2004 public comment period or because it did not provide information about the 2004 reopening. First, EPA notes that the 2003 Statement of Basis has been available to the public on its own Web site since the initial permit was issued in December, 2003.[18] In addition, Petitioner has not established a legal basis to support its claim that this information is a required element for a Statement of Basis. Petitioner also concedes that the District provided a different Statement of Basis in connection with the 2004 reopening. Petitioner does not claim that the Permit is deficient as a result of any of these alleged issues regarding the Statement of Basis, therefore, EPA denies the Petition on this ground..

EPA does not agree with Petitioner's allegations that the 2004 Statement of Basis was deficient because it did not discuss any changes made between the draft permit available in August 2003 and the final Permit issued in December 2003. Petitioner has not established a legal basis to support its claim that this information is a required element for a Statement of Basis. Petitioner has not demonstrated that the Permit is deficient because the District did not provide this discussion in the 2004 Statement of Basis. Moreover, Petitioner could have obtained much of this information by reviewing the District's response to comments received during the 2003 public comment period, which was dated December 1, 2003. Therefore, EPA denies the Petition on this ground.

E. Permit Shields

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a title V permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a title V permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in title V permits. The District's Statement of Basis explains: "Compliance with the applicable requirement contained in the permit automatically results in compliance with any subsumed (= less stringent) requirement." See December 2003 Statement of Basis at 27.

1. 40 C.F.R. §§ 60.7(c) and (d)

Petitioner alleges that the permit shield in Table IX B of the Permit (p669-670)

[18]Title V permits and related documents are available through Region IX's Electronic Permit Submittal System at http://www.epa.gov/region09/air/permit/index.html.

improperly subsumes 40 C.F.R. §§ 60.7(c) and (d) under SIP-approved BAAQMD Regulation 1-522.8, and that the Statement of Basis does not sufficiently explain the basis for the shield. Petition at 28.

BAAQMD Regulation 1-522.8 requires that:

> Monitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on.

Sections 60.7(c) and (d) require very specific reporting requirements that are not required by BAAQMD Regulation 1-522.8. For instance, § 60.7(c)(1) requires that excess emissions reports include the magnitude of excess emissions computed in accordance with § 60.13(h) and any conversion factors used. Section 60.7(d)(1) requires, that the report form contain, among other things, the duration of excess emissions due to startup/shutdown, control equipment problems, process problems, other known causes, and unknown causes and total duration of excess emissions.

The Statement of Basis for Valero contains the following justification for the shield:

> 40 C.F.R. Part, 60 Subpart A CMS reporting requirements are satisfied by BAAQMD 1-522.8 CEMS reporting requirements. *See* December 2003 Statement of Basis at 31.

EPA agrees with Petitioner that the requirements of 40 C.F.R. §§ 60.7(c) and (d) are not satisfied by BAAQMD Regulation 1-522.8, and that the Statement of Basis does not provide adequate justification for subsuming §§ 60.7(c) and (d). An adequate justification should address *how* the requirements of a subsumed regulation are satisfied by another regulation, not simply that the requirements *are* satisfied by another regulation.

For the reasons set forth above, EPA is granting the Petition on these grounds. The District must reopen the Permit to include the reporting requirements of §§ 60.7(c) and (d) or adequately explain how they are appropriately subsumed.

2. BAAQMD Regulation 11-7

Petitioner also alleges that the District incorrectly attempted to subsume the State-only requirements of BAAQMD Regulation 11-7 for valves under the requirements of SIP approved BAAQMD Regulation 8-18-404, and states that only a federal requirement may be subsumed in the permit pursuant to BAAQMD Regulation 2-6-233.2. Petition at 29.

Including a permit shield for a subsumed non-federally enforceable regulation has no regulatory significance from a federal perspective because it is not related to whether the permit assures compliance with all Clean Air Act requirements. See 40 C.F.R. 70.2 (defining

"applicable requirement"); 70.1(b) (requiring that title V sources have operating permits that assure compliance with all applicable requirements). 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. *In the Matter of Eastman Kodak Company*, Petition No.: II-2003-02, at 37 (Feb. 18, 2005). Therefore, EPA is denying the Petition on this issue.

3. 40 C.F.R. § 60.482-7(g)

Petitioner alleges that a permit shield should not be allowed for federal regulation NSPS Subpart VV, § 60.482-7(g) based upon its being subsumed by SIP-approved BAAQMD Regulation 8-18-404 because the NSPS defines monitoring protocols for valves that are demonstrated to be unsafe to monitor, whereas Regulation 8-18-404 refers to an alternative inspection scheme for leak-free valves. Petitioner states "Because the BAAQMD regulation does not address the same issue as 40 C.F.R. § 60.482-7(g), it cannot subsume the federal requirement." Petition at 29.

EPA disagrees with Petitioner that the two regulations address different issues. Both regulations address alternative inspection time lines for valves. Regulation 8-18-404 specifically states:

> Alternative Inspection Schedule: The inspection frequency for valves may change from quarterly to annually provided all of the conditions in Subsection 404.1 and 404.2 are satisfied.
>
> 404.1 The valve has been operated leak free for five consecutive quarters;
> 404.2 Records are submitted and approval from the APCO is obtained.
> 404.3 The valve remains leak free. If a leak is discovered, the inspection frequency will revert back to quarterly.

NSPS Subpart VV requires valves to be monitored monthly except, pursuant to § 60.482-7(g), any valve that is designated as unsafe to monitor must only be monitored as frequently as practicable during safe-to-monitor times. In explaining the basis for the shield, the Permit states:

> [60.482-7(g)] Allows relief from monthly monitoring if designated as unsafe-to-monitor. BAAQMD Regulation 8-18-404 does not allow this relief. Permit at 644.

BAAQMD is correct that the Regulation 8-18-404 is more stringent than 40 C.F.R. § 60.482-7(g). Therefore, EPA is denying the Petition on this issue.

F. Throughput Limits for Grandfathered Sources

Petitioner alleges that EPA should object to the Permit to the extent that throughput limits

for grandfathered sources set thresholds below which sources are not required to submit all information necessary to determine whether "new or modified construction may have occurred." Petitioner also alleges that the thresholds are not "legally correct" and therefore are not reasonably accurate surrogates for a proper NSR baseline determination. Petitioner also argues that EPA should object to the Permit because the existence of the throughput limits, even as reporting thresholds, may create "an improper presumption of the correctness of the threshold" and discourage the District from investigating events that do not trigger the threshold or reduce penalties for NSR violations. Finally, Petitioner also requests that EPA object to the Permit because the District's reliance on non-SIP Regulation 2-1-234.1 "in deriving these throughput limits" is improper.

The District has established throughput limits on sources that have never gone through new source review ("grandfathered sources"). The Clean Air Act does not require permitting authorities to impose such requirements. Therefore, to understand the purpose of these limits, EPA is relying on the District's statements characterizing the reasons for, and legal implications of, these throughput limits. The District's December 2003 CRTC makes the following points regarding throughput limits:

- The throughput limits being established for grandfathered sources will be a useful tool that enhances compliance with NSR. . . .Requiring facilities to report when throughput limits are exceeded should alert the District in a timely way to the possibility of a modification occurring.

- The limits now function merely as reporting thresholds rather than as presumptive NSR triggers.

- They do not create a baseline against which future increases might be measured ("NSR baseline"). Instead, they act as a presumptive indicator that the equipment has undergone an operational change (even in the absence of a physical change), because the equipment has been operated beyond designed or as-built capacity.

- The throughput limits do not establish baselines; furthermore, they do not contravene NSR requirements. The baseline for a modification is determined at the time of permit review. The proposed limits do not preclude review of a physical modification for NSR implications.

- Throughput limits on grandfathered sources are not federally enforceable.

- The [permits] have been modified to clearly distinguish between limits imposed through NSR and limits imposed on grandfathered sources.

December 1, 2003 RTC at 31-33.

EPA believes the public comments and the District's responses have done much to

describe and explain, in the public record, the purpose and legal significance of the District's throughput limits for grandfathered sources. Based on these interactions, EPA has the following responses to Petitioner's allegations.

First, EPA denies the Petition as to the allegation that the thresholds set levels below which the facility need not apply for NSR permits. As the District states, the thresholds do not preclude the imposition of federal NSR requirements. EPA does not see that the throughput limits would shield the source from any requirements to provide a timely and complete application if a construction project will trigger federal NSR requirements.

Second, the Permit itself makes clear that the throughput limits are not to be used for the purpose of establishing an NSR baseline: "Exceedance of this limit does not establish a presumption that a modification has occurred, nor does compliance with the limit establish a presumption that a modification has not occurred." Permit at 4. Therefore, EPA finds no basis to object to the Permit on the ground that the thresholds are not "reasonably accurate surrogates" for an actual NSR baseline, as they clearly and expressly have no legal significance for that purpose.

Third, while EPA shares Petitioner's interest in compliance with NSR requirements, Petitioner's concern that the thresholds might discourage reliance on appropriate NSR baselines to investigate and enforce possible NSR violations is speculative and cannot be the basis of an objection to the Permit.

Fourth, EPA finds that the District's reliance on BAAQMD Regulation 2-1-234.1, which is not SIP-approved, to impose these limits is appropriate. EPA's review of the Permit, however, found a statement suggesting that the District will rely on this non-SIP approved rule to determine whether an NSR modification has occurred. EPA takes this opportunity to remind the District that its NSR permits must meet the requirements of the federally-applicable SIP. *See* CAA 172, 173; 40 C.F.R. § 51. EPA finds no basis, however, to conclude that the Permit is deficient.

G. Monitoring

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 has recognized, however, that there may be limited cases in which the establishment of a regular program of monitoring or recordkeeping 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 recordkeeping) could meet the requirements of 40 C.F.R. § 70.6(a)(3). *See, Los Medanos,* at 16. EPA's consideration of these issues and determinations as to the adequacy of monitoring follow.

1. 40 C.F.R. Part 60, Subpart J (NSPS for Petroleum Refineries)

Petitioner makes the following allegations with regard to the treatment of flares under NSPS Subpart J: (i) BAAQMD has not made a determination as to the applicability of NSPS Subpart J to three of the four flares at Valero; (ii) there is no way to tell whether flares qualify for the exemption in NSPS Subpart J because there are no requirements in the Permit to ensure that the flares are operated only in "emergencies;" (iii) the Permit must contain a federally enforceable reporting requirement to verify that each flaring event would qualify for an exemption from the H2S limit; (iv) the Permit fails to ensure that all other NSPS Subpart J requirements are practically enforceable; and (v) federally enforceable monitoring must be imposed pursuant to 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c) and Section 504(c) of the Act to verify compliance with all applicable requirements of Subpart J. Petition at 33.

The New Source Performance Standard (NSPS) for Petroleum Refineries, 40 C.F.R. Part 60, Subpart J, prohibits the combustion of fuel gas containing H_2S in excess of 0.10 gr/dscf at any flare built or modified after June 11, 1973. This prohibition is codified in 40 C.F.R. § 60.104(a)(1). Additionally, 40 C.F.R. §§ 60.105(a)(3-4) requires the use of continuous monitors for flares subject to § 60.104(a)(1). However, the combustion of gases released as a result of emergency malfunctions, process upsets, and relief valve leakage is exempt from the H_2S limit. The draft refinery permits proposed by BAAQMD in February 2004 applied a blanket exemption from the H_2S standard and associated monitoring for about half of the Bay Area refinery flares on the basis that the flares are "not designed" to combust routine releases. The statements of basis for the refinery permits state, however, that at least some of these flares are "physically capable" of combusting routine releases. To help assure that this subset of flares would not trigger the H_2S standard, BAAQMD included a condition in the permits prohibiting the combustion of routine releases at these flares.

Following EPA comments submitted to BAAQMD in April of 2004, BAAQMD revised its approach to the NSPS Subpart J exemption. The permits proposed to EPA in August of 2004 indicate that all flares that are affected units under 60.100 are subject to the H2S standard, except when they are used to combust process upset gases, and gases released to the flares as a result of relief valve leakages or other malfunctions. However, the permits were not revised to include the continuous monitors required under §§ 60.105(a)(3) and (4) on the basis that the flares will always be used to combust non-routine releases and thus will never actually trigger the H2S standard or the requirement to install monitors.

With respect to Petitioner's first allegation, BAAQMD has clearly considered applicability of NSPS Subpart J to flares, and has indicated that NSPS Subpart J applies to one, S-19. Page 16 of the December 2004 Statement of Basis states:

> The Benicia Refinery has three separate flare header systems: 1) the main flare gas recovery header with flares S-18 and S-19, 2) the acid gas flare header with flare S-16, and 3) the butane flare header with flare S-17. Flares S-16 and S-18 were placed in service during the original refinery startup in 1968. Flare S-17 was placed in service with

the butane tank TK-1726 in 1972. Flare S-19 was added to the main gas recovery header in 1974 to ensure adequate relief capacity for the refinery. S-19 is subject to NSPS Subpart J, because it was a fuel gas combustion device installed after June 11, 1973, the effective date of 60.100(b).

The table on page 18 of the Statement of Basis also directly states that flares S-16, S-17, and S-18 are not subject to NSPS Subpart J. While the Permit would be clearer if BAAQMD included a statement that the flares have not been modified so as to trigger the requirements of NSPS Subpart J, such a statement is not required by title V. Therefore, EPA is denying the Petition on this issue.

However, EPA agrees with Petitioner that the Permit is flawed with respect to issues (ii) and (iii) above. First, the continuous monitoring of §§ 60.105(a)(3) and (4) is not included in the Permit because, BAAQMD claims, flare S-19 is never used in a manner that would trigger the H2S standard and the requirement to install a continuous monitor. While the Permit does contain District–enforceable only monitoring to show compliance with a federally enforceable condition prohibiting the combustion of routinely-released gases in a flare (20806, #7), there is currently no federally enforceable monitoring requirement in the Permit to demonstrate compliance with this condition or with NSPS Subpart J, both federally enforceable applicable requirements. Because NSPS Subpart J is an applicable requirement, the Permit must contain periodic monitoring pursuant to 40 C.F.R. § 70.6(a)(3)(i)(B) and BAAQMD Reg. 6-503 (BAAQMD Manual of Procedures, Vol. III, Section 4.6) to show compliance with the regulation.

Therefore, EPA is granting the Petition on the basis that the Permit does not assure compliance with NSPS Subpart J, or with federally enforceable permit condition 20806, #7. 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 20806, #7.

With respect to issues (iv) and (v), it is unclear what other requirements Petitioner is referring to, or what monitoring Petitioner is requesting. For these reasons, EPA is denying the Petition on these grounds.

2. Flare Opacity Monitoring

Petitioner notes that flares are subject to SIP-approved BAAQMD Regulation 6-301, which prohibits visible emissions from exceeding defined opacity limits for a period or periods aggregating more than three minutes in any hour. Petitioner alleges that the opacity limit set forth in Regulation 6-301 is not practically enforceable during short-duration flaring events because no monitoring is required for flaring events that last less than fifteen minutes and only limited monitoring is required for events lasting less than thirty minutes. Petitioner alleges that repeated violations of BAAQMD Regulation 6-301 due to short-term flaring could be an ongoing problem that evades detection.

The opacity limit in Regulation 6-301 does not contain periodic monitoring. Because the underlying applicable requirement imposes no monitoring of a periodic nature, 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 . . . ." 40 C.F.R. § 70.6(a)(3)(i)(B). Thus, the issue before EPA is whether the monitoring imposed in the Permit will result in reliable and representative data from the relevant time period such that compliance with the Permit can be determined.

In this case, the District has imposed certain monitoring conditions to determine compliance with the opacity standard during flaring events. The Permit defines a "flaring event" as a flow rate of vent gas flared in any consecutive 15 minute period that continuously exceeds 330 standard cubic feet per minute (scfm). Within 15 minutes of detecting a flaring event, the facility must conduct a visible emissions check. The visible emissions check may be done by video monitoring. If the operator can determine there are no visible emissions using video monitoring, no further monitoring is required until another 30 minutes has expired. If the operator cannot determine there are no visible emissions using video monitoring, the facility must conduct either an EPA Reference Method 9 test or survey the flare according to specified criteria. If the operator conducts Method 9 testing, the facility must monitor the flare for at least 3 minutes, or until there are no visible emissions. If the operator conducts the non-Method 9 survey, the facility must cease operation of the flare if visible emissions continue for three consecutive minutes.

Although EPA agrees with Petitioner that the Permit does not require monitoring during short-duration flaring events, EPA does not believe Petitioner has demonstrated that the periodic monitoring is inadequate. For instance, Petitioner has not shown that short-duration flaring events are likely to be in violation of the opacity standard, nor has Petitioner made a showing that short-duration flaring events occur frequently or at all. Thus, Petitioner has not demonstrated that the periodic monitoring in the Permit is insufficient to detect violations of the opacity standard.

Additionally, in June 1999, a workgroup comprised of EPA, CAPCOA and CARB staff completed a set of periodic monitoring recommendations for generally applicable SIP requirements such as Regulation 6-301. The workgroup's relevant recommendation for refinery flares was a visible emissions check "as soon as an intentional or unintentional release of vent gas to a gas flare but no later than one hour from the flaring event." *See* CAPCOA/CARB/EPA Region IX Periodic Monitoring Memo, June 24, 1999, at 2. In comparison, the periodic monitoring contained in the Permit would appear to be both less stringent, by not requiring monitoring for up to thirty minutes of a release of gas to a flare, and more stringent, by requiring monitoring within 30 minutes rather than one hour. Therefore, EPA encourages the District to amend the Permit to require monitoring upon the release to the flare, rather than delaying monitoring as currently set forth in the Permit.

Finally, EPA notes that the Permit does not prevent the use of credible evidence to demonstrate violations of permit terms and conditions. Even if the Permit does not require

visible emissions checks for short-duration flaring events, EPA, the District, and the public may use any credible evidence to bring an enforcement case against the source. 62 Fed. Reg. 8314 (Feb. 24, 1997).

For the reasons cited above, EPA is denying the Petition on this issue.

3. Cooling Tower Monitoring

Petitioner claims that the Permit lacks monitoring conditions adequate to assure that the cooling tower complies with SIP-approved District Regulations 8-2 and 6. Petitioner further alleges that the District's decisions to not require monitoring for the cooling towers is flawed due to its use of AP-42 emission factors, which may not be representative of the actual cooling tower emissions.

a. Regulation 8-2

District Regulation 8-2-301 prohibits miscellaneous operations from discharging into the atmosphere any emission that contains 15 lb 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 source S-29 to assure compliance with the emission limit.[19]

The December 1, 2003 Statement of Basis sets forth the grounds for the District's decision that monitoring is not necessary to assure compliance with this applicable requirement. First, the District stated that its monitoring decisions were made by balancing a variety of factors including 1) the likelihood of a violation given the characteristics of normal operation, 2) the degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) 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 tower. 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. Although it is true that the results suggest there may be a large margin of compliance, the nature of the emissions and the unreliability of the data used in the calculations renders 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

[19] *See* Permit, Table VII – C5 Cooling Tower, pp. 541.

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); *In re: Peabody Western Coal Co.*, CAA Appeal No. 04-01, at 22-26 (EAB Feb. 18, 2005). Because emission factors essentially represent an average of a range of facilities and 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 lb 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 1) contaminants enter the cooling water system from leaks in heat exchangers and condensers, which are not predictable, and 2) the effectiveness of cooling tower controls is itself highly variable, depending on refinery configuration and existing maintenance practices.[20] 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 stated 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. 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. *See In the Matter of Fort James Camas Mill*, Petition No. X-1999-1, at 17-18, (December 22, 2000).

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 unpredictable nature of the emissions and the unreliability of the data used in the calculations. Therefore,

[20]AP 42, Fifth Edition, Volume I, Chapter 5

under the authority of 40 C.F.R. § 70.6(a)(3)(i)(B), EPA is granting Petitioner's request to object to the Permit as the request pertains to cooling tower monitoring for District 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 Rule, provided best modern practices are used." As a result, in lieu of adding periodic monitoring requirements adequate to assure compliance with the emission limit in Section 8-2-301, the District may require the Statement of Basis to include an applicability determination with respect to Section 8-2-114 and revise the Permit to reflect the use of best modern practices.

b. Regulation 6

BAAQMD SIP-approved Regulation 6 contains four particulate matter emissions standards for which Petitioner objects to the absence of monitoring. The District's decision for each standard is discussed separately below.

(1) Regulation 6-310

BAAQMD Regulation 6-310 limits the emissions from the cooling tower to 0.15 grains per dry standard cubic foot. Appendix G of the December 1, 2003 Statement of Basis sets forth the grounds for the District's decision that monitoring is not necessary to assure compliance with this requirement. Specifically, Appendix G provides calculations for the particulate matter emissions from the cooling tower and compares the expected emission rate to the regulatory limit. In calculating the emissions, the District used the PM-10 emission factor of 0.019 lb per 1000 gal circulating water from Table 13.4-1 of AP-42. The calculations show that the emissions are expected to be approximately 180 times lower than the emission limit. As a result, the District concluded that periodic monitoring is not necessary to assure compliance with the standard.

Petitioner alleges that these calculations do not adequately justify the District's decision because the AP-42 emission factor used carries an E rating, which means that it is of poor quality. As a result, Petitioner claims it is unlikely that the calculated emissions based on this factor are representative of the actual cooling tower emissions.

Petitioner is correct that the emission factor used by the District has an E rating. However, EPA disagrees that this rating alone is sufficient to conclude that the emission factor is not representative of the emissions from the cooling towers at the refinery. PM-10 emissions from cooling towers are generated when drift droplets evaporate and leave fine particulate matter formed by crystallization of dissolved solids. Particulate matter emission estimates can be obtained by multiplying the total liquid drift factor by the total dissolved solids (TDS) fraction in the circulating water. The AP-42 emission factor used by the District is based on a drift rate of 0.02% of the circulating water flow and a TDS content of approximately 12,000 ppm. With

regard to both parameters, the District indicated in the December 1, 2003 Statement of Basis that the emission factor yielded a higher estimate of the emissions than the actual drift and TDS data that was supplied by the refineries. Therefore, EPA believes that the District's reliance on this emission factor does not demonstrate a deficiency in the Permit.[21]

EPA notes that the emission factor's poor rating is due in part to the variability associated with cooling tower drift and TDS data. As discussed in the Statement of Basis, the degree to which the emissions may vary was taken into account when considering the ability of the emission factor to demonstrate compliance with the emission limit. With respect to the drift, EPA believes that the emission factor is conservatively high compared to the 0.0005% drift rate that cooling towers are capable of achieving. Where TDS are concerned, AP-42 indicates that the dissolved solids content may range from 380 ppm to 91,000 ppm. While the emission factor represents a TDS concentration at the lower end of this spectrum, increases in the TDS content do not significantly increase the grain loading due to the large exhaust air flow rates exiting the cooling towers. Even assuming that the TDS concentration reached 91,000 ppm, the calculated emissions are still approximately 22 times lower than the regulatory limit.[22]

The District has provided sufficient evidence to demonstrate that the emissions will not vary by a degree that would cause an exceedance of the standard. Given the representative air flow and water circulation rates supplied by the refinery, compliance with the applicable requirement is expected under conditions (i.e., maximum TDS content) that represent a reasonable upper bound of the emissions. Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to periodic monitoring for Regulation 6-310.

(2) Regulation 6-311

BAAQMD Regulation 6-311 states that no person shall discharge particulate matter into the atmosphere at a rate in excess of that specified in Table 1 of the Rule for the corresponding process weight rate. Assuming the process weight rate for the cooling tower remains at or above the maximum level specified in Table 1, the rule establishes a maximum emission rate of 40 lb/hr. Unlike for Regulation 6-310, the District provided no justification for its decision to not require monitoring to assure compliance with this limit.

Using the PM-10 emission factor cited by the District in its calculations for Regulation 6-310, EPA estimates the emissions from S-29 to be in excess of 40 lb/hr. While the District stated that the emission factor represents a more conservative estimate of the emissions than the actual

[21] Although EPA stated above in the discussion for Regulation 8-2 that AP-42 emission factors are generally not recommended for use in determining compliance with emission limits, there are exceptions. Data supplied by the refineries indicates that the AP-42 emission factor for PM-10 conservatively estimates the actual cooling tower emissions; as discussed further below, compliance with the limit is expected under conditions that represent a reasonable upper bound on the emissions.

[22] Again, this is assuming a drift rate of 0.02%.

data provided by the refineries, it did not say how conservative the factor is. As a result, the District's monitoring decision is unsupported by the record and EPA finds that the Permit fails to meet the Part 70 standard that it contain periodic monitoring sufficient to yield reliable data that are representative of the source's compliance with its terms. *See* 40 C.F.R. § 70.6(a)(3)(i)(B). Therefore, EPA is granting Petitioner's request to object to the Permit. The Permit must include periodic monitoring adequate to assure compliance with BAAQMD Regulation 6-311. *See* 40 C.F.R. § 70.6(a)(3)(i)(B).

(3) Regulation 6-305

BAAQMD Regulation 6-305 states that, "a person shall not emit particles from any operation in sufficient number to cause annoyance to any other person…This Section 6-305 shall only apply if such particles fall on real property other than that of the person responsible for the emission." Nuisance requirements such as this may be enforced by EPA and the District at any time and there is no practical monitoring program that would enhance the ability of the permit to assure compliance with the applicable requirement. Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to monitoring for BAAQMD Regulation 6-305.

(4) Regulation 6-301

BAAQMD Regulation 6-301 states that a person shall not emit from any source for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart. While the Statement of Basis does not contain a justification for the District's decision that monitoring is not required for this standard, the District stated the following in response to public comments: "The District has prepared an analysis based on the AP-42 factors for particulate, which are very conservative, and has indeed determined that 'it is virtually impossible for cooling towers to exceed visible or grain loading limitations.' The calculations show that the particulate grain loading is a hundredth or less than the 0.15 gr/dscf standard due to the large airflows. When the grain loading is so low, visible emissions are not expected." 2003 CRTC at 59. EPA finds the District's assessment of the visible emissions to be reasonable and that Petitioner has not demonstrated otherwise. Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to monitoring for BAAQMD Regulation 6-301.

4. Monitoring of Pressure Relief Valves

Petitioner alleges that the Permit must include additional monitoring to assure that all pressure relief valves at the facility are in compliance with the requirements of SIP-approved District Regulation 8-28 (Episodic Releases from Pressure Relief Valves). Petition at 36.

Regulation 8-28 requires that within 120 days of the first "release event" at a facility, the facility shall equip each pressure relief device of that source with a tamperproof tell-tale indicator that will show that a release has occurred since the last inspection. Regulation 8-28 also requires that a release event from a pressure relief device be reported to the APCO on the

next working day following the venting. Petitioner states that neither the regulation nor the Permit includes any monitoring requirements to ensure that the first release event of a relief valve would ever be recorded, and that available tell-tale indicators or another objective monitoring method should be required for all pressure relief valves at the refinery, regardless of a valve's release event status.

First, EPA believes that the requirement that a facility report all release events to the District is adequate to ensure that the first release event would be recorded. EPA also notes that the refinery is subject to the title V requirement to certify compliance with all applicable requirements, including Regulation 8-28. See 40 C.F.R. § 70.6(c)(5). Thus, EPA does not have a basis to determine that the reporting requirement would not assure compliance with the applicable requirement at issue.

For the reasons stated above, EPA is denying the Petition on this issue.

5. Additional Monitoring Problems Identified by Petitioner

Petitioner claims that several sources with federally enforceable limits under BAAQMD Regulation 6 do not have monitoring adequate to assure compliance. The sources and limits at issue are discussed separately below.

a. Sulfur Storage Pit (S-157) / BAAQMD Regulations 6-301 and 6-310

BAAQMD Regulation 6 contains two particulate matter emissions standards for which Petitioner objects to the absence of monitoring. Specifically, BAAQMD Regulation 6-301 limits visible emissions to less than Ringelmann No. 1 and Regulation 6-310 limits the emissions to 0.15 gr. per dscf. Although Regulation 6 does not contain periodic monitoring requirements for either of the standards, the District declined to impose monitoring on this source.

The December 1, 2003 Statement of Basis provides the District's justification for not requiring monitoring. Specifically, the District stated, "Source is capable of exceeding visible emissions or grain loading standard only during process upset. Under such circumstances, other indicators will alert the operator that something is wrong." *See* December 1, 2003 Statement of Basis, n. 4, at 23. If the source is not capable of exceeding the emission standards at times other than process upsets, it is reasonable that the District would not require regularly scheduled monitoring during normal operations. However, if, as stated by the District, S-157 is capable of exceeding the emission standards during process upsets, monitoring during those periods may be necessary. While the District stated that indicators would alert the operator that something is wrong in the event of a process upset, the District failed to demonstrate how the indicators or the operator's response would assure compliance with the applicable limits.

EPA finds in this case that the District's decision to not require monitoring is not adequately supported by the record. Therefore, EPA is granting Petitioner's request to object to

the Permit as it pertains to monitoring for S-157. The District must re-open the Permit to include periodic monitoring that yields reliable data that are representative of the source's compliance with the permit or further explain in the Statement of Basis why monitoring is not needed.

b. Lime Slurry Tanks (S-174 and S-175) / BAAQMD Regulations 6-301, 6-310, and 6-311

BAAQMD Regulation 6 contains three standards for which Petitioner objects to the absence of monitoring. Regulation 6-311 sets a variable emission limit depending on the process weight rate and the requirements of 6-301 and 6-310 are described above. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

As in the previous case for source S-157, the Statement of Basis states that the District did not require monitoring to assure compliance with Regulations 6-301 and 6-310 because the "source is capable of exceeding visible emissions or grain loading standard only during process upset. Under such circumstances, other indicators will alert the operator that something is wrong." *See* December 1, 2003 Statement of Basis, n. 4, at 23. The Statement of Basis is silent on the District's monitoring decision for Regulation 6-311. Therefore, for the reasons stated above, EPA is granting Petitioner's request to object to the Permit as it pertains to monitoring for sources S-174 and S-175 to assure compliance with Regulations 6-301, 6-310, and 6-311. The District must reopen the Permit to include periodic monitoring or further explain in the Statement of Basis why monitoring is not needed.

c. Diesel Backup Generators (S-240, S-241, and S-242) / BAAQMD Regulations 6-303.1 and 6-310

BAAQMD Regulation 6 contains two particulate matter emissions standards for which Petitioner objects to the absence of monitoring. The requirement of Regulation 6-310 is described above and Regulation 6-303.1 limits visible emissions to Ringelmann No. 2. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

As a preliminary matter, EPA notes that opacity monitoring is generally not necessary for California sources firing on diesel fuel, based on the consideration that sources in California usually combust low-sulfur fuel.[23] Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to monitoring for Regulation 6-303.1.

With regard to Regulation 6-310, the December 1, 2003 Statement of Basis sets forth the basis for the District's decision that monitoring is not necessary. Specifically, the District states, "No monitoring [is] required because this source will be used for emergencies and reliability

[23]Per CAPCOA/CARB/EPA Region IX agreement. *See Approval of Title V Periodic Monitoring Recommendations*, June 24, 1999.

testing only." While it is true that Condition 18748 states these engines may only be operated to mitigate emergency conditions or for reliability-related activities (not to exceed 100 hours per year per engine), this condition is not federally enforceable. Absent federally enforceable restrictions on the hours of operation, the District's decision not to require monitoring is not adequately supported. Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to Regulation 6-310. The District must reopen the Permit to add periodic monitoring to assure compliance with the applicable requirement or further explain in the statement of basis why it is not necessary.

d. FCCU Catalyst Regenerator (S-5) and Fluid Coker (S-6) / BAAQMD Regulation 6-305

BAAQMD Regulation 6 contains one particulate matter emission standard for which Petitioner objects to the absence of monitoring. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

BAAQMD Regulation 6-305 states that, "a person shall not emit particles from any operation in sufficient number to cause annoyance to any other person…This Section 6-305 shall only apply if such particles fall on real property other than that of the person responsible for the emission." Petitioner has failed to establish that there is any practical monitoring program that would enhance the ability of the permit to assure compliance with the applicable requirement. Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to monitoring for BAAQMD Regulation 6-305.

e. Coke Transport, Catalyst Unloading, Carbon Black Storage, and Lime Silo (S-8, S-10, S-11, and S-12) / BAAQMD Regulation 6-311.

BAAQMD Regulation 6 contains one particulate matter emission standard for which Petitioner objects to the absence of monitoring. Specifically, BAAQMD Regulation 6-311 sets a variable emission limit depending on the process weight rate. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

For all four emission sources, the Permit requires monitoring with respect to Regulations 6-301 and 6-310 but not 6-311. Given this apparent conflict and the failure of the Statement of Basis to discuss the absence of monitoring, EPA finds that the District's decision in this case is not adequately supported by the record. Therefore, EPA is granting Petitioner's request as it pertains to monitoring for sources S-8, S-10, S-11, and S-12. The District must reopen the Permit to include periodic monitoring for Regulation 6-311 that yields reliable data that are representative of the source's compliance with the permit or explain in the Statement of Basis why monitoring is not needed.

H. Miscellaneous Permit Deficiencies

1. Missing Federal Requirements for Flares (Subpart CC)

Petitioner states that the District incorrectly determined that Valero flares are categorically exempt from 40 C.F.R. § 63 Subpart CC (NESHAP for Petroleum Refineries). Petitioner further states that "EPA disagreed with the District's claim that the flares qualify for a categorical exemption from Subpart CC when used as an alternative to the fuel gas system," and that the Valero Permit and Statement of Basis contain incorrect applicability determinations for flares S-18 and S-19, and that there is not enough information to determine applicability for flares S-16 and S-17. Petitioner states that for all flares subject to Subpart CC, the Permit must include all applicable requirements, including 40 C.F.R. § 63 Subpart A, by reference from 40 C.F.R. § 63 Subpart CC. Petitioner goes on to note that Petitioner has requested in past comments that the District determine the potential applicability of a number of federal regulations to the Valero flares, including 40 C.F.R. § 63 Subpart A, 40 C.F.R. § 63 Subpart CC, and 40 C.F.R. § 60 Subpart A, but that the District did not do so. Petitioner notes that given a lack of relevant information, Petitioner was unable to make an independent evaluation of applicability. Petitioner also alleges that EPA agreed with Petitioner that the District failed to provide sufficient information for the applicability determinations for flares S-16 and S-70 via Attachment 2 of EPA's October 8 comment letter. Finally, Petitioner states that EPA must object to the Permit until the District provides a sufficient analysis regarding the applicability of these federal rules to the Valero flares, and until the Permit contains all applicable requirements.

a. 40 C.F.R. Part 60, Subpart A

EPA finds that the applicability of 40 C.F.R. § 60 Subpart A is adequately addressed in the December 16, 2004 Statement of Basis for Valero. *See* Statement of Basis at 18 (Dec. 16, 2004). The District has included a table on page 18 of the December 16, 2004 Statement of Basis indicating applicability of NSPS Subpart A to each of Valero's flares. Therefore, EPA is denying the Petition on this issue.

b. 40 C.F.R. Part 63, Subparts A and CC

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 section 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 Statement of Basis indicates that flares S-18 and S-19 are not subject to MACT Subpart CC pursuant to the exemption set forth in 40 C.F.R. § 63.640(d)(5). *See* December 16, 2004 Statement of Basis at 18. In the BAAQMD February 15, 2005 Letter, 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 the BAAQMD 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.

Because the Permit and the Statement of Basis for Valero's flares S-18 and S-19 contain contradictory information with regard to the use of these flares, EPA agrees with Petitioner that the Statement of Basis is lacking a sufficient analysis regarding the applicability of MACT CC to these flares. Therefore, EPA is granting the Petition on this issue. BAAQMD must reopen the Permit to address applicability in the Statement of Basis, and, if necessary, to include the flare requirements of MACT Subpart CC in the Permit.

2. Basis for Tank Exemptions

Petitioner claims that the statement of basis and the Permit lack adequate information to support the proposed exempt status for numerous tanks identified in Table IIB of the Permit.

Table IIB of the Permit contains a list of 43 emission sources that have applicable requirements in Section IV of the Permit but that were determined by the District to be exempt from BAAQMD Regulation 2, which specifies the requirements for Authorities to Construct and Permits to Operate. Rule 1 of the regulation contains numerous exemptions that are based on a variety of physical and circumstantial grounds. EPA agrees with Petitioner that the Permit itself contains insufficient information to determine the basis for the exempt status of the equipment with respect to the exemptions in the rule. However, for most of the sources in Table IIB, Petitioner's claim that the Statement of Basis lacks the information is factually incorrect. Petitioner is referred to pages 94-99 of the Statement of Basis that accompanied the Permit issued by the District on December 1, 2003. Nonetheless, EPA is granting Petitioner's request on a limited basis for the reasons set forth below.

EPA's regulations state that the permitting authority must provide the Agency with a statement of basis that sets forth the legal and factual basis for the permit conditions. 40 C.F.R. § 70.7(a)(5). EPA has provided guidance on the content of an adequate statement of basis in a letter dated December 20, 2001, from Region V to the State of Ohio[24] and in a Notice of Deficiency (NOD) issued to the State of Texas.[25] These documents describe several key elements of a statement of basis, specifically noting that a statement of basis should address any federal regulatory applicability determinations. The Region V letter also recommends the inclusion of topical discussions on issues including but not limited to the basis for exemptions. Further, in response to a petition filed in regard to the title V permit for the Los Medanos Energy Center, EPA concluded that a statement of basis should document the decision-making that went into the development of the title V permit and provide the permitting authority, the public, and EPA with a record of the applicability and technical issues surrounding the issuance of the permit. Such a record ought to contain a description of the origin or basis for each permit condition or exemption. *See, Los Medanos*, at 10.

As stated in *Los Medanos*, the failure of a permitting authority to meet the procedural requirement to provide a statement of basis does not necessarily demonstrate that the title V permit is substantively flawed. 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) (objection required "if the petitioner demonstrates . . . that the permit is not in compliance with the requirements of this Act, including the requirements of the applicable

[24]The letter is available at: http://www.epa.gov/rgytgrnj/programs/artd/air/title5/t5memos/sbguide.pdf.

[25]67 Fed. Reg. 732 (January 7, 2002).

[SIP]"); *see also* 40 C.F.R. § 70.8(c)(1). Thus, where the record as a whole supports the terms and conditions of the permit, flaws in the statement of basis generally will not result in an objection. *See e.g., Doe Run*, at 24-25. In contrast, where flaws in the statement of basis resulted in, or may have resulted in, deficiencies in the title V permit, EPA will object to the issuance of the permit.

With regard to the Valero Permit, the majority of the sources listed in Table IIB are identified in the December 1, 2003 Statement of Basis along with a citation from Regulation 2 describing the basis of the exemption. For the sources that fall within this category, EPA finds that the permit record supports the District's determination for the exempt status of the equipment. However, in reviewing the December 16, 2004 Statement of Basis, EPA noted that three of the sources listed in Table IIB of the Permit are not included in the statement of basis with the corresponding citations for the exemptions.[26] For these sources, the failure of the record to support the terms of the Permit is adequate grounds for objecting to the Permit. Therefore, EPA is granting Petitioner's request to object to the Permit with respect to the listing of exempt sources in Table IIB but only as the request pertains to the three sources identified herein. Although EPA is not aware of other errors, the District should review the circumstances for all of the sources in Table IIB and the corresponding table in the statement of basis to further ensure that the Permit is accurate and that the record adequately supports the Permit. EPA also encourages the District to add the citation for each exemption to Table IIB as was done for the ConocoPhillips, Chevron, and Shell permits.

3. Public Participation

Petitioner argues that the District did not, in a timely fashion, make readily available to the public, compliance information that is relevant to evaluating whether a schedule of compliance is necessary. Specifically, Petitioner asserts that it had to make several requests under the California Public Records Act to obtain "relevant information concerning NOVs issued to the facility between 2001 and 2004" and the "2003 Annual Report and other compliance information, which is not readily available." Petitioner states that it took three weeks for the District to produce the information requested in Petitioner's "2003 PRA request." Petitioner contends that it expended significant resources to obtain the data and received the data so late in the process that they could not be sufficiently analyzed.

In determining whether an objection is warranted for alleged flaws in the procedures leading up to permit issuance, such as Petitioner's claims here that the District failed to comply with public participation requirements, EPA considers whether the petitioner has demonstrated that the alleged flaws resulted in, or may have resulted in, a deficiency in the permit's content. *See* CAA, Section 505(b)(2)(objection required "if the petitioner demonstrates ... that the permit is not in compliance with the requirements of [the Act], including the requirements of the applicable [SIP].") EPA's title V regulations specifically identify the failure of a permitting

[26]Compare Table IIB of the Permit with the December 1, 2003 statement of basis for the LPG Truck Loading Rack, the TK-2710 Fresh Acid Tank, and the Cogeneration Plant Cooling Tower.

authority to process a permit in accordance with procedures approved to meet the public participation provisions of 40 C.F.R. § 70.7(h) as grounds for an objection. 40 C.F.R. § 70.8(c)(3)(iii). District Regulations 2-6-412 and 2-6-419 implement the public participation requirements of 40 C.F.R. § 70.7(h). District Regulation 2-6-412, *Public Participation, Major Facility Review Permit Issuance*, approved by EPA as meeting the public participation provisions of 40 C.F.R. § 70.7(h), provides for notice and comment procedures that the District must follow when proposing to issue any major facility review permit. The public notice, which shall be published in a major newspaper in the area where the facility is located, shall identify, *inter alia*, information regarding the operation to be permitted, any proposed change in emissions, and a District source for further information. District Regulation 2-6-419, *Availability of Information*, requires the contents of the permit applications, compliance plans, emissions or compliance monitoring reports, and compliance certification reports to be available to the public, except for information entitled to confidential treatment.

Petitioner fails to demonstrate that the District did not process the permit in accordance with public participation requirements. The District duly published a notice regarding the proposed initial issuance of the permit. The notice, *inter alia*, referenced a contact for further information. The permit application, compliance plan, emissions or compliance monitoring reports, and compliance certification reports are available to the public through the District's Web site or in the District's files, which are open to the public during business hours. Petitioner admits that it ultimately obtained the compliance information it sought, albeit later than it wished. Petitioner fails to show that the perceived delay in receiving requested documents resulted in, or may have resulted in, a deficiency in the Permit. Therefore, EPA denies the Petition on this issue.

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 OCE 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 OCE Petition also constitutes the Agency's response to the 2003 Petition. Furthermore, EPA considers the Petition validly submitted under CAA section 505(b)(2). However, if the Petition should be deemed to be invalid under that provision, EPA also considers, in the alternative, the Petition and Order to be a Petition to Reopen the Permit and a response to a Petition to Reopen the Permit, respectively.

V. CONCLUSION

For the reasons set forth above, and pursuant to section 505(b)(2) of the Clean Air Act, I deny in part and grant in part OCE's Petition requesting that the Administrator object to the Valero 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.

Date	Stephen L. Johnson Acting Administrator