BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Tesoro Refining and Marketing Co. Martinez, California Facility Major Facility Review Permit Facility No. B2758 & Facility No. B2759 Issued by the Bay Area Air Quality Management District	Petition No. IX-2004-6 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 Tesoro Refining and Marketing Co. to operate its petroleum refinery located in Martinez, 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*, hydrogen plant vents, flares, cooling towers, slop oil vessels and de-watering operations, and other waste streams and units. Petitioner identified several alleged flaws in the Permit application and issuance, including a deficient Statement of Basis. Petitioners alleged that the permit impermissibly lacked a compliance schedule and failed to include monitoring for several applicable requirements. Finally, the Petition raised environmental justice concerns.

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 performed an independent and in-depth

review of the Permit and related materials and information provided by Petitioner in the Petition. Based on this review, I deny in part and grant in part 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. To justify the exercise of an objection by EPA to a title V permit pursuant to section 505(b)(2), a petitioner must demonstrate that the permit is not in compliance with the requirements of the Act, including the requirements of Part 70. *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 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 administrative review 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 Permit from June 29 through September 28, 2002 and held a public hearing on July 29, 2002. BAAQMD held a second public comment period from August 5 to September 22, 2003. EPA's 45-day review of BAAQMD's initial proposed permit ran concurrently with the public comment period, from August 13 to September 26, 2003. EPA did not object to the permit under CAA section 505(b)(1). The deadline for submitting CAA section 505(b)(2) petitions was November 25, 2003. EPA received two petitions from the public: Tesoro Refining and Marketing Co. and Our Children's Earth Foundation.

On December 1, 2003, BAAQMD issued a title V permit for Tesoro's Martinez refinery. On December 12, 2003, EPA informed the District of EPA's finding that cause existed to reopen the Permit (and BAAQMD's other title V 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. EPA's finding was based on the fact that the District had substantially revised the Permit in response to public comments without re-submitting a proposed permit to EPA for another 45-day review. As a result of the reopening, EPA required BAAQMD to submit to EPA a new proposed permit allowing EPA an additional 45-day review period and an opportunity to object to the permit if it fails to meet the standards set forth in section 505(b)(1).

On December 19, 2003, EPA dismissed the section 505(b)(2) petitions on the permit as unripe, because of the just-initiated reopening process. EPA also stated that the reopening process would allow the public an opportunity to submit new section 505(b)(2) petitions after the end of EPA's 45-day review period. In February 2004, three groups filed challenges in the Ninth Circuit Court of Appeals regarding EPA's dismissal of their 505(b)(2) petitions. The parties resolved this litigation by a settlement agreement under which EPA agreed to respond to new petitions (i.e., those submitted after EPA's receipt of BAAQMD's re-proposed permits) by March 15, 2005. *See* 69 Fed. Reg. 46536 (Aug. 3, 2004).

BAAQMD submitted a new proposed permit to EPA on August 26, 2004; EPA's 45-day review period ended on October 10, 2004. EPA objected to the 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 Emissions 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 received 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 SIP-approved Regulation 8-2 to vents at the facility's hydrogen plant
- Applicability of 40 C.F.R. Part 63, Subpart CC to flares
- Applicability of Regulation 8-2 to cooling towers
- Applicability of Regulation 8 rules and 40 C.F.R. Part 60 to slop oil vessels and sludge de-watering operations
- Compliance with 40 C.F.R. Part 61, Subpart FF for benzene waste streams
- Applicability of 40 C.F.R. Part 61, Subpart FF requirements to specific units
- 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 comments on 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.

On February 15, 2005, EPA 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"). EPA is making the following findings.

a. Applicability of SIP-approved District Regulation 8-2 to Hydrogen Plant Vents

Petitioner notes that EPA's October 8, 2004 letter states that the Permit fails to include Regulation 8-2 requirements for VOCs as an applicable requirement for Tesoro's hydrogen plant CO_2 vents, including all control devices and compliance requirements necessary to assure compliance with this limit. Petition at 9.

As noted in EPA's October 8, 2004 letter, CO_2 generation is an inherent part of the hydrogen generation process at the refineries. VOC emissions could violate Regulation 8-2 if the hydrocarbons from the CO_2 vent stream are not adequately controlled. Control options required in other refinery permits issued by the District include scrubbing or incineration of

these emissions. In addition, refineries have installed reformulated catalysts to reduce emissions. *See* EPA October 8, 2004 Letter, Attachment 2 at 2.

In its February 15, 2005, response to EPA's request for more information on this subject, the District stated that Tesoro's hydrogen plant has two CO_2 vents, and that Tesoro controls emissions of VOCs by using reformulated catalyst to minimize the production of methanol. The District further stated that Tesoro recently tested the vents and demonstrated that the exhaust VOC concentration is in compliance with Regulation 8-2. The District stated that, "Rule 8-2-301 will be listed in Table IV-AI as an applicable requirement" and that a new condition would be added to Table VII of the Permit requiring annual compliance testing. BAAQMD February 15, 2005 Letter at 3.

Based on the applicability determination submitted by the District to EPA on February 15, it is now evident that the Permit is missing an applicable requirement for Tesoro's hydrogen plant CO_2 vents and corresponding periodic monitoring requirements. Therefore, EPA is granting Petitioner's request to object to the Permit. The District must include Regulation 8-2 as an applicable requirement for Tesoro's hydrogen plant CO_2 vents along with appropriate periodic monitoring.

b. Applicability of 40 C.F.R. Part 63, Subpart CC to flares

This issue is addressed in Section III.H.1.

c. Cooling Tower Monitoring

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

d. Slop Oil Vessels and Sludge De-watering Operations

Referencing previous EPA comments, Petitioner claims that EPA identified deficiencies in the applicability determination for federal requirements for slop oil vessels and sludge de-watering operations at the facility. Petition at 9.

EPA notes that its previous comments did not find flaws in an applicability determination, but rather requested that the District review the operations at the refinery to determine whether or not slop oil vessels or sludge de-watering operations exist. At the time EPA made the request, there was no apparent flaw in the Permit and therefore no basis for an objection by the Agency.In response to EPA's request for an applicability determination the District indicated that the facility has one slop oil vessel and utilizes an on-site contractor for sludge de-watering activities. *See* BAAQMD February 15, 2005 Letter. The District further stated that requirements from NSPS Subpart QQQ and BAAQMD Regulation 8-8 need to be added to the Permit along with any necessary conditions. Therefore, EPA is granting Petitioner's request to object to the Permit to require that the District document its applicability determination in the Statement of Basis and address the missing applicable requirements.

e. 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 made for Valero, and alleges that the District's silence on the issue raises a question as to whether the control requirements were considered for the operations at Tesoro. Petition at 9.

Petitioner is correct that EPA raised concerns about the District's failure to discuss the control requirements of 40 C.F.R. § 61.342(e)(1) in its applicability determination for Valero. In response to EPA's request for more information on this subject, the District 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." Thus, 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.

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

Referencing EPA's October 8, 2004 letter to the District, 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). Petition at 9.

In its October 8, 2004 letter, EPA raised the issue of incorrect statements by the District regarding wastes subject to the 6 Mg/yr limit under 40 C.F.R. § 61.342(e)(2)(i). Specifically, the District had 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 incorrect information was presented in applicability determinations for the Valero and Shell refineries and in the District's response to comments for the Chevron refinery. The same statements were not included in the record for Tesoro.

The fundamental issues raised by the EPA October 8, 2004 Letter were (i) whether or not the refineries are in compliance with the requirements of the benzene waster operations NESHAP, and (ii) the need to remove the incorrect language from the applicability determinations. 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 is not relevant to Tesoro because the District did not provide an applicability determination for this facility with language that needs correction.

Because Petitioner has not demonstrated a deficiency in the Permit, EPA is denying the Petition as to this issue. In responding to this Petition, however, EPA identified additional incorrect language in the Permit. Specifically, Table IV - A contains an entry that states: "Standards: General; [Uncontrolled] 61.342(e)(2) Waste shall not contain more than 6.0 Mg/yr benzene." *See* Permit at 47. As discussed above, this language is clearly inconsistent with 40 C.F.R. § 61.342(e)(2). Therefore, in a process separate from this Order, EPA will require the District to reopen the Permit to require that the District fix this incorrect language.

g. Applicability of 40 C.F.R. Part 61, Subpart FF Requirements to Specific Units

Petitioner claims EPA determined that the Permit fails to include the requirements of 40 C.F.R. Part 61, Subpart FF in any unit-specific tables, which makes the compliance obligations of the facility unclear. Petition at 9.

Except for two requirements for closed-vent systems and bypass lines in Table VII - CF, the requirements of NESHAP Subpart FF appear in the permit only through section-level references in Table IV - A (Source-specific Applicable Requirements, Facility #B2758). For the reasons explained further below, this method of incorporation by reference without regard to the individual emission units that are subject to the regulation renders the Permit unenforceable as a practical matter and incapable of meeting the Part 70 standard that it assure compliance with all applicable requirements.

EPA has discussed the issue of incorporation by reference in *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (March 5, 1996)("White Paper 2"). As White Paper 2 explains, incorporation by reference may be useful in many instances, though it is important to exercise care to balance the use of incorporation by reference with the obligation to issue permits that are clear and meaningful to those who must comply with or enforce their conditions. *Id.* at 34-38. EPA's expectations for what requirements may be referenced and for the necessary level of detail are guided by Sections 504(a) and (c) of the CAA and corresponding provisions at 40 C.F.R. § 70.6(a)(1) and (3). *Id.* At a minimum, a permit must explicitly state all emission limitations and operational requirements for all applicable emission units at the facility. *Id.* Permitting authorities may reference the details of those limits and other requirements rather than reprinting them in permits provided that (i) applicability issues and compliance obligations are clear, and (ii) the permit contains any additional terms and conditions necessary to assure compliance with all applicable requirements. *Id.* In all cases, references should be detailed enough that the manner in which the referenced material applies to the facility is clear and is not reasonably subject to misinterpretation. *Id.*

EPA has reviewed the use of incorporation by reference in several petition orders. Those orders generally found that incorporation by reference is appropriate in a permit application where the cited requirement is part of the public docket or is otherwise readily available, current, clear and unambiguous, and currently applicable. *See e.g., In the Matter of Elmhurst Hospital,* Petition No. II-2000-09 at 7; *In the Matter of King's Plaza Total Energy Plant,* Petition No. II-2000-03 at 9. *For further discussion, see also White Paper for Streamlined Development of Part 70 Permit Applications* dated July 10, 1995. Although these orders addressed incorporation by reference in the context of a permit application rather than the operating permit, the orders are instruction here since the terms in the District's standard permit application typically serve as the basis for the permit conditions.

With respect to the citations to Subpart FF in Table IV - A of the Permit, the fundamental questions raised are (i) whether the Permit is specific enough to define how the applicable requirement applies to the facility, i.e., is its application unambiguous; and (ii) whether the Permit provides for practical enforceability of the NESHAP. EPA finds in the negative on both of these questions. Given the complexity of the NESHAP and the refinery, it is impossible to determine how the regulation applies to the facility by referring to the section-level citations that are currently provided in the permit. This ambiguity and the applicability questions it creates render the Permit unenforceable as a practical matter. In addition, the lack of detail detracts from the usefulness of the Permit as a compliance tool for the facility.

The BAAQMD February 15, 2005 Letter stated that the District intends to meet with Tesoro to determine which sources are subject to the NESHAP and it agreed that the limits and monitoring requirements should be added to the appropriate tables in Section VII of the permit. *See* BAAQMD Letter dated February 15, 2005.

Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to the manner in which the NESHAP Subpart FF requirements are incorporated into the permit. At a minimum, the District must add the requirements of Subpart FF to all of the unit-specific tables in the permit, as applicable.

h. Parametric Monitoring for Electrostatic Precipitators

Referencing previous EPA comments, Petitioner claims that the Permit contains inadequate monitoring requirements for the electrostatic precipitators ("ESPs"). Petition at 9.

SIP-approved District Regulation 6-310 limits the particulate matter emissions from sources S-901, S-903, and S-904 to 0.15 grains per dry standard cubic foot ("dscf"). Because Regulation 6 does not contain monitoring provisions, the District relied on its periodic monitoring authority to impose monitoring requirements on the sources to ensure compliance with the standard. *See* 40 C.F.R. § 70.6(a)(3)(i)(B); BAAQMD Reg. 6-503; BAAQMD Manual of Procedures, Vol. III, Section 4.6. In every case, the Permit requires an annual source test and continuous monitoring using a continuous opacity monitor.

With respect to the continuous monitoring requirement, the District has not demonstrated how the data collected from the continuous opacity monitors would be used to establish compliance with the applicable concentration limit. As a result, this monitoring requirement does not assure compliance with the standard. Regarding source tests, 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 limit. 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 with the permit. *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 the Permit.

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 four issues related to the Tesoro Permit. The District agreed to address three of these issues prior to issuing the Permit. EPA has reviewed the most recent version of the Permit and determined that it contains the agreed-upon changes: inclusion of NSPS Subpart A as an applicable requirement for flares; removal of a shield from BAAQMD Regulation 8-2; and inclusion of temperature monitoring in Table VV-CF for section 60.692-5(a). Therefore, EPA is denying Petitioner's request to object to the Permit as these issues are moot.

The fourth issue pertains to applicability determinations for support facilities. EPA does not have adequate information demonstrating that the Tesoro 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.

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. Petition at 11.

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. Petition at 11-12.

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.[1] We find no permit deficiency otherwise related to allegedly 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 Permit on December 1, 2003. In support, Petitioner cites the section of its petition (III.D.) alleging that the refinery failed to properly update its compliance certification. Petition at 12.

Title V regulations do not require an applicant to supplement its application with information regarding non-compliance,[2] 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*

[1] 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.

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

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 and available to the public. 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 is denying 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 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 12-21. Petitioner further alleges that a compliance schedule is necessary to address NOVs issued to the plant (including many that are still

pending),[3] one-time episodes[4] 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.* at 23. 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.* at 12-21.

Section 70.6(c)(3) requires title V permits to include a schedule of compliance consistent with Section 70.5(c)(8), which 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

In connection with its claim that the Permit is deficient because it lacks a compliance schedule, Petitioner states that the District issued 165 NOVs to Tesoro between 2001 and 2004 and 99 NOVs in 2003 and 2004. Petitioner highlights that, as of October 22, 2004, all 99 NOVs issued in 2003 and 2004 were unresolved and still "pending." Petition at 15. To support its claims, Petitioner attached to the Petition various District compliance reports and summaries,

[3]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."

[4]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.

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).[5]

Using the District's own enforcement records, Petitioner has demonstrated that 99 NOVs were pending before the District at the time it issued the revised Permit. The District's most recent statements, as of January 2005, do not dispute this fact.[6] 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 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 10.

- July 2003 Statement of Basis, "Compliance Status" section: "The Compliance and Enforcement Division has prepared an Annual Compliance Report for 2001. . . The

[5]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.

[6]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.

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 45.

- 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 31.

- 2003 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 shown that there were nearly 100 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 the NOVs issued to the facility to determine whether a compliance schedule was necessary. The District's 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.[7]

Because the District has 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.

[7]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.*

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.[8] *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. *See* Petition at 16, n. 25. 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 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 18. The Petition then cites, as evidence, the existence of 20 episodes and 13 NOVs for the Coker CO boiler (S-903; boiler #5), 19 episodes and 6 NOVs for another boiler (S-906; boiler #6), 10 episodes a furnace (S-927), 9 episodes and 14 NOVs for the sulfur recovery unit (S-927), and 13 episodes and 5 NOVs for the sulfuric acid manufacturing plant (S-1411).

A close examination of the BAAQMD Episodes chart relied upon by the Petitioner,

[8]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.

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 noncompliance at specific emission units, namely S-903, S-904, S-927, S-1401 and S-1411 with a compliance schedule; (2) the District should impose additional maintenance or installation of monitoring equipment, or new monitoring methods to address the 85 episodes involving inoperative monitors; and (3) the District should impose 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 20-21.

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 proposal, the 85 episodes cited by the Petitioner are for different monitors, and spread over a multi-year period. 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 suggestion regarding additional operation and maintenance requirements to address alleged violations 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")[9] 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 22-23. Petitioner claims to have identified four potential NSR violations at the refinery, as follows: (i) apparent emissions increases at three boiler units (S-901, S-903, and S-904) beyond the NSR significance level for modified sources of NOx, based on the District's emissions inventory indicating dramatic increases in NOx emissions during the 1990s; and (ii) an apparent extensive rebuild of the coker boiler unit (S-903) and its electrostatic precipitator ("ESP") without NSR review, based on information from Babcock and Wilcox Construction Company ("B&W"), the company that managed the boiler upgrade work..[10] Petition at 21-22 and Exhibit A at 34.

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.[11]

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[9] "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.

[10] 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 22; 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*.

[11] 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

Based on the information provided by Petitioner, Petitioner has failed to demonstrate that NSR permitting and BACT requirements have been triggered at boilers S-901, S-903, or S-904. With regard to boilers S-901 and S-904, Petitioner's only evidence in support of its claims are apparent "dramatic" increases in each of these boiler's emissions inventory. However, as the District correctly notes:

> "...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 CRTC at 22. With regard to boiler S-903, Petitioner relies on both the apparent "dramatic" increases in the boiler's emissions inventory and the more substantial evidence regarding the apparent extensive rebuild of the boiler. According to B&W's information sheet:

> "B&W Construction Company managed [S-903] Boiler Complex upgrade work which included the complete rebuild of the boiler, excluding the lower furnace area. Scope included all major components including the generator bank, pendant superheater, horizontal economizer sections an screen wall sections."

Petition, Exhibit A at Exhibit D. In addition, Southern Environmental, Inc., apparently performed a "total rebuild" of the boiler S-903's ESP. Petition, Exhibit A at Exhibit E.

In response to EPA's comments regarding the applicability of NSR requirements to this boiler, the District recently stated that:

> Boiler [S-903] underwent a maintenance turnaround in 1996 wherein the generating tubes and the superheater tubes were replaced with identical equipment. In 2002, during the Coker/Boiler [S-903] turnaround, additional tubes were replaced, along with the covering or metal 'skin' of the boiler. These were identical replacements to repair deteriorating tubes and the worn cover to return the boiler to its design integrity. These do not constitute a modification and there were no associated increases in emissions. According to Tesoro, if the tubes were

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"BACT" to signify "LAER."

not replaced with identical components, then the boiler design would be affected and boiler damage could result.

District Response to EPA's April 14, 2004 Comments.

While EPA believes that the available evidence does not support the District's assessment that these "identical replacements" do not constitute a modification under NSR rules, EPA is unable to conclude at this time that these physical changes resulted in a daily or annual cumulative emissions increase that would trigger NSR requirements. *See* District Regulation 2-2-301 (*as amended on* Oct. 7, 1981; Nov. 1, 1989; and, for the 2002 "turnaround," Jun. 15, 1994) and District Regulation 2-2-304 (*as amended on* Nov. 1, 1989; and, for the 2002 "turnaround," Jun. 15, 1994). Until further evidence is developed to support a different conclusion, EPA cannot discount the District's assertion that there were no increases in emissions associated with these physical changes.[12]

Petitioner does not claim to have sufficient evidence to establish that these units are subject to NSR permitting and the application of BACT.[13] 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 22. 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 22 (*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 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 Tesoro 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

[12] Similarly, EPA also lacks sufficient evidence to conclude at this time that the 1996 "turnaround" constituted a "replacement" that would have triggered the application of BACT under the District's pre-1999 state implementation plan Regulation 2-2-302.

[13] Even with regard to boiler S-903, Petitioner recognizes that (i) upgrades may result in short term actual emission rates that stay the same or decline, and (ii) emissions increases at the boiler may have been offset by emissions reductions elsewhere at the refinery. Petition, Exhibit A at 34. In other words, Petitioner recognizes that more information is necessary to establish the triggering of NSR requirements at boiler S-903.

or reopen the title V permit to incorporate the applicable NSR requirements.[14]

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, EPA is denying the Petition on this issue.

3. Intermittent and Continuous Compliance

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

[14] 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.

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 process flow diagrams which would "illustrate how the sources, abatement devices and waste streams are connected;"

- 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; and

- 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 a 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 p. 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 MACT 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.[15] In addition, Petitioner has not established a legal basis to support its claim that information about the 2004 reopening 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

[15]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.

denies the Petition on this ground.

E. Permit Shields

Petitioner alleges that the shield in Table IX A-6 of the Permit is improper and that EPA should object to the Permit until it provides that certain sources are subject to Regulation 10. Petition at 29.

The shield in Table IX A-6 of the proposed Permit shields all of Tesoro's flares from the requirements of SIP-approved District Regulation 8-2 on the basis that the flares are already regulated under BAAQMD Regulation 10. *See* proposed Permit at 667. BAAQMD Regulation 10 incorporates by reference New Source Performance Standards, including NSPS Subpart J. However, the Permit and Statement of Basis for four of these flares (S-943, S-944, S-945, and S-1012) indicate that they are not actually subject to an NSPS standard, and are therefore not regulated by Regulation 10. *See* December 16, 2004 Statement of Basis at 10 and Permit at 90. Petitioner therefore alleges that EPA should object to the permit shield. EPA agrees that the permit shield contained in Table IX A-6 of the proposed Permit is improper for the reasons set forth by Petitioner. EPA notes, however, that these four sources were removed from the permit shield for the final Permit issued on December 16, 2004, in response to EPA comments. *See* Permit at 663.Therefore, EPA is denying this issue as moot.

However, EPA notes that although these sources are no longer shielded from the requirements of Regulation 8-2, the applicability of Regulation 8-2 has not been addressed in the Permit or in the Statement of Basis for these sources. Therefore, in a process separate from this Order, EPA intends to require the District to reopen the Permit to address this deficiency.

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." Petition at 29. 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 RTC 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 CRTC 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, we have 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. We do 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, we find 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 we share 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 not inappropriate. 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. We find no basis, however, to conclude that the Permit is deficient.

G. Monitoring

Petitioner alleges that the District did not include sufficient monitoring to assure compliance with applicable requirements, as required by 42 U.S.C. §7661d(a); 40 C.F.R. §§ 70.6(a)(3) and (c)(1). Petition at 31-35.

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

Petitioner alleges that the Permit does not assure compliance with all applicable requirements of NSPS Subpart J. Petitioner notes that there is no way to determine whether flares are operating in compliance with the prohibition in Subpart J and claims that the Permit must require a federally enforceable reporting requirement to verify that each flaring event would qualify for an exemption from the H_2S limit. Petitioner alleges that the exemption contained in section 60.104(a)(1) is limited only to the emission standard, and that the Permit fails to ensure that all other requirements of NSPS J are practically enforceable by imposing monitoring pursuant to 40 C.F.R. §§ 70.6(a)(3)(i)(B), 70.6(c), and section 504(c) of the Act. Petition at 32.

EPA finds that Petitioner has not met the requirements of 40 C.F.R. § 70.8(d), which requires that a petition be "based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in § 70.7(h) of this part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period."

In reviewing all comments submitted by the public[16] on Tesoro's title V permit, EPA was unable to determine that this issue had been raised with reasonable specificity during the public comment periods provided for in § 70.7(h). EPA contacted Petitioner via email for further information. *See* email from Kathleen Stewart, US EPA, to Helen Kang, GGU, January 31, 2005.

Petitioner stated that:

> The applicability of NSPS Subpart J to Tesoro flares was previously raised by OCE in its 2002 public comments. *See* September 17, 2002 letter to Terry Carter of BAAQMD. Specifically, the first full paragraph on page 40 directly addresses this issue. Also, see pages 38-39 for discussion of general NSPS applicability to sulfur dioxide emissions from flares.

Petitioner also states that EPA specifically raised the issue of NSPS Subpart J applicability to flares in its July 28, 2004 letter to BAAQMD at pages 2-3, and that the fact that EPA identified this deficiency yet failed to object is an additional issue in OCE's petition that could not be raised previously. EPA addresses this allegation in Section III.A.1 of this Order.

EPA reviewed the 2002 comments referred to by Petitioner. The only place on page 40 in which NSPS Subpart J is mentioned is in a sentence related to good air pollution control practices. This sentence states: "The District should place additional operational requirements on the refinery to insure that good air pollution control practices are being followed, and to reduce the probability of process upsets. Under 40 C.F.R. § 60 Subpart J, the District has the authority to require these types of limitations." EPA finds that this comment is not reasonably specific to the petition issue at hand, that the Permit does not contain monitoring sufficient to assure compliance with all applicable requirements of NSPS Subpart J. Pages 38 and 39 of the 2002 comments discuss sulfur dioxide emissions from the refinery flares, but again are focused on good air pollution control practices and do not address the applicability of, or compliance with, NSPS Subpart J. EPA additionally finds that it was practicable for Petitioner to raise such objections within the public comment period because this alleged flaw was present in the draft Tesoro Permit proposed for public review in March 2004. It is also telling that Petitioner did raise this issue for the Valero Permit in its April 14, 2004 comment letter to the District. *See* comment letter at 5.

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[16]EPA reviewed comments submitted during the following public comment periods:
1. June 29-September 28, 2002
2. August 5-September 22, 2003
3. March 1-April 14, 2004

For the reasons cited above, EPA finds that Petitioner has not met the requirements of § 70.8(d) and is denying the Petition on this issue on procedural grounds. However, EPA does agree with Petitioner that there is a material flaw in the Permit with respect to NSPS Subpart J. For that reason, in a process separate from this Order, EPA intends to require the District to reopen the Permit to address this issue.

2. Flares and Opacity

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. Petition at 33-34.

The opacity limit in Regulation 6-301 does not require monitoring. Because the underlying applicable requirement imposes no monitoring, 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. 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 Towers and Regulations 8-2 and 6

Petitioner claims that the Permit lacks monitoring conditions adequate to assure that the cooling towers comply with SIP-approved District Regulations 8-2 and 6. Petitioner further alleges that the District's decision not to 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. Petition at 34.

a. Regulation 8-2

District Regulation 8-2-301 prohibits miscellaneous operations from discharging into the atmosphere any emission that contains 15 pounds per day and a concentration of more than 300 ppm total carbon. Although the underlying applicable requirement does not contain monitoring requirements, the District did not impose periodic monitoring on the sources in Table VII-T.

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 (i) the likelihood of a violation given the characteristics of normal operation, (ii) the degree of variability in the operation and in the control device, if there is one, (iii) the potential severity of impact of an undetected violation, (iv) the technical feasibility and probative value of indicator monitoring, (v)) the economic feasibility of indicator monitoring, and (vi) whether

there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

In addition, the District provided calculations that purported to quantify the emissions from the facility's cooling towers. The calculations relied upon water circulation and exhaust airflow rates supplied by the refinery in addition to two AP-42 emission factors. The District found that the calculated emissions were much lower than the regulatory limit and concluded that monitoring was not necessary for any of the cooling towers. EPA has determined, however, that 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. AP-42 Fifth Edition, Volume I, Introduction. The use of these emission factors may be appropriate in some permitting applications, such as establishing operating permit fees. *Id*. EPA, however, has also stated that AP-42 factors do not necessarily 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 of emission rates, they are not necessarily indicative of the emissions from a given source at all times; with a few exceptions, use of these factors to develop source-specific permit limits or to determine compliance with permit requirements is generally not recommended. *Id.*; AP-42 Fifth Edition, Volume I, Introduction. The District's reliance on the emission factors in making its monitoring decision is therefore problematic.

Atmospheric emissions from the cooling towers include fugitive VOCs and gases that are stripped from the cooling water as the air and water come into contact. In an attempt to develop a conservative estimate of the emissions, the District used the emission factor for "uncontrolled sources." For these sources, AP-42 Table 5.1.2 estimates the release of 6 pounds of VOCs per million gallons of circulated water. This emission factor carries a "D" rating, which means that it was developed from a small number of facilities, and there may be reason to suspect that the facilities do not represent a random or representative sample of the industry. In addition, this rating means that there may be evidence of variability within the source population. In this case the variability stems from the fact that (i) contaminants enter the cooling water system from leaks in heat exchangers and condensers, which are not predictable, and (ii) the effectiveness of cooling tower controls is itself highly variable, depending on refinery configuration and existing maintenance practices.[17] 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

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

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, 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

SIP-approved BAAQMD Regulation 6 contains four particulate matter emissions standards, none of which prescribe monitoring. The District did not impose monitoring on any of the cooling towers to assure compliance with the Regulation 6 standards. EPA considers the District’s decision for each standard separately below.

(1) Regulation 6-310

BAAQMD Regulation 6-310 limits the emissions from the cooling towers 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 towers 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/1000 gal circulating water from Table 13.4-1 of AP-42. The calculations show that the emissions are expected to be approximately 42 to 138 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.[18]

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 5 to 17 times lower than the regulatory limit.[19]

The District has provided sufficient evidence (*i.e.*,actual drift and TDS data) 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,

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[18]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.

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

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 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 rates for the cooling towers are at or above the maximum level specified in Table 1, the rule establishes a maximum emission rate of 40 lb/hr for these sources. The District's justification for not requiring monitoring to assure compliance with this limit is provided on page 37 of the December 1, 2003 Statement of Basis. Specifically, the District stated, "No monitoring is proposed because PM-10 emissions are calculated to be less than or equal to 0.019 pounds per 1000 gallons of circulation water, well beneath the applicable limit." This estimate of the emissions is equal to the emission factor in Table 13.4-1 of AP-42.

As discussed above with respect to Regulations 8-2 and 6-310, the fundamental question in assessing the District's use of emission factors and calculations is whether the emissions could vary by a degree that would cause an exceedance of the applicable standard. By multiplying the emission factor with the water circulation rates listed in Appendix G of the Statement of Basis, EPA found the emissions from two of the cooling towers to be in excess of the allowable limit.[20] For the remaining cooling towers listed in the Appendix, the estimated emissions range between 12% and 99% of the standard.

Although the District stated that the emission factor was more conservative than the drift and TDS data supplied by the refineries, it did not state how conservative it is. This situation is analogous to Fort James in that the calculated margins of compliance do not reasonably assure compliance with the standard and the District did not provide evidence showing it is not possible for the cooling towers to exceed the applicable limit. 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." EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, and Petitioner has not proposed

[20]For sources S-975 and S-976, the calculated emission rates using the cited emission factor are 78.66 lb/hr and 85.5 lb/hr, respectively.

any such monitoring. 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. The December 1, 2003 Statement of Basis provides the District's justification for not requiring monitoring to assure compliance with this standard. Specifically, the District stated that no monitoring was proposed because "visible emissions from these sources are historically negligible and are expected to continue to be less than Ringelmann 1." Statement of Basis at 35. In addition, the District's 2003 CRTC states the emission 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 District 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 35.

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 there are several requirements for which monitoring is either absent from the Permit or is insufficient to assure compliance. Petition at 35. Each of the sources and applicable requirements at issue are discussed separately below.

a. Fluid coker (S-806) and ESP (A-806) / BAAQMD Regulations 6-301, 6-305, and 6-310

SIP-approved District Regulation 6 contains three particulate matter emission standards for which Petitioner objects to the absence of monitoring. Specifically, Regulation 6-301 limits visible emissions to Ringelmann No. 1, Regulation 6-305 regulates nuisance fallout, and Regulation 6-310 limits the emissions to 0.15 grains per dscf. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

EPA is denying Petitioner's request to object to the Permit as it pertains to Regulation 6-305 because EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, nor has Petitioner proposed any such monitoring. Regulations 6-301 and 6-310 are discussed further below.

The December 1, 2003 Statement of Basis sets forth the basis for the District's decision that monitoring is not necessary to assure compliance with the requirements of Regulation 6.[21] Specifically, the District stated, "No monitoring is proposed because these coke generating/processing sources are enclosed, the coke is handled as a wet slurry, transfer points are abated by an electrostatic precipitator and because particulate emissions are expected to be negligible." This statement is in contrast to evidence to brought forth by Petitioner in its September 22, 2003 comment letter to the District, which states that according to the District's inventory, Source 806 emitted approximately 100 tons of PM in 2001.[22] On September 26, 2003, EPA made a similar comment regarding this emission unit and stated that monitoring for S-806

[21]While the District did not provide a separate monitoring determination specifically for Regulation 6-310, the basis for not requiring monitoring for this standard is presumably the same as that for Regulation 6-301.

[22]The proposed Permit was the subject of a 90-day public comment period and a public hearing on July 18, 2002. Partly as a result of the comments received, the District revised the Permit and held a second public comment period beginning on August 5, 2003 to allow for review of the updates and corrections. For this second review period, the District invited comments only on the updates and corrections made relative to the permit that was originally offered for review. At the time Petitioner made this comment in 2003, the District declined to provide a response because the comment was considered to be outside the scope of the revisions made to the previous draft and therefore untimely. *See* District Response to GGU Comments at 4 (2003). However, EPA notes that this comment first appeared in Petitioner's September 17, 2002 comment letter, which was submitted in response to the District's first notice inviting written public comments. As a result, EPA believes the issue deserves further attention from the District.

should be added to the permit.[23] In response to this comment, the District agreed and stated that the suggested change should be implemented. However, the current permit contains no monitoring requirements.

The need for monitoring is further supported by the request for a Conditional Order for Abatement that the District filed with the Hearing Board on February 23, 2005. In its request, the District stated, "[the coker flue gas emissions] contain high concentrations of sooty, carbonaceous particulate matter. [Tesoro] uses a waste heat boiler equipped with an Electrostatic Precipitator ("ESP") to control the emissions, but this equipment can and does break down...As a result, sooty particulate matter is emitted into the atmosphere where it creates a large black plume...These emissions...violate a number of District regulations." Given the limited scope of the discussion in the Statement of Basis, EPA believes that Petitioner has demonstrated that a flaw in the Permit may have resulted to warrant an objection by EPA and further review by the District. Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to monitoring for Regulations 6-301 and 6-310. The District must reopen the Permit to include periodic monitoring adequate to assure compliance with Regulations 6-301 and 6-310 or explain further in the Statement of Basis why monitoring is not needed.

b. FCCU (S-802) / BAAQMD Regulations 6-301, 6-305, and 6-310

BAAQMD Regulation 6 contains three particulate matter emission standards for which Petitioner objects to the absence of monitoring. Specifically, BAAQMD Regulation 6-301 limits visible emissions to Ringelmann No. 1, Regulation 6-305 regulates nuisance fallout, and Regulation 6-310 limits the emissions to 0.15 grains per dscf. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on this source.

EPA is denying Petitioner's request to object to the permit as it pertains to Regulation 6-305 because EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, nor has Petitioner proposed any such monitoring. Regulations 6-301 and 6-310 are discussed further below.

The December 1, 2003 Statement of Basis sets forth the basis for the District's decision that monitoring is not required. Specifically, the District states, "No monitoring is proposed because emissions are expected to be negligible."[24] In contrast, Condition 11433 requires that S-802 be abated by electrostatic precipitator A-30 at all times and limits the total PM emissions from S-802/S-901 to 151.5 tons per year. *See* Permit at 453. In addition, Table IIB indicates that ESP operating parameters should be established to assure compliance with Regulations 6-

[23] *See EPA Review of Three Proposed Refinery Title VI Major Facility Review Permits, Enclosure B*, at 2-3 (September 26, 2003).

[24] While this monitoring determination was made with respect to Regulation 6-311, the basis for the District's decision regarding Regulations 6-301 and 6-310 is presumed to be the same.

301, and 6-310. *See* Permit at 34.

In its September 26, 2003 comment letter to the District, EPA noted that the District's emission inventory indicated that the emissions from this unit could be substantial. EPA further stated that monitoring should be added to the permit for the ESP to assure compliance with the PM and opacity limits.[25] In response to this comment, the District agreed and stated that the suggested change should be implemented. However, while Table IIB of the current permit indicates that ESP operating parameters should be established to assure compliance with Regulations 6-301, and 6-310, Table VII - K of the permit contains no actual monitoring requirements. *See* Permit at 34 and 540. Given this apparent conflict, EPA finds that the District's monitoring decision is not adequately supported by the record. Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to Regulations 6-301 and 6-310. The District must reopen the Permit to add periodic monitoring that assures compliance with the applicable requirements or explain further in the Statement of Basis why it is not needed.

c. FCCU Catalyst Hoppers (S-97 and S-98) and Baghouses A-3 and A-4 / BAAQMD Regulations 6-301, 6-305, and 6-310

BAAQMD Regulation 6 contains three particulate matter emission standards for which Petitioner objects to the absence of monitoring. Specifically, BAAQMD Regulation 6-301 limits visible emissions to Ringelmann No. 1, Regulation 6-305 regulates nuisance fallout, and Regulation 6-310 limits the emissions to 0.15 grains per dscf. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

EPA is denying Petitioner's request to object to the permit as it pertains to Regulation 6-305 because EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, nor has Petitioner proposed any such monitoring. Regulations 6-301 and 6-310 are discussed further below.

For both of these sources, which are abated by baghouses and (in the case of S-97) an electrostatic precipitator, Table IIB indicates that the baghouse pressure gauges should be monitored and that ESP operating parameters should be established to assure compliance with Regulations 6-301, 6-305, and 6-310. *See* Permit at 30 and 34. However, Table VII C of the Permit states that monitoring is not required for 6-301 or 6-310. 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 Regulations 6-301 and 6-310. The District must reopen the Permit to include periodic monitoring that yields reliable data that are representative of the source's compliance with the Permit or explain in the Statement of Basis

[25] *See EPA Review of Three Proposed Refinery Title VI Major Facility Review Permits, Enclosure B*, at 2-3 (September 26, 2003).

why monitoring is not needed.

d. Diesel Backup Engines (S-1487 and S 1488) / BAAQMD Regulations 6-301, 6-305, and 6-310

BAAQMD Regulation 6 contains three particulate matter emissions standards for which Petitioner objects to the absence of monitoring. Specifically, Regulation 6-301 limits visible emissions to less than Ringelmann No. 1; Regulation 6-305 regulates nuisance fallout; and Regulation 6-310 limits the emissions to 0.15 gr. per dscf. 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. Therefore, EPA is denying Petitioner's request to object to the Permit as it pertains to monitoring for Regulation 6-301. In addition, EPA is denying Petitioner's request to object to the permit as it pertains to Regulation 6-305 because EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, nor has Petitioner proposed any such monitoring. Regulation 6-310 is discussed further below.

With regard to Regulation 6-310, the District provided no justification for its decision that monitoring is not necessary. As discussed elsewhere in this order, EPA has 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. Therefore, EPA is granting Petitioner's request to object to the Permit. The District should add monitoring to the Permit or explain in the Statement of Basis why it is not needed.

e. Claus 3-Stage Sulfur Recovery Unit (S-1401) / BAAQMD Regulation 9-1-313.2

Table VII - AK of the Permit requires that the facility conduct an annual source test to demonstrate (1) that 95% of the H_2S in the refinery fuel gas is removed and recovered on a refinery-wide basis, (2) that 95% of the H_2S in the process water streams is removed and recovered on a refinery-wide basis, and (3) that 95% of the ammonia in the process water stream is removed. In addition, the Permit requires that the facility perform monitoring of its fuel gas for H_2S using continuous online H_2S analyzers and summarize the results an annual report. Though Petitioner alleges that this monitoring is inadequate to assure compliance with the applicable requirement, it provided no evidence in support of its claim. Therefore, there is no basis upon which to grant Petitioner's request to object to the Permit as it pertains to monitoring for Regulation 9-1-313.2.

f. Heat Exchanger Cleaning Pits (S-823 and S-824) / BAAQMD Regulations 6-301, 6-304, and 6-305

BAAQMD Regulation 6 contains three particulate matter emissions standards for which Petitioner objects to the absence of monitoring. Specifically, Regulation 6-301 limits visible emissions to less than Ringelmann No. 1; Regulation 6-304 limits visible emissions during tube cleaning to Ringelmann No. 2; and Regulation 6-305 regulates nuisance fallout. Petition at 35. Regulation 6 does not contain periodic monitoring requirements for any of the standards and the District did not impose monitoring on these sources.

EPA is denying Petitioner's request to object to the permit as it pertains to Regulation 6-305 because EPA is unaware of any periodic monitoring that would enhance the ability of the Permit to assure compliance with the applicable requirement, nor has Petitioner proposed any such monitoring. Regulations 6-301 and 6-310 are discussed further below.

For Regulation 6-301, EPA finds that the Statement of Basis is lacking a monitoring evaluation for these units. Despite past comments from Petitioner, no specific evaluation of the monitoring for these units is given anywhere else in the public record, such as a response to comments document.[26] Therefore, EPA is granting Petitioner's request to object to the Permit as it pertains to monitoring for Regulation 6-301. The District must reopen the Permit to add monitoring that assures compliance with the applicable standard or explain in the Statement of Basis why no monitoring is needed.

For Regulation 6-304, EPA finds that the Permit is lacking the monitoring described for these units in the Statement of Basis. The District's Statement of Basis for the initial December 1, 2003 Permit says that hourly monitoring on an event basis during tube cleaning is necessary for units S-823 and S-824 due to possible emissions from improper cleaning of soot from furnace tubes. Statement of Basis at 33 and 34. However, the current title V Permit does not require any monitoring for Regulation 6-304. Permit at 544, Table VII-O. Therefore, with respect to monitoring for Regulation 6-304, EPA is granting the Petition on this issue. The District must reopen the Permit to include the monitoring in Section VII that the District has deemed necessary.

H. Miscellaneous Permit Deficiencies

1. Missing Federal Requirements for Flares

Petitioner claims that the District failed to provide enough information to determine the applicability of 40 C.F.R. § 63 Subpart CC (NESHAP for Petroleum Refineries) to Tesoro flares. Petitioner states that "EPA disagreed with the District's claim that the flares qualify for a

[26]The District's July 25, 2003 Response to Comments document states: "The District's determination that 'no monitoring' is adequate to assure compliance for these applicable requirements is contained in the Statement of Basis. The District maintains that these determinations are reasonable."

categorical exemption from Subpart CC when used as an alternative to the fuel gas system." Petitioner further 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 Tesoro 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 these applicability determinations via Attachment 2 of its October 8, 2004 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 Tesoro 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. Part 60, Subpart A is adequately addressed in the Statement of Basis for the most recent revised Permit. *See* Statement of Basis (Dec. 16, 2004) at 10 and 13. The District has included a table on page 10 of the December 16, 2004 Statement of Basis indicating applicability of NSPS Subpart A to each of Tesoro's flares. The December 16, 2004 Statement of Basis further explains the applicability of NSPS Subpart A to Tesoro's flares. *Id.* at 16. Therefore, EPA is denying the Petition on this issue.

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

EPA finds that the applicability of 40 C.F.R. Part 63, Subparts A and CC are not adequately addressed in the December 16, 2004 Statement of Basis. The table on page 10 contains a column for the applicability of "40 C.F.R. 63." For each flare, the District has indicated in this table that no requirement from 40 C.F.R. Part 63 applies to Tesoro's flares. No explanation is given as to how the District arrived at this conclusion. Given that the applicability determination for 40 C.F.R. Part 63, Subpart CC is somewhat complex, EPA agrees with Petitioner that the District has not provided a sufficient analysis regarding the applicability of 40 C.F.R. Part 63, Subparts A and CC to Tesoro's flares. Therefore, EPA is granting the Petition on this issue. The District must reopen the Permit to address applicability of these requirements in the Statement of Basis, and if necessary, to add any applicable requirements to the Permit for Tesoro's flares.

2. Missing Appendix

Petitioner notes that information referenced in the Permit is supposed to be attached to the Permit, but is not.

EPA agrees with Petitioner that this information is both necessary and absent from the Permit and grants the Petition in this regard. For instance, the Permit states that: "The specific

emission points covered by the various limitations listed in A-D below are set forth in Table A of the Appendix to these conditions." Permit at 397. The condition does not contain the referenced information, nor could EPA locate the information elsewhere in the Permit.[27] The District must include the cited appendices or otherwise correct the Permit by including the necessary information.

3. 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 IID of the permit. Petition at 36.

Table IID of the Permit contains a list of 87 tanks 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 IID, Petitioner's claim that the Statement of Basis lacks the information is factually incorrect. Petitioner is referred to pages 6-10 of the District's December 1, 2003 Statement of Basis. 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[28] and in a Notice of Deficiency (NOD) issued to the State of Texas.[29] 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.

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[27]EPA notes that pictures of icons on page 675 of the December 16, 2004 permits indicate that the District may have intended to include the information there; however it is not included.

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

[29]67 Fed. Reg. 732 (January 7, 2002).

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 [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 Tesoro Permit, the majority of the sources listed in Table IID are identified in the December 1, 2003 Statement of Basis along with a citation from Regulation 2 describing the basis of the exemption. In most cases, the regulatory citation is detailed enough to determine the specific exemption claimed by the Facility. 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. In reviewing the relevant documents, however, EPA noted that five of the sources listed in Table IID of the Permit are not included in the Statement of Basis with the corresponding citations for the exemptions.[30] 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 to document the basis for the exemptions but only as the request pertains to the five sources not included in the Statement of Basis. When revising the Statement of Basis, the District should be advised of additional discrepancies between it and Table IID of the permit. Specifically, Table IID is missing eight sources that are identified as exempt from Regulation 2 in the Statement of Basis and that appear elsewhere in the permit. While this does not necessarily mean that the Permit is flawed (because the sources may no longer be exempt, for example), it does raise questions regarding the accuracy of the information presented in the Statement of Basis. The District is therefore encouraged to review the circumstances for all of the sources in Table IID 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.[31]

4. Missing Information on Tanks

Petitioner claims that fifty-eight tanks were claimed in the application as exempt from

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[30]Compare Table IID of the Permit with the December 1, 2003 Statement of Basis for sources S-22, S-59, S-131, S-212, and S-654.

[31]EPA also encourages the District to add the citation for each exemption to the Permit as was done for other refinery permits the District has issued.

permitting requirements pursuant to BAAQMD Regulation 2 but that the tanks and justification of the exemptions are missing from the Permit and the Statement of Basis. As a result, Petitioner is requesting that the Administrator object to the Permit until the District determines the status of the tanks and any exemptions being claimed. Petition at 37.

Petitioner is referred to page 6 of the District's December 1, 2003 Statement of Basis, which explains the absence of nineteen of the fifty-eight sources by stating that they have been demolished or were never constructed.[32] For these sources, EPA finds Petitioner's claim to be factually incorrect and therefore, denies it as moot. However, the claim will be considered as it applies to the remaining thirty-nine sources.

As previously discussed, 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. In the present case, Petitioner has identified thirty-nine existing emission units that appeared in the application but not in the Permit. Of those, nineteen are included in the table of exempt sources of the December 1, 2003 Statement of Basis along with a citation for one of the exemptions in Regulation 2-1.[33] For these sources, Petitioner's claim that the record does not support the basis for the exemption is again factually incorrect. With regard to their absence from the Permit, the fact that an exempt source appears in the Statement of Basis does not mean that it must be included in Table IID or any other portion of the permit. As stated on page 40 of the Permit, Table IID contains a list of sources that have been determined to be exempt from the requirements of BAAQMD Regulation 2, and that have applicable requirements listed in Section IV. Absent any information from Petitioner suggesting that these nineteen sources have applicable requirements, EPA has no reason to believe that the Permit is deficient. Therefore, for these nineteen sources, EPA is denying Petitioner's request to object to the Permit but recommends the District verify that their absence from Table IID of the Permit is appropriate.

For the remaining twenty sources identified in the Petition, EPA agrees that the District failed to document the basis for the exemptions and explain their absence from the Permit. This situation is analogous to Petitioner's claim above that the Statement of Basis and the Permit lack adequate information to support the proposed exempt status for certain tanks. Therefore, for the reasons discussed above, EPA is granting Petitioner's request to object to the Permit but only as it pertains to the following tanks: A-223, 231, 240, 276, 370, 371, 372, 373, 375, 376, 384, 387, 388, 389, 390, 506, 507, 539, 615, and 718. The District should investigate the status of these sources and add them to the Permit along with any applicable requirements or explain their

[32]Page 6 of the December 1, 2003 Statement of Basis states that sources S180 - S197 and S294 have been demolished or were never constructed at the plant.

[33]See table of exempt sources on pages 6-10 of the December 1, 2003 Statement of Basis, which provides the basis of the exemption for the following sources: S198, S514 - S515, S554, S572, S597 - S599, S618, S646 - S649, and S666 - S670.

absence in the Statement of Basis.

Petitioner also claims that Tank B-23 is listed as a permitted source in the Permit application but is not mentioned at all in the permit. As a result, Petitioner requests that the Administrator object to the Permit until the District determines the status of the tank.

As stated on page 6 of the District's December 1, 2003 Statement of Basis, Tank B-23 is not included in the Permit because it was removed from service after submission of the application. Absent information suggesting that the tank actually is in service, EPA has no reason to believe that the Permit is deficient. Therefore, EPA is denying Petitioner's request to object to the Permit as the request pertains to Tank B-23.

I. 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. Petition at 37-38.

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 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*, 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 failed to 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 is denying the Petition on this issue.

J. Environmental Justice

Petitioner alleges that EPA must object to the Permit because it "has significant implications for environmental justice [and] . . . issuance of the permit violates title VI of the federal Civil Rights Act of 1964, 42 U.S.C. § 2000d *et seq.*" Petition at 38-41. Petitioner cross-references its allegations regarding deficiencies in the Statement of Basis and public process and specifically alleges that "the District failed to make relevant information available to the public and failed to adequately explain its permitting decisions." Petition at 40. Petitioner also refers to its allegations regarding the District's failure to adequately address non-compliance as a basis for finding environmental injustice.

To justify exercise of an objection by EPA to a title V permit pursuant to Section 505 (b)(2) of the Act, Petitioner must demonstrate that the Permit is not in compliance with the requirements of the Act. EPA's responses to Petitioner's substantive claims regarding the Statement of Basis, public process and non-compliance are addressed in Sections III.C. and D. EPA notes, however, that its conclusions with regard to the adequacy of a title V permit are not determinative of whether an environmental justice issue exists. An EPA finding that an objection is warranted does not necessarily constitute a finding of environmental injustice. Petitioner has provided no legal or factual basis for EPA to conclude that the Agency must object to the Permit on the grounds of environmental justice.

If Petitioner believes there are environmental justice issues related to the Permit, Petitioner may file a complaint under title VI of the Civil Rights Act of 1964, as amended, and EPA's implementing regulations, which prohibit discrimination of recipients of EPA assistance on the basis of race, color, or national origin. 42 U.S.C. § 2000d et seq.; 40 C.F.R. Part 7. As a recipient of EPA financial assistance, the activities and programs of BAAQMD, including its issuance of the Permit, are subject to the requirements of title VI and EPA's title VI regulations. Any complaint must meet the jurisdictional criteria that are described in EPA's title VI regulations in order for EPA to accept it for investigation.[34]

[34]Under title VI, a recipient of federal financial assistance may not discriminate on the basis of race, color, or national origin. Pursuant to EPA's title VI administrative regulations, EPA's Office of Civil Rights conducts a preliminary review of title VI complaints for acceptance, rejection, or referral. 40 C.F.R. § 7.120(d)(1). A complaint

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 Tesoro 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

should meet jurisdictional requirements as described in EPA's title VI regulations. First, it must be in writing. Second, it must describe alleged discriminatory acts that may violate EPA's title VI regulations. Title VI does not cover discrimination on the grounds of income or economic status. Third, it must be timely filed. Under EPA's title VI regulations, a complaint must be filed within 180 calendar days of the alleged discriminatory act. 40 C.F.R. § 7.120(b)(2). Fourth, because EPA's title VI regulations only apply to recipients of EPA financial assistance, it must identify an EPA recipient that allegedly committed a discriminatory act. 40 C.F.R. § 7.15.