BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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In the Matter of the Proposed Title V Operating Permit Issued to

Valero Refining Company – California to operate a petroleum refinery located in Benicia, California

Issued by the Bay Area Air Quality Management District Facility Permit #B2626

PETITION REQUESTING THE ADMINISTRATOR TO OBJECT TO ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT ISSUED TO VALERO REFINING COMPANY – CALIFORNIA

INTRODUCTION

Pursuant to section 505(b)(2) of the Clean Air Act (the "Act"), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Our Children's Earth, Sierra Club-Redwood Chapter-Solano Group, and Environment California hereby petition the Administrator ("Administrator") of the United States Environmental Protection Agency ("EPA") to object to issuance of the proposed Title V Operating Permit issued to Valero Refining Company – California ("Valero Refining") Facility #B2626, Permit Application #16423 ("Refinery permit").

The Bay Area Air Quality Management District ("BAAQMD" or "District") submitted the proposed Title V permit for EPA's review on August 5, 2003. *See* Letter to Jack Broadbent, Director, Air Management Division, U.S. EPA Region 9, August 5, 2003.¹ EPA received the proposed Title V permit on August 13, 2003, and its 45-day review period ended on September 26, 2003.² This petition is timely because it is filed within sixty days of the expiration of EPA's 45-day review period, as required by section 505(b)(2) of the Act. *See* 42 U.S.C. § 7661d(b)(2). The Administrator must grant or deny this petition within sixty days after it is filed. *See id.* In compliance with section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), this petition is based on

¹ Available at http://yosemite.epa.gov/R9/AIR/EPSS.NSF/6924c72e5ea10d5e882561b100685e04/ 7c9b342e091d92fc86256d7c00018ce8/\$FILE/B2626epa8-5-03.pdf (last accessed November 10, 2003).

² See http://yosemite.epa.gov/R9/AIR/EPSS.NSF/e0c49a10c792e06f8825657e007654a3/ 78c91a0d32c3bad286256d7b00839ff7?OpenDocument (last accessed November 6, 2003).

objections to the Refinery permit that were raised during the public comment period or on grounds that arose after the public comment period.³

<u>PETITIONERS – OUR CHILDREN'S EARTH, SIERRA CLUB-REDWOOD CHAPTER-</u> <u>SOLANO GROUP & ENVIRONMENT CALIFORNIA</u>

Petitioner Our Children's Earth ("OCE") is an organization dedicated to protecting the public, especially children, from the health impacts of pollution and other environmental hazards and to improve environmental quality for the public benefit. OCE has members who live, work, recreate and breathe air in the San Francisco Bay Area, including Benicia, California, where Valero Refining is located. OCE is active in issues concerning air quality in the Bay Area and throughout the State of California.

Petitioner Sierra Club is an organization dedicated to practicing and promoting the responsible use of the earth's ecosystems and resources. The Redwood Chapter-Solano Group of the Sierra Club encompasses Sierra Club members living in Solano County.

Petitioner Environment California is a statewide non-profit public interest advocacy organization with members throughout California. Environment California works exclusively on protecting California's air, water and open spaces and takes action at the local, state and national level to improve the quality of the environment and people's lives.

<u> APPLICANT – VALERO REFINING COMPANY-CALIFORNIA</u>

The Valero Refinery, located in Benicia, California, was constructed in 1969 and Valero Refining acquired the facility in 2000. *See* Permit Evaluation & Statement of Basis for Major Facility Review Permit, Valero Refining Co., Facility #B2626 (hereinafter "Valero Statement of Basis"), p. 4. The refinery has a total throughput capacity of 180,000 barrels of crude oil per day and the petroleum products it produces include gasoline, diesel fuel, jet fuel, fuel oil, residual oil and asphalt. *Id*.

TITLE V OVERVIEW

The Valero Refinery is subject to the operating permit requirements of Title V of the federal Clean Air Act, 42 U.S.C. § 7661, *et seq.*, the Code of Federal Regulations (40 C.F.R. Part 70), and BAAQMD Regulation 2, Rule 6 ("Major Facility Review rules"), because it is a major facility as defined by BAAQMD Regulation 2-6-212. The Refinery is a major facility because it has the "potential to emit" more than 100 tons per year of a regulated air pollutant. *See* BAAQMD Reg. 2-6-218; 40 C.F.R. § 70.2. Major Facility Review Permits ("Title V permits") must meet the requirements of 40 C.F.R. Part 70 and BAAQMD Regulation 2, Rule 6.

³ The draft Refinery permit was first issued by the District in June 2002, and the District held a public hearing on July 10, 2002. The District made changes to the draft permit sufficient to require an additional public comment period and issued a second draft for public comment on August 5, 2003. Petitioner submitted comments on the draft Refinery permit on September 9, 2002 ("2002 Valero Refinery Comments") and September 22, 2003 ("2003 Comments"), which are attached as Attachments 1 and 2 respectively for reference.

Major facilities have a duty to apply for a Title V permit. *See* 40 C.F.R. § 70.5(a); BAAQMD Reg. 2-6-403. A facility must submit specific information as a part of its Title V application. *See* 40 C.F.R. § 70.5(c); BAAQMD Reg. 2-6-403. Before a Title V permit is issued, the permitting authority ("District") must receive a complete permit application. *See* 40 C.F.R § 70.7(a)(1)(i); *see also id.* §§ 70.5(a)(2), 70.5(c); BAAQMD Reg. 2-6-405.

In the initial application, the facility must certify compliance with all applicable requirements and report any instances of non-compliance, so that a schedule of compliance can be incorporated into the permit. *See* 40 C.F.R. §§ 70.5(c)(8) & (9); BAAQMD Regs. 2-6-405.7, 405.8. "Applicable requirements" are defined 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. section 70.2." BAAQMD Reg. 2-6-202; *see also* 40 C.F.R. § 70.2.

Specifically, the application must include a compliance plan containing a description of the current status of each source's compliance with all applicable requirements. 40 C.F.R. § 70.5(c)(8)(i); BAAQMD Reg. 2-6-405.7. The compliance plan must contain a statement certifying that the source will comply with all requirements that become effective during the permit term on a timely basis, and must explain how the source will achieve compliance with all applicable requirements if the source is not in compliance at the time of permit issuance. *See id.* § 70.5(c)(8)(ii); *see also* BAAQMD Reg. 2-6-405.8. In addition, for sources not in compliance, the compliance plan must include a schedule of compliance that demonstrates how the facility will achieve compliance. *See id.* § 70.5(c)(8)(iii). "Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements." 40 C.F.R. § 70.5(c)(8)(iii)(C); *see also* 42 U.S.C. § 7661(3); BAAQMD Reg. 2-6-224.

The compliance statements in the application must be certified by a responsible official as "true, accurate and complete." 40 C.F.R. §§ 70.5(c)(9), 70.5(d); BAAQMD Reg. 2-6-405.9. The facility has a duty to supplement the application as new or incorrect information comes to its attention. 40 C.F.R. § 70.5(b); BAAQMD Reg. 2-6-405.10. The District has the authority to require information disclosure from the facility prior to deeming the application complete. *See* 40 C.F.R. § 70.5(a)(2), 70.7(a)(2) & (4); BAAQMD Reg. 2-6-408.3. Each facility must respond to the District's requests for information regarding its Title V permit application, including the compliance status of every source at the facility. *See* 40 C.F.R. § 70.5(a)(2), 70.5 (c)(8) & (9); *see also* BAAQMD Reg. 2-6-407.3.

The District has a duty to take final action on a permit application submitted by a facility. *See* 40 C.F.R. § 70.7(a)(2); BAAQMD Reg. 2-6-410. When proposing a draft permit, the District must provide an explanation for its permitting decisions in a "statement that sets forth the legal and factual basis for the draft permit conditions" ("Statement of Basis"). 40 C.F.R. § 70.7(a)(5); BAAQMD Reg. 2-6-427. The District may only issue a final Title V permit if the terms and conditions of the permit "provide for compliance with all applicable requirements and the requirements of [Part 70]." 40 C.F.R. § 70.7(a)(1)(iv).

Part 70 contains multiple requirements for assuring compliance with all applicable requirements. *See, e.g.,* 40 C.F.R. §§ 70.6(a)(1), 70.6(c). For example, every Title V permit must include "compliance certification, testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." 40 C.F.R. § 70.6(c)(1). In addition, all Title V permits must contain a compliance plan, including a schedule of compliance consistent with 40 C.F.R. § 70.5(c)(8). *See* 40 C.F.R. § 70.6(c)(3); BAAQMD Reg. 2-6-409.10. Developed as an enforceable plan to assure that a facility will achieve compliance with all applicable requirements, a schedule of comply with applicable requirements that the facility will continue to comply with applicable requirements that will become effective during the permit term in a timely manner; and (3) for sources that are not in compliance at the time of permit issuance, an enforceable schedule detailing how the source will achieve compliance with all applicable requirements. *See* 40 C.F.R. § 70.5(c)(8), 70.6(c)(3); BAAQMD Reg. 2-6-409.10.

Additionally, Title V permits must contain specific requirements for the submission of regular compliance certifications. *See* 40 C.F.R. § 70.6(c)(5). The certification includes information regarding whether compliance with the permit terms and conditions during the certification period was "continuous" or "intermittent" and must identify the means used to determine compliance status with each term and condition, as well as "such other facts the [District] may require to determine the compliance status of the source." *See id.* § 70.6(c)(5)(iii).

GROUNDS FOR OBJECTIONS

Petitioner requests that the Administrator object to the Refinery permit for Valero Refining because it does not comply with 40 C.F.R. Part 70 and BAAQMD Regulation 2, Rule 6. In particular:

- The District's Failure to Submit a "Proposed" Permit for EPA Review Violates 40 C.F.R. § 70.8(a) and BAAQMD Regulation 2-6-411, Resulting in Depriving the Public of a Meaningful Petition Process
- EPA Determined that the Permit Contains Provisions that Are Not in Compliance with the Applicable Requirements of the Act But Failed to Object as Required By 42 U.S.C. § 7661d (b)(1) and 40 C.F.R. § 70.8(c)(1)
- 3) The Permit Does Not Assure Compliance With All Applicable Requirements Pursuant to the Clean Air Act, Part 70 and BAAQMD Regulations
 - a. The District Ignored Its Own Records Showing Recurring Compliance Problems at the Refinery in Concluding that a Schedule of Compliance Was Not Necessary
 - b. The District Ignored Non-Compliance Issues Raised by Public Commenters in Concluding that a Schedule of Compliance Was Not Necessary

- c. The District Ignored Its Own Assessment that the Facility Cannot Continuously Comply with the Terms of the Permit; and the "Reasonable Intermittent Compliance" Standard Damages the Integrity of the Title V Program
- d. The District Did Not Require the Refinery to Properly Certify Compliance with All Applicable Requirements and Update Its Initial Certification, Pursuant to 40 C.F.R. §§ 70.5(c)(5) and 70.5(b) and BAAQMD Regulations 2-6-426 and 2-6-405.10
- 4) The Statement of Basis Does Not Include the Factual or Legal Basis for Certain Permit Conditions as Required by 40 C.F.R. § 70.7(a)(5)
- 5) The District Failed to Comply with the Public Participation Requirements of 40 C.F.R. § 70.7(h)
- 6) The Permit Shield Provisions are Either Improperly Granted or Inadequately Explained as Required by the Act and Part 70
- 7) The District-Imposed Throughput Limits on Grandfathered Sources at the Refinery Do Not Assure Compliance With All Applicable Requirements in Violation of 40 C.F.R. § 70.6 (a)(1)
- 8) The Refinery Permit Lacks Monitoring that Is Sufficient to Assure the Facility's Compliance with All Applicable Requirements and Many Individual Permit Conditions Are Not Practicably Enforceable

I. The District's Failure to Submit a "Proposed" Permit for EPA Review Violates 40 C.F.R. § 70.8(a) and BAAQMD Regulation 2-6-411, Resulting in Depriving the Public of a Meaningful Petition Process

The District is required to submit to EPA for review a "proposed" permit, *i.e.*, a permit that the permitting authority "proposes to issue." See 40 C.F.R. §§ 70.2, 70.8(a); BAAQMD Regulation 2-6-411. Instead of a "proposed" permit, however, the District actually submitted a "draft" permit to EPA, *i.e.*, the version of the permit that the District made available to the public. See 40 C.F.R. § 70.2 (a "draft" permit is "the version of a permit for which the permitting authority offers public participation"). The District's submission of a "draft" permit as a "proposed" permit deprived Petitioners of a meaningful petition process because (1) Petitioners are compelled to petition on a draft permit, without knowing the proposed terms; and (2) the version submitted to EPA did not properly consider public comments, which were due after the District's submission of the permit to EPA for review, and in turn EPA could not properly consider public comments for making objections under section 505(b)(1) of the Act, 42 U.S.C. § 7661d(b)(1). As a result, Petitioners do not know whether further significant changes may be made to the permit which, had the terms been made known to the public, may properly have been the subject of a petition; conversely, some issues may be mooted if, for example, the District incorporates Petitioners' public comments, in which case EPA and Petitioners will have unnecessarily squandered resources. Petitioners therefore request that EPA object to the permit on the ground

that it is not a proposed permit, and that EPA's 45-day review period will not begin, at least for any significant modifications to the draft permit, until a proposed permit is submitted to EPA. Petitioners also request that EPA decide that a procedure that conflates "draft" and "proposed" permits violates Title V.

The chronology of relevant actions plainly illustrates Petitioner's grievance. The District submitted the Refinery permit to the public for comment on August 5, 2003. *See* BAAQMD Notice Inviting Written Public Comments ("BAAQMD Public Notice").⁴ In Title V parlance, the August 5 version was therefore a "draft" permit. *See* 40 C.F.R. § 70.2. At the same time, the District purported to submit the draft permit as a "proposed" permit for EPA's review. *See* Letter to Jack Broadbent ("Dist. Transmittal Letter"), Director, Air Management Division, U.S. EPA Region 9, August 5, 2003, received by EPA on August 13, 2003.⁵ On September 22, 2003, upon the expiration of the public comment period provided by the District, Petitioners and other commenters submitted extensive written comments on the inadequacies of the August 5 draft.

On September 26, 2003, only several days after receiving the public's comments on the August 5 draft and upon the purported expiration of its 45-day review period, EPA sent a letter to the District, requesting that certain changes be made to the August 5 draft. EPA Letter to Steve Hill, BAAQMD, September 26, 2003, ("EPA Sept. Letter").⁶ While that letter requests improvements to the permit, it does not, as it could not, address many of the issues raised in the public comments, as EPA had only several days to review those comments. Had the District complied with Title V, the public would have provided its comments, and the District then would have considered those comments before issuing its proposed permit, which then would have been transmitted to EPA for review. In that case, EPA would have had 45 days to review both the proposed permit and the public comments.

In addition, it appears that the final version of the permit the District is now drafting will include changes to the August 5 version of the permit other than those required by the EPA Sept. Letter. At least two refineries have indicated in their petitions to EPA that the District and refinery representatives are still in the process of discussing changes to the August 5 draft. *See In re Chevron Products Company Petition Requesting That the Administrator Object to Issuance of a Title V Permit* at 11-12; *In re Valero Refining Company-California Petition Requesting That the Administrator Object to Issuance of a Title V Permit* at 11-12; *see also* BAAQMD Public Notice (stating that public comment is invited on the permit) and Dist. Transmittal Letter (stating that the District will address any comments from EPA and the public before issuing the permit and that public comment is invited on the permit). Thus, it appears a certainty that the final version

⁴ Available at http://www.baaqmd.gov/pmt/t5/Refinery2003/B2626PN-2003-CORRECTED.doc (last accessed November 21, 2003).

⁵ Available at http://yosemite.epa.gov/R9/AIR/EPSS.NSF/6924c72e5ea10d5e882561b100685e04/ 7c9b342e091d92fc86256d7c00018ce8/\$FILE/B2626epa8-5-03.pdf (last accessed November 10, 2003).

⁶ EPA Region 9's website contains information concerning EPA's receipt of the August 5 version of the permit. *See* http://yosemite.epa.gov/R9/AIR/EPSS.NSF/e0c49a10c792e06f8825657e007654a3/e039c297967ea1f886256d7b007ff12e?OpenDocument (last accessed November 6, 2003).

of the permit will have terms Petitioners have never reviewed, on which terms Petitioners did not have an opportunity to comment or petition.

Accordingly, EPA should object to the permit on the basis that a proposed permit has not yet been submitted to EPA for review. Such objection will provide Petitioners with an opportunity to review the proposed permit to determine whether any matters which they have raised in this petition have become moot and whether there are new issues due to significant modifications to the August 5 draft. In addition, EPA then may properly consider the public comments and make objections, as appropriate.

II. EPA Determined that the Permit Contains Provisions that Are Not in Compliance with the Applicable Requirements of the Act But Failed to Object as Required By 42 U.S.C. § 7661d (b)(1) and 40 C.F.R. § 70.8(c)(1)

The plain language of the Act requires the Administrator to object to the issuance of a Title V permit that is not in compliance with the applicable requirements of the Act. *See* 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c)(1); *see also NYPIRG v. Whitman*, 321 F.3d 316, 333, n.12 (2d Cir. 2003) ("the Administrator is required to object to permits that violate the Clean Air Act," citing 136 Cong. Rec. S16,895, S16,944 (1990)); *In re Consolidated Edison Co. of NY, Inc., Ravenswood Steam Plant, Order Granting In Part and Denying In Part Petition for Objection to Permit*, Petition No.:II-2001-08, at 6 (U.S. EPA Adm'r, September 30, 2003)⁷ (citing 42 U.S.C. § 7661d(b)(2) and 40 CFR § 70.8(c)(1), which require the Administrator to object to a permit determined not to be in compliance with applicable requirements). Once EPA makes an objection, the permitting authority has up to 90 days to make revisions to meet the objection; and upon the permitting authority's failure to meet the objection within 90 days, EPA inherits the duty to issue or deny the permit. *See* Section 505(b)(3) of the Act, 42 U.S.C. § 7661d(b)(3).

Here, EPA Region 9, which has been delegated authority to object to Title V permits by the Administrator, identified numerous problems and deficiencies in all of the refinery permits including deficiencies in this Refinery permit, and requested that the District make the suggested changes to the permit before finalizing it. *See* EPA Sept. Letter at 1 (stating that EPA did not object to the Refinery permits because "the District has committed to make a number of specific improvements"). While concluding that there are deficiencies in the permit and requesting that the District make changes to the permit prior to finalizing it, EPA failed to object to the permit as required by the Clean Air Act and Part 70. Instead, EPA has begun an informal procedure, which has no legal basis, to attempt to remedy the numerous deficiencies in the Refinery permit.

The Administrator is required to object to the permit at least on the basis of the deficiencies it has already determined to exist, as identified in the EPA Sept. Letter. Without EPA's objection made in accordance with section 505(b) of the Act, 42 U.S.C. § 7661d(b), the sequence of events Congress mandated for permit revision and the time limit the District has to make such revisions (90 days) are not triggered, and therefore the public has no means to enforce the scheme Congress mandated. The Administrator should therefore object to the permit at least on the basis of the deficiencies that it has already determined to exist, as identified in the EPA Sept. Letter.

⁷ Available at http://www.epa.gov/region7/programs/artd/air/title5/petitiondb/petitions/ravenswood_decision2001.pdf (last accessed November 11, 2003).

III. The Permit Does Not Assure Compliance With All Applicable Requirements Pursuant to the Clean Air Act, Part 70 and BAAQMD Regulations

A Title V permit must contain enforceable conditions sufficient to assure compliance with all applicable requirements, including a schedule of compliance to resolve non-compliance issues and monitoring, reporting and recordkeeping requirements. Section 504 of the Act, 42 U.S.C. § 7661c(a) & (c); 40 C.F.R. § 70.6(c)(1) & (3); 57 Fed. Reg. 32250, 32275 (July 21, 1992).⁸ Here, the District ignored existing evidence of recurring compliance problems at the Refinery, instead relying on limited review of outdated records to conclude that a schedule of compliance is unnecessary, even though continuous compliance cannot be assured at the Refinery. Had it not willfully turned a blind eye to its own records and the requirements of Title V, the District would have had to include a schedule of compliance in the permit – or explain why one is not necessary. *See* 40 C.F.R. § 70.7(a)(5); *see also, e.g., In re Huntley Generating Station, Order Granting In Part Petition for Objection to Permit*, Petition No.: II-2002-01, at 4-5 (U.S. EPA Adm'r, July 31, 2003) ("Huntley Order").⁹ Additionally, the District would have had to include additional monitoring, recordkeeping and reporting requirements to assure compliance with all applicable requirements.

Equally important, Title V requires the local permitting agency to administer the program in such a way as to ensure that sources of pollution – which have the best information about their compliance – be the first to identify violations in the permit process. Here, the Refinery did not identify non-compliance issues in the permit process; and the District, even though it had ample evidence to require the Refinery to identify non-compliance, did not do so. To make matters worse, the District takes the illegal position that "reasonable intermittent compliance" – that is, non-compliance – is an acceptable standard for assuring compliance for Title V permit issuance. The District's complete disregard for these lynchpins of the Title V program – that there be

⁸ Congress considered compliance plans to be essential to the Title V program. "Congress considered and rejected even a limited exemption from the requirement to submit compliance plans for sources in compliance." 57 Fed. Reg. at 32274. Thus, Congress specified that all permit applications identify violations and "include a schedule of compliance that describes what steps the source will take to come into compliance with the applicable requirements and to fulfill obligations with respect to penalties." 1990 U.S.C.C.A.N. 3385, 3736. Congress contemplated that such plans "set reasonable and enforceable conditions to accomplish timely compliance with the Act, and well-defined interim compliance steps and deadlines for their accomplishment." Clean Air Act Amendments of 1990: Remarks on H.R. Conf. Rep. on S.1630, 101st Congress (1990) (Statement of Hon. Michael Bilirakis) at E3674; see 42 U.S.C. § 7661b(b). *See also* EPA Region 9, Draft Title V Permit Review Guidelines, at 90 (Sept. 9, 1999) ("Where a source is not in compliance, the schedule of compliance establishes enforceable milestones to bring the source into compliance and requires status reports on at least a semi-annual basis. The schedule of compliance documents that the source has a plan for correcting the problem, and provides means of tracking the source's progress.").

⁹ Available at http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/huntley_ decision2002.pdf (last accessed November 17, 2003). In that matter, because the facility had violations of SIP opacity limits and PSD requirements at the time of permit issuance and the permit record did not show the facility had come into compliance by the time the final permit was issued, EPA determined that the agency either had to include a schedule of compliance in the permit or explain why one was unnecessary. *See* Huntley Order at 4.

continuous compliance and that violators identify their violations – fundamentally damages the integrity of the program, which was intended to duplicate the success of the Clean Water Act's permit program. In particular, in this instance, the District's disregard for the program has directly led to the District's inability to assure compliance, such as through imposition of an appropriate schedule of compliance.

Petitioners request that the Administrator object to the permit on the ground it does not assure compliance in that (1) the permit fails to include a schedule of compliance and monitoring, reporting and recordkeeping that are specifically geared to assure compliance at sources with recurring compliance problems; and (2) the District's disregard of compliance information and failure to review such information, its failure to compel information from the Refinery, and its expectation of "reasonable intermittent compliance" resulted in deficiencies in the permit content. *See* 40 C.F.R. § 70.8(c)(1); *see also, e.g., In re Consolidated Edison Co. of NY, Inc., Ravenswood Steam Plant, Order Granting In Part and Denying In Part Petition for Objection to Permit*, Petition No.: II-2001-08, at 5 (U.S. EPA Adm'r, September 30, 2003) (mandating that the Administrator object to a permit determined not to be in compliance with applicable requirements);¹⁰ *see also, In re Dynergy Corp., Order Granting In Part and Denying In Part Petition for Objection to Permit*, Petition No.: II-2001-06, at 5 (U.S. EPA Adm'r February 14, 2003) ("Dynergy Order") ("Defects in the application process can provide a basis for objecting to a title V permit if flaws in the application could result in a deficient permit").¹¹

A. The District Ignored Its Own Records Showing Recurring Compliance Problems at the Refinery in Concluding that a Schedule of Compliance Was Not Necessary¹²

Between January 1, 2001 and October 27, 2003, the Valero Refinery was issued 48 notices of violations ("NOVs").¹³ *See* Attachment 3. Of these, only 9 are classified as "resolved," while 39 are still "pending." Many of these were repeat violations. Eight NOVs were for violations of permit conditions (BAAQMD Reg. 2-1-307); 11 were violations of opacity limits (BAAQMD Reg. 6-301 & 6-302); 6 were for various violations involving tank-fitting requirements (BAAQMD Reg. 8-5-320); and 4 were for excess NOx emissions (BAAQMD Reg. 9-9-301.3).

¹⁰ Available at http://www.epa.gov/region7/programs/artd/air/title5/petitiondb/petitions/ravenswood_decision2001.pdf (last accessed November 11, 2003).

¹¹ Available at http://www.epa.gov/Region7/programs/artd/air/title5/petitiondb/petitions/danskammer_decision2001.pdf (last accessed November 11, 2003).

¹² Petitioners reviewed the District's 2001 Annual Compliance Report (available at http://www.baaqmd.gov/pmt/ t5/Refinery2003/b2626compliance.pdf) (last accessed November 21, 2003) and the District's six-month Update Compliance Report (January 1, 2002 to June 30, 2002) for the Valero Refinery (*see* Attachment 2, Exhibit A). In addition, Petitioners reviewed District records provided in response to two 2003 Public Records Act ("PRA") requests. *See* Attachment 3 (listing NOVs issued to the Refinery between 1/1/01 and 10/27/03, sorted by source number; data provided in response to an October 2003 PRA request); *see also* Attachment 2, Exhibit B (data provided in response to an August 2003 PRA request).

¹³ *Notices of Violation*—When a violation of a BAAQMD Regulation is documented at a facility, a Notice of Violation ("NOV") may be issued and the District may assess a penalty.

Further review of the District's records indicates that *several sources at the Refinery have serious recurring or ongoing compliance problems.*¹⁴ One source, an FCCU regenerator (S#5), was cited for 7 emissions violations between 2002 and 2003, resulting in repeated opacity and emissions excesses. Another source, an industrial turbine (S#45), was cited for 6 NOx emissions violations between 2001 and 2002. In 2002, 3 NOVs were issued for failure to report and for excess emissions from a third source, a new boiler (S#237). On June 3, 2002, the Refinery experienced 5 violations from different sources, resulting in emissions excesses, a permit violation, and confirmed public nuisance complaints.

Similarly, the number of episodes¹⁵ at the Refinery increased to 59 in 2002 from 46 in 2001, doubling the number of episodes in 1999. Of the 59 episodes in 2002, 31 resulted in excess emissions, 23 were due to equipment breakdowns, and 5 were due to inoperative monitors. As of September 2003, the Refinery had already experienced 16 episodes, 11 of which resulted in excess emissions, and 5 due to equipment breakdowns. Given the high number of episodes, the District should have explained whether these issues have been addressed such that compliance can be assured.

Furthermore, the Refinery was the subject of 34 complaints¹⁶ in 2001 and another 34 complaints in 2002. Between January 1, 2003 and August 27, 2003, the Refinery was already the subject of at least 22 complaints, including 16 for "odor" and 5 for "smoke."

Remarkably, many of the NOVs were issued during the permit drafting process in 2002 and 2003, such that the Refinery would have been characterized as a "recalcitrant violator" under the District's own regulations. A recalcitrant violator is defined as follows:

A person which has been cited for chronic violations¹⁷ or has engaged in a pattern of neglect or disregard with respect to the requirements of district rules and regulations, permit conditions, or other applicable provisions of state or federal

¹⁴ Petitioners were unable to conduct a complete analysis of the sources cited for the violations, as 3 of the NOVs failed to contain source numbers. *See* Valero NOVs #: A13186A, A03849A, A44850A.

¹⁵ *Episodes*—The District defines episodes as reported equipment breakdowns, monitored emission excesses, inoperative monitors, and pressure relief valve venting. Episodes are investigated by District inspectors for compliance with applicable regulations, and may result in the issuance of an NOV.

¹⁶ *Complaints*—The District maintains a toll-free number for lodging public complaints of odors, smoke, fires, dust, fall-out, and other related air pollutants. Complaints can also be referred from U.S. EPA and CARB. Complaints are categorized as either confirmed or unconfirmed. A confirmed complaint requires a District inspector, employee or the complainant to "be able to testify that a particular operation or combination of operations is the source of the air contaminant," which requires personal observation tracing the contaminant to the source or identification by sampling or other data analysis. BAAQMD Complaint Guidelines, Sec. 2.E at 7 (July 31, 2002). (*Note*: apparently BAAQMD is proposing to revise these guidelines.)

¹⁷ A "chronic violation" is defined as one that has been preceded by at least one Notice to Comply or 1 NOV of the same or similar nature at the same source or facility within the prior three years. *See* BAAQMD Reg. 1-2-201.

law or regulations, as evidenced within the prior three (3) years by at least two (2) Notices to Comply and/or Notices of Violation of the same or different District, state or federal rules, regulations or requirements, unless a higher number is specified in the District's Notice to Comply Policies and Procedures.

BAAQMD Regulation 1-2-207.

Despite this record, however, the District has not evaluated, addressed or resolved the compliance issues such that compliance can be assured by the terms and conditions of the permit. For example, as to the 11 episodes of inoperative monitors, it is unclear why this problem occurred and if it has been resolved such that a compliance schedule is not necessary. Problems with monitors should be addressed because an inoperative monitor would not record exceedances that may occur, which may then conceal a more serious problem. Equipment breakdowns pose similar problems for excess emissions. A review of these issues may have led the District to place additional monitoring and reporting requirements in the permit and to insert a schedule of compliance into the permit to address and resolve non-compliance issues, or provided a sufficient explanation why a schedule of compliance is not required to assure compliance with all applicable requirements.

Instead, the District surprisingly concludes that there are no compliance problems at the Refinery and that a schedule of compliance is not required in the permit. *See* Valero Statement of Basis at 11-12, 35-36. The District's conclusion is supported solely by its evaluation of the Refinery's compliance through 2001.¹⁸ Obviously, the evaluation ignores the Refinery's compliance records for the period between 2002 and 2003. Had it not willfully ignored the Refinery's recent compliance record, the District would have had to conclude that the record appears to have dramatically worsened since 2001.

B. The District Ignored Non-Compliance Issues Raised by Public Commenters in Concluding that a Schedule of Compliance Was Not Necessary

Petitioners' 2002 Comments identified potential violations of New Source Review ("NSR") requirements and permit conditions at the Valero Refinery.¹⁹ First, Petitioners noted that the District's emissions inventory indicated that NOx emissions from certain boiler units (S-3 and S-4) had dramatically increased between 1993 and 2001, and appeared to exceed the NSR significance level for modified sources of NOx. *See* 2002 Valero Refinery Comments, § 21 at 18-19 (Attachment 1). Petitioners requested that, prior to issuance of the final Title V permit, the District demonstrate the sources' compliance, or include a schedule of compliance in the permit. Second, Petitioners indicated what appeared to be a substantial rebuild of an FCCU unit (S-5) without proper preconstruction review and emissions limitations and other requirements under

¹⁸ The "Compliance Record" accompanying the September 2003 draft permit is merely the District's "Annual Compliance Report" for 2001, which fails to include any information about the Refinery's compliance between January 2002 and September 2003, including current compliance status. *See* "Compliance Record" for the Valero Refinery (available at http://www.baaqmd.gov/pmt/t5/Refinery2003/b2626compliance.pdf) (last accessed November 21, 2003).

¹⁹ See 2002 Valero Refinery Comments, § 21 at 18-19 (Attachment 1).

40 C.F.R. § 63 Subpart UUU. Third, Petitioners noted that sulfur dioxide emissions at a coker burner (S-6) had increased dramatically in 2001 to 4991 tons per year, a 1248 tons per year increase over the highest emission rate during 1993-2000. Petitioners noted that if this significant increase in emissions was the result of a major modification, then the source should have undergone proper preconstruction review, including adding NSR requirements to the permit. *See id.*

As with its own records, the District ignored Petitioners' well-documented concerns regarding potential non-compliance. *See, e.g.*, Draft District Consolidated Response to Comments on Refinery Title V Permits, July 25, 2003 ("Dist. Resp. Comments"), § 3.B-C at 4-6; § 5 at 12, 14-16; § 6 at 22; § 6.V. at 50-52. The District takes the position that "preconstruction review rules themselves are not applicable requirements, for purposes of Title V," and therefore allegations of failure to comply with NSR requirements do not need to be addressed in the context of issuing a Title V permit. Dist. Resp. Comments § 3.D at 6-7. The District's position is not consistent with EPA's regulatory interpretation, guidance or precedent and District Regulations.

In its final promulgation of Part 70, EPA clarified that the requirement to obtain preconstruction permits is indeed an "applicable requirement." EPA states that the definition of "applicable requirements" under the Act was revised "in part to clarify that applicable requirements include terms and conditions of preconstruction permits issued pursuant to SIPs and other regulations approved by EPA in formal rulemaking after notice and an opportunity for public comment." 57 Fed. Reg. at 32276. See also In re Pacific Coast Building Products, Inc., Order Denving Petition for Objection to Permit, at 7 (U.S. EPA Adm'r, December 10, 1999) (applicable requirements in Title V permits include the requirement to obtain a preconstruction review permit under the Act)²⁰; May 20, 1999 letter from John Seitz, Office of Air Quality Planning and Standards, U.S. EPA to Robert Hodanbosi & Charles Lagges, STAPPA/ALAPCO, Enclosure A, at 2.²¹ EPA Region 9's Title V permit guidance also clearly states that "[t]he title V permit for a source must assure compliance with all applicable requirements. If a NSR permit was not issued in the past, and should have been, then the source is not in compliance with the requirement to obtain a NSR permit as required in Title I of the CAA." EPA Region 9, Draft Title V Permit Review Guidelines, Sept. 9, 1999, at 40 (discussing the importance of reviewing Title V permits for past NSR determinations).

Accordingly, District regulations define "applicable requirements" 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." BAAQMD Regulation 2-6-202 (emphasis added). Under the District's definition, all provisions of the Clean Air Act, including the requirement to undergo NSR permitting, are "applicable requirements" to be included in a Title V permit. Thus, the District's failure to resolve the compliance issues raised by commenters in the permit violates Title V.

²⁰ Available at http://www.epa.gov/region7/programs/artd/air/title5/petitiondb/petitions/pacific_coast_decision1999.pdf (last accessed November 14, 2003).

²¹ Available at http://www.epa.gov/Region7/ programs/artd/air/title5/t5memos/hodan7.pdf (last accessed November 14, 2003).

C. The District Ignored Its Own Assessment that the Facility Cannot Continuously Comply with the Terms of the Permit; and the "Reasonable Intermittent Compliance" Standard Damages the Integrity of the Title V Program

Congress intended Title V permits to "assure prompt and *continuing* compliance with applicable requirements of the Act." *See* 136 Cong. Rec. S16,895, S16,943 (1990) (Clean Air Act Amendments of 1990, Chafee-Baucus Statement of Senate Managers, S.1630) (emphasis added); *see also Utility Air Regulatory Group v. U.S. EPA*, 320 F.3d 272, 275 (D.C. Cir. 2003) (the purpose for inserting monitoring and testing requirements into a Title V permit is to "ensure that sources continuously comply with emission standards."). The District's position, however, is that it need only assure "reasonable intermittent" compliance because, for one, "compliance by the refineries with all District and federal air regulations will not be continuous."²² Dist. Resp. Comments at 15. Of course, the term "intermittent," as the District implicitly recognizes, means "stopping and starting at intervals" and is synonymous with "occasional, periodic, [and] sporadic." Webster's II New Riverside University Dictionary. That is, "intermittent" compliance can only mean non-compliance.²³

The District's position raises two particular problems. First, as with other evidence, the District ignored its own assessment that instances of non-compliance will recur at the Refinery in concluding that a schedule of compliance was unnecessary. Second, through its insistence that "reasonable intermittent compliance" is somehow the proper standard for compliance assurance, the District reveals its fundamentally flawed philosophy that dooms its proper administration of the Title V program.²⁴ In other words, because the District's position is that "reasonable

²² Although made in the context of the Shell Martinez Refinery, Facility #A0011, this concession is relevant here as the District makes clear it relates to all Bay Area refineries.

²³ In a mistaken attempt to justify the sufficiency of assuring "intermittent" compliance, the District points to the fact that the term "intermittent" can be used in compliance certifications. *See* Dist. Resp. Comments at 15. Indeed, federal regulations require Title V compliance certifications to include information regarding the compliance status of each source and to specify whether compliance was "continuous" or "intermittent." *See* 40 C.F.R. §§ 70.6(c)(5)(iii)(C); 71.6(c)(5)(iii)(C); *see also* 42 U.S.C. § 7414(a)(3)(D). However, "intermittent" compliance is *not* sanctioned by the Act. To the contrary, any instance of non-compliance is considered a violation. *See* 40 C.F.R. § 70.6(a)(6)(i). In fact, EPA's use of the term "intermittent" to specify a source's compliance is intended to require the facility to explicitly identify instances of non-compliance. Thus, when EPA attempted to remove the term "intermittent" from the compliance certification procedure, the D.C. Circuit held that it could not do so, as Congress' "express and unambiguous" intent was for Title V sources to explicitly certify whether their compliance was "continuous" or "intermittent." *See Natural Resources Defense Council v. EPA*, 194 F.3d 130, 138 (D.C. Circ. 1999); *see also* 66 Fed. Reg. 12872 (Mar. 1, 2001).

²⁴ Compliance with all applicable requirements must be assured by the terms and conditions of a Title V permit when it is issued. *See* 40 C.F.R. § 70.7(a)(1)(iv). Outstanding compliance issues must be addressed in a Title V permit through a schedule of compliance. *See id.* § 70.6(c)(3). Instead of fulfilling its legal duty to issue a Title V permit that assures compliance with all applicable requirements, the District plans to issue the permits for the Bay Area refineries while deferring non-compliance issues to its enforcement division to address at some unspecified time in the future. *See* Dist. Resp. Comments, § 3.B-C at 4-6; § 5 at 12, 14-16; § 6 at 22; § 6.V at 50-52. This approach is inconsistent with Title V.

intermittent compliance" assures compliance, its Title V permitting practice, as demonstrated here, fails to address compliance problems in the permit. It is no wonder that the District has never once included a schedule of compliance in a Title V permit.²⁵

D. The District Did Not Require the Refinery to Properly Certify Compliance with All Applicable Requirements and Update Its Initial Certification, Pursuant to 40 C.F.R. §§ 70.5(c)(5) and 70.5(b) and BAAQMD Regulations 2-6-426 and 2-6-405.10

Every Title V permit applicant must comply with specific requirements when initially certifying compliance in its application. *See* 40 C.F.R. § 70.5(c)(9). The certification must include a certification of compliance with all applicable requirements under the Act and a statement of the methods used for determining compliance. *Id.* The application must contain "specific information that may be necessary to implement and enforce other applicable requirements." *Id.* § 70.5(c)(5). The application must also contain"[a] certification by a responsible official of truth, accuracy and completeness." *Id.* § 70.5(d). In addition, every permit applicant has a duty to supplement and correct its application as new or incorrect information comes to its attention. *See id.* § 70.5(b); BAAQMD Reg. 2-6-405.10. BAAQMD Regulation 2-6-426 further requires the Refinery to "submit a new certification of compliance on every anniversary of the application date if the permit has not been issued," as here.

Congress mandated that facilities and permitting agencies establish reliable compliance certifications in part "to provide an incentive for sources to come into compliance with applicable requirements before they complete their applications," and "to alert the permitting authority to compliance issues in advance so that it can work with the source on such problems and develop an appropriate schedule of compliance in the title V permit." Dynergy Order at 5. If a facility fails to properly certify compliance in its initial application, "the State, EPA and the public have been deprived of meaningful information on compliance status which may have a negative effect on source compliance and could impair permit development." *Id.* Flaws in the initial compliance certification process may in fact result in a deficient permit. Where a facility does not properly certify compliance schedule to address noncompliance that occurred as of the date of application submission." Dynergy Order at 6.

Here, Petitioners are unaware of any supplementation or correction made to the application by the Refinery, other than a letter to the District from the Refinery purporting to certify compliance with applicable requirements. *See* July 10, 2003 Letter from William H. Buckalew, Valero Refining Company, to William C. Norton, BAAQMD (Attachment 2, Exhibit C) ("2003 certification"). The Refinery's 2003 certification, however, is incomplete and may be inaccurate. According to the 2003 certification, the Refinery is in compliance with every single requirement

²⁵ In fact, the District has issued other Title V permits without compliance schedules to facilities with serious, recurring compliance problems. For example, according to District records, the relatively new, Calpine-owned Delta Energy Center (Facility #B2095) was issued at least 47 NOVs and had at least 52 episodes between March 2002 and July 2003, the majority of which resulted in excess emissions. Yet the District recently proposed a significant revision to the facility's Title V permit without even evaluating Delta's serious history of non-compliance. *See* BAAQMD Notice Inviting Public Comment (available at http://www.baaqmd.gov/permit/t5/NOTICES/B2095pn8-4-2003.pdf) (last accessed November 13, 2003).

that applied to the several hundred sources operating at the Refinery as of September 6, 2002. *See id.* (stating that the 2003 certification "does not extend to any subsequent additions, deletions or revisions" since the September 6, 2002 draft.) This is problematic for at least two reasons. First, the Refinery did not "provide additional information as necessary to address any requirements that become applicable to the source" since September 6, 2002. *See* 40 C.F.R. § 70.5(b); BAAQMD Reg. 2-6-405.10. Second, although the District's records demonstrate that there have been recurring or ongoing compliance problems at the Refinery, nowhere in the 2003 certification does the Refinery identify any of these issues.

Furthermore, the District did not require supplementation or correction to obtain self-reporting of violations. Not having sought such information to which it is fully entitled, the District now states that it cannot issue a schedule of compliance because, for one, it would need the type of information necessary to prove an enforcement action, which the District apparently does not have.²⁶ *See* Dist. Resp. Comments, § 3.C at 5. Congress included the requirement for facilities to self-report violations at the application stage precisely so that permitting agencies would be able to obtain the kind of information the District is saying that it does not have. Indeed, the concept of self-reporting of violations, borrowed from the Clean Water Act, is one of the lynchpins of the Title V program. Of course, updated information and certifications are particularly important here, where the initial certification was made over seven years ago, in 1996, when the Refinery originally submitted its permit application.

The District's failure to compel the Refinery—which has the best information regarding its compliance status—to identify its violations resulted in the District's fundamental inability to determine and assure compliance, and to impose additional enforceable requirements in the permit where necessary to assure compliance with all applicable requirements. Thus, the defects in the compliance certification procedure have resulted in a deficient permit for the Refinery.

IV. The Statement of Basis Does Not Include the Factual or Legal Basis for Certain Permit Conditions as Required by 40 C.F.R. § 70.7(a)(5)

Each Title V permit must be accompanied by a "statement that sets forth the legal and factual basis for the draft permit conditions." 40 C.F.R. § 70.7(a)(5). According to U.S. EPA Region 10, the Statement of Basis should include:

 (1) Detailed descriptions of the facility, emission units and control devices, and manufacturing processes including identifying information like serial numbers that may not be appropriate for inclusion in the enforceable permit;
(2) Justification for streamlining of any applicable requirements including a detailed comparison of stringency;

²⁶ The District's argument has no merit, however. In addition to the Refinery's compliance records, the District has ample authority under Title V to obtain information to determine compliance at the Refinery. For example, after a Title V permit application is deemed complete, the District may request any additional information that is "necessary to evaluate or take final action" on the permit application. *See* 40 C.F.R. § 70.5 (a)(2); *see also* BAAQMD Reg. 2-6-408.3. The District's general regulations also grant broad authority to require the submission of information from the facility to determine the compliance of a source. *See, e.g.*, BAAQMD Regs. 1-101, 1-440, 1-441.

(3) Explanations for actions including documentation of compliance with one time NSPS requirements (e.g. initial source test requirements) and emission caps; and

(4) Basis for periodic monitoring, including appropriate calculations, especially when periodic monitoring is less stringent than would be expected.

See Elizabeth Waddell, Region 10 Permit Review, May 27, 1998, at 4 (emphasis added); see also In re Fort James Camas Mill, ("Fort James"), Order Denying In Part And Granting In Part Petition For Objection To Permit, Petition No.: X-1999-1, at 8 (U.S. EPA Adm'r, December 22, 2000)²⁷ ("the rationale for the selected monitoring method must be clear and documented in the permit record"); Letter from Stephen Rothblatt, Air Programs Branch, U.S. EPA to Robert F. Hodanbosi, Chief, Ohio Environmental Protection Agency.²⁸

Without a sufficient Statement of Basis, it is virtually impossible for the public to evaluate the legal and factual basis for certain permit conditions and to prepare effective comments during the public comment period. The Statement of Basis for the Refinery permit is insufficient because it does not contain a detailed facility description, including comprehensive information on permitted and exempt sources, and a discussion of the changes at the Refinery between application date (1996), the 2002 draft, and the August 5, 2003 draft. Without such information, the public cannot discern what the applicable requirements should be, and to which sources such requirements should apply.

Moreover, the Statement of Basis fails to serve its basic function because it is inaccurate in critical ways. For example, the Statement of Basis states that there is no compliance problem at the Refinery, when in fact, there is a significant problem, even according to District records. The Statement of Basis also does not reflect the changes made to the permit shields in the Refinery permit. *See* Valero SB at 30; *see also* Refinery Permit, § IX at 683.

EPA indeed recognizes that the Refinery permit Statement of Basis is insufficient. In EPA's comments on the Refinery permit, it sets out a number of instances where the Statement of Basis for the Refinery permit is inadequate and requires changes. *See* EPA Sept. Letter, Enclosure A at 1, 2, Enclosure D at 3.

Because the Statement of Basis accompanying the Refinery permit does not sufficiently set forth the legal and factual basis for the draft permit conditions as required by section 70.7(a)(5), the Administrator must object to the issuance of the Refinery permit.

V. The District Failed to Comply with the Public Participation Requirements of 40 C.F.R. § 70.7(h)

The public can participate in the Title V permitting process by commenting and requesting a public hearing on draft permits and by petitioning the Administrator to object to a permit that is

²⁷ Available at http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/fort_james_decision1999.pdf, (last accessed November 6, 2003).

²⁸ Available at http://www.epa.gov/rgytgrnj/ programs/artd/air/title5/t5memos/sbguide.pdf (last accessed November 5, 2003).

not in compliance with all applicable requirements. See Section 502 of the Act, 42 U.S.C. § 7661a(b)(6); 40 C.F.R. §§ 70.7(h), 70.8(d). To facilitate the public review process, the District must make available specific information related to the permit and the facility. See 40 C.F.R. §§ 70.7(h), 70.4(b)(3)(viii); BAAQMD Regs. 2-6-412 & 2-6-419. In its public notice, the District must identify how the public may obtain additional information about the permit and facility, including "all relevant supporting materials ... and *all other materials available to the [District] that are relevant to the permit decisions.*" 40 C.F.R. § 70.7(h) (emphasis added).

Here, the District failed to make available critical information that is relevant to important permitting decisions in a timely fashion. For example, the District did not make available to the public information relevant to the Refinery's compliance and the necessity for a schedule of compliance. Documents about the facility's compliance could not be more relevant to the permitting decision, as compliance data relates to terms and conditions that should be included in the permit. Compliance data should have been immediately accessible to the public, even without a Public Records Act ("PRA") request. Instead, Petitioners had to make several PRA requests seeking relevant information concerning NOVs issued to the Refinery between 2001 and 2003, and received the information sufficiently late in the process so that it could not be adequately analyzed in time for public comments. Petitioners' most recent PRA request was forwarded by the District's public information officer to the District's legal division, and was followed by three weeks of follow-up phone calls, e-mails, a letter to District Counsel and the threat of litigation, before the District finally produced the information. While Petitioners ultimately received the information, Petitioners expended significant resources to obtain the data, which was not readily available.

In the District's view, it would be "highly impractical" for the District make available all the information contained in District files regarding a facility, and therefore, this could not have been the intent of Congress nor EPA in enacting Title V or promulgating Part 70. *See* Dist. Resp. Comments § 3.E. at 7-8.²⁹ The District believes that the only reasonable interpretation is that the District must merely explain and support its Title V permitting decisions. *See* Dist. Resp. Comments § 3.E. at 7-8. The District appears to be confusing its obligation to prepare a Statement of Basis (explaining the legal and factual basis for its decisions) with its obligation to make relevant public records available to facilitate the public's review of draft permits for sufficiency. The ultimate test here is *not* merely whether the District has provided sufficient explanation of its decisions, but whether it has provided sufficient information for the public to evaluate whether its decisions are appropriate under the circumstances – i.e., *whether the terms and conditions of the draft Title V permit properly assure compliance with all applicable requirements*, or whether additional requirements should be imposed to assure compliance. Because the District failed to comply with the public participation requirements under the Act, the Administrator must object to the issuance of the Refinery permit.

²⁹ The District admits that it does not attempt to review all files for each facility in drafting Title V permits, and thus believes the public should be equally ill-informed about the permitting and enforcement history of the facility. Dist. Resp. Comments, § 3.E. at 7-8 (disagreeing that a public reviewer should be *"far more* informed" than District staff).

VI. The Permit Shield Provisions are Either Improperly Granted or Inadequately Explained as Required by the Act and Part 70

Section 504(f) of the Act allows permit shields in Title V permits and authorizes the permitting authority to provide that compliance with the permit be deemed compliance with all other applicable provisions of the Act. This determination can only be made if the applicable requirements of such provisions are included in the permit, or if the permitting authority, in acting on the permit, determines that such other provisions (which shall be referred to in such determinations) are not applicable. *See* 42 U.S.C. § 7661c(f) (1) & (2), *see* also 57 Fed. Reg. at 32255, 32277. The permitting authority's determination regarding the shield or a concise summary thereof must be included in the permit. *Id*.

The permitting authority's failure to adequately explain its basis for granting a permit shield with respect to part of the plan either in the Statement of Basis or elsewhere in the permit record represents a flaw in the permitting process and calls into question the adequacy of the permit itself. *See In re Consolidated Edison Company Hudson Avenue Generating Station*, Order Granting In Part And Denying In Part Petition For Objection To Permit, Petition No.: II-2002-10, at 45 (U.S. EPA Adm'r, September 30, 2003).³⁰

While District regulations allow for two types of permit shields, a shield for non-applicable requirements, and a shield for subsumed requirements, *see* BAAQMD Regulation 2-6-233; *see also* Valero Statement of Basis at 27, the District must make a proper determination that a permit shield applies and justify that determination. However, the District has improperly granted permit shields to the Refinery and has failed to fully explain the grant of others, as discussed below. Further, the EPA, in its comments on the Refinery permit, sets out a number of instances where the permit shields need to be amended. *See* EPA Sept. Letter, Enclosure A at 2-3, Enclosure D at 2. Until these changes are made to the Refinery permit, the permit violates Title V requirements and the Administrator should accordingly object.

A. Deficient Permit Shield Provisions

1. Table IX B-23 (CEMS) on page 685 of the Refinery Permit states that 40 C.F.R. § 60.7 (c) and (d) may be subsumed by BAAQMD Regulation 1-522.8, because the BAAQMD rule satisfies the reporting requirements of the federal regulation. Petitioners disagree. BAAQMD Regulation 1.522.8 states simply that "[m]onitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on." The rule only allows the APCO to define the format of reporting.

In contrast, 40 C.F.R. § 60.7 (c) and (d) provide extensive and explicit reporting requirements, as indicated in the following excerpts:

- (c) Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with Sec.
- 60.13(h), any conversion factor(s) used, and the date and time of commencement

³⁰ Available at http://www.epa.gov/region7/programs/artd/air/title5/petitiondb/petitions/hudson_decision 2002.pdf (last accessed November 6, 2003).

and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Sec. 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Sec. 60.7(c) shall both be submitted.

It is clear that the requirements of 40 C.F.R. § 60.7 are not "satisfied" by BAAQMD Regulation 1-522.8. Therefore the permit shield proposed in Table IX B-23 must be removed from the permit.

2. Tables IX B-7, IX B-8, and IX B-9 of the Refinery permit propose permit shields for Sources 21, 22, and 220, claiming that permit condition #10574-19 is satisfied by BAAQMD Regulation 9-10-502. *See* Refinery Permit, p. 682-683. However, a comparison of the specific language of the permit condition indicates that the condition is more stringent. The permit condition states that the three sources shall be monitored,³¹ "with a District approved continuous fuel flow monitor and recorder in order to determine fuel consumption." However, BAAQMD Regulation 9-10-502.2 only requires, "[a] fuel-flow meter in each fuel line for each affected unit." Therefore, the proposed permit shields for permit condition #10574-19 should be eliminated from the Refinery permit.

³¹ Note that there is a typo in permit condition #10574-19 such that the language of the condition does not form a complete sentence. However, the phrase "shall be monitored," is implied by the context of the condition and is assumed here.

3. Petitioners object to numerous proposed permit shields presented in Tables IX B-24 (Fugitives) and IX B-25 (Fugitives) on pages 685 through 688 of the Refinery permit:

a. BAAQMD Regulations 11-7-302 and 303 should not be subsumed by BAAQMD Regulation 8-18-303 because the Regulation 11 rules deal with a larger array of requirements than Regulation 8-18-303 does. The latter rule only defines acceptable VOC concentrations and repair times. Regulations 11-7-302 and 303 address monitoring frequencies and other issues in addition to repair times and VOC concentrations.

b. BAAQMD Regulation 11-7-307 should not be subsumed by BAAQMD Regulation 8-18-302 because Regulation 11-7-307 contains monitoring requirements, whereas Regulation 8-18-302 does not. Moreover, the monitoring requirements of Regulation 11-7-307 are more stringent than those of BAAQMD Regulations 8-18-401 and 404.

c. The monitoring requirements of BAAQMD Regulations 11-7-307.3 and 307.4 are more stringent than those of BAAQMD Regulation 8-18-404, and therefore the permit shield should be eliminated from the permit. The monitoring requirements of Regulation 11-7-307.5 are more stringent than those of Regulation 8-18-401.3, and therefore the permit shield should be eliminated from the permit.

d. BAAQMD Regulation 11-7-308 contains a monitoring requirement and should not be subsumed by BAAQMD Regulation 8-18-304, which does not contain monitoring requirements. Furthermore, although Regulation 8-18 contains monitoring requirements at 8-18-401.8, these are neither as detailed nor as stringent as the monitoring requirements of Regulation 11-7-308. Regulation 8-18.401.8 states that, "[a]ny pressure relief device that releases to the atmosphere shall be inspected within 5 working days," whereas Regulation 11-7-308 states that pressure relief devices, "shall be monitored within 5 calendar days after evidence of a potential lead is found by visual, audible, olfactory, or other detection methods." Therefore the shield should be removed from the permit.

e. BAAQMD Regulations 11-7-310.2 and 310.3 are more stringent than BAAQMD Regulation 8-18-306.1, and therefore the permit shield for these regulations should be eliminated from the permit.

f. Federal regulations 40 C.F.R. § 61.350 (a) and (b) should not be subsumed by BAAQMD Regulation 8-18-306.1 because the federal regulations are more stringent than the BAAQMD Regulation. The federal regulation states that the delay of repairs is allowable "if the repair is technically impossible without a complete or partial facility or unit shutdown." However, Regulation 8-18-306 does not have a requirement that is as strong as technical impossibility. The permit shield should be removed from the Refinery permit.

g. A permit shield should not be allowed for federal regulations 40 C.F.R. §§ 60.482-7 (g) and 60.482-9 (e). BAAQMD Regulations 8-18-404 and 8-18-306 that have been proposed as streamlined requirements are not as stringent as the federal regulations, in

particular, with respect to monitoring. The permit shield should be removed from the Refinery permit.

VII. The District-Imposed Throughput Limits on Grandfathered Sources Do Not Assure Compliance with All Applicable Requirements in Violation of 40 C.F.R. § 70.6 (a)(1)

The District proposes to establish "throughput" limits, which if exceeded, that the Refinery must report the exceedance for better compliance with NSR provisions. Petitioners support improved monitoring, reporting and recordkeeping requirements for better detection of NSR violations as undetected NSR violations result in many tons of excess of pollution. Petitioners request that EPA object to the imposition of throughput limits to the extent that they set a *threshold level* below which the Refinery need not report. The Refinery should instead be required to report all relevant information that bears on whether new or modified construction may have occurred.

There are several reasons for Petitioners' position. First, the throughput limits in the permit are not a reasonably accurate surrogate for an NSR baseline determination. The District states:

These [throughput] limits are generally based upon the District's review of information provided by the facility regarding the design capacity or highest documented capacity of the grandfathered source. To verify whether these limits reflect the true design, documented, or "bottlenecked" capacity (pursuant to 2-1-234.1) of each source is *beyond the resource abilities of the District* in this Title V process. Moreover, the District *cannot be completely confident* that the facility has had time or resources necessary to provide the most accurate information available in this regard.

See Valero Statement of Basis at 13 (emphasis added). The discussion of throughput limits in the Statement of Basis indicates that the District has little reliable information regarding these "grandfathered" sources with which to make judgments about the applicability of NSR at these sources. Rather than setting baselines that contravene NSR requirements, the District should devote the appropriate resources for the important task of determining the legally correct baseline. The District cannot bypass the required steps for determining the correct baseline merely because of its resource constraints, particularly given the importance of the NSR requirements.

Second, placing these throughput limits in the Title V permit may create an improper presumption of the correctness of the threshold, which may encourage illegal modifications below the threshold and deter future enforcement of NSR violations. *See id.* (referring to the throughput limits as "presumptive," although the District's current position appears to be that the limits are reporting thresholds and not presumptive). Although the District states that the limits do not create a safe harbor, *id.*, the incentive for investigating whether an event that does not exceed the threshold indeed triggered NSR requirements will be severely diminished. Penalties for NSR violations where the Refinery did not exceed the throughput limits may also be diminished.

Third, the District's reliance on BAAQMD Regulation 2-1-234³² in deriving these throughput limits is not appropriate. BAAQMD Regulation 2-1-234 is not a State Implementation Plan ("SIP") provision. The definition of "modification" in the SIP-approved version of BAAQMD Regulation 2-2-223³³ should be used for purposes of new source review. Any reliance on provisions not approved by U.S. EPA is inappropriate because the SIP sets forth the EPA-approved NSR program.

VIII. The Refinery Permit Lacks Monitoring that Is Sufficient to Assure the Facility's Compliance with All Applicable Requirements and Many Individual Permit Conditions Are Not Practicably Enforceable

A basic tenet of Title V permit development is that the permit must require sufficient monitoring and recordkeeping to provide a reasonable assurance that the permitted facility is in compliance with legal requirements. As U.S. EPA explained in its recent response to a Title V permit petition:

3.1 The highest of the following:

3.1.1 The highest attainable design capacity, as shown in preconstruction design drawings, including process design drawings and vendor specifications.

3.1.2 The capacity listed in the District permit to operate.

3.1.3 The highest documented actual levels attained by the source prior to March 1, 2000. 3.2 The capacity of the source, as limited by the capacity of any upstream or downstream process that acts as a bottleneck (a grandfathered source with an emission increase due to debottlenecking is considered to be modified).

³³ SIP Regulation 2-2-223 provides as follows:

Modified Source or Facility: Any existing source or facility which will undergo a physical change, change in the method of operation of, or addition to an existing facility which results or may result in either an increase, of the permitted emission level of a source, of any air pollutant subject to District control, or the emission of any such air pollutant not previously emitted in a quantity which would cause the source to fail an air toxic screening analysis performed in accordance with the current Air Toxic Risk Screening Procedure. Routine maintenance or repair or a change in ownership of itself shall not be considered a modification. Unless previously limited by a permit condition the following shall not be considered changes in method of operation:

223.1 An increase in the production rate if such increase does not exceed the operating design capacity or the actual demonstrated capacity of the facility as approved by the APCO.

223.2 An increase in the hours of operation.

223.3 Change in ownership.

223.4 Use of an alternative fuel or raw material if the source was capable of using such fuel or raw material prior to July 1, 1972, or had received permits to use such fuel or raw material.

³² BAAQMD Regulation 2-1-234 provides as follows:

Modified Source: Any existing source which undergoes a physical change, change in the method of operation of, increase in throughput or production, or addition which results or may result in any of the following:

^{2-1-234.3} For sources which have never been issued a District authority to construct, and which do not have conditions limiting daily or annual emissions, an increase of either daily or annual emission level of any regulated air pollutant, or the production rate or capacity that is used to estimate the emission level, above the lowest of the following:

[W]here the applicable requirement does not require any periodic testing or monitoring, section 70.6(c)(1)'s requirement that monitoring be sufficient to assure compliance will be satisfied by establishing in the permit '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). Where the applicable requirement already requires periodic testing or instrumental or non-instrumental monitoring, however, as noted above the court of appeals has ruled that the periodic monitoring rule in § 70.6(a)(3) does not apply even if that monitoring is not sufficient to assure compliance. In such cases the separate regulatory standard at § 70.6(c)(1) applies instead. By its terms, § 70.6(c)(1) – like the statutory provisions it implements – calls for sufficiency reviews of periodic testing and monitoring in applicable requirements, and enhancement of that testing or monitoring through the permit necessary to be sufficient to assure compliance with the terms and conditions of the permit.

In re Pacificorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants, Order Partially Granting and Partially Denying Petition for Objection to Permits, Petition No.: VIII-00-1at 18-19 (U.S. EPA Adm'r, November 16, 2000).³⁴

In addition to containing adequate monitoring, each permit condition must be "enforceable as a practical matter" in order to assure the facility's compliance with applicable requirements. To be enforceable as a practical matter, a condition must (1) provide a clear explanation of how the actual limitation or requirement applies to the facility; and (2) make it possible to determine whether the facility is complying with the condition. *See, e.g.*, 66 Fed. Reg. 53146, 53147 (Oct. 19, 2001).³⁵

The following analysis of specific Refinery permit conditions identifies requirements for which monitoring is either absent or insufficient and permit conditions that are not practicably enforceable.

A. Deficient Monitoring, Recordkeeping and Reporting

1. General

The District has determined that, with few exceptions, additional monitoring to assure compliance with all applicable requirements does not need to be imposed in the Refinery permit. The District states in the Statement of Basis for the Refinery that:

³⁴ Available at http://www.epa.gov/region7/programs/artd/air/title5/ petitiondb/petitions/woc020.pdf (last accessed, November 6, 2003).

³⁵ EPA states that "practicable enforceability for a source-specific permit means that the permit's provisions must, at a minimum: (1) Be technically accurate and identify which portions of the source are subject to the limitation; (2) specify the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); (3) be independently enforceable and describe the method to determine compliance including appropriate monitoring, recordkeeping and reporting; (4) be permanent; and (5) include a legal obligation to comply with the limit."

[A]lthough Title V calls for a re-examination of all monitoring, there is a presumption that these factors [used by the District to develop monitoring] have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. It is possible that, where a rule or permit requirement has historically had no monitoring associated with it, *no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation*. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate.

See Valero Statement of Basis at 14 (emphasis added).

The revised Statement of Basis explains that "The tables [listed in Section C.VII (Applicable Limits and Compliance Monitoring Requirements)] contain only the limits for which there is no monitoring or inadequate monitoring in the applicable requirements. The District has examined the monitoring for other limits and has determined that monitoring is adequate to provide a reasonable assurance of compliance." *See* Valero Statement of Basis at 16-17.

First, the District's determination that, in some cases, requiring additional monitoring is inappropriate directly contradicts the mandate of Title V of the Act, which requires all Title V permits to contain monitoring sufficient to assure compliance with all applicable requirements. *See* 42 U.S.C. § 7661c(c), 40 C.F.R. §§ 70.6(a)(3) & (c)(1). The District has not explained how violations will be detected if there is no monitoring. The absence of monitoring for these sources is therefore insufficient.

Second, the District created and relies upon a presumption that existing monitoring is adequate. According to the District, "a presumption of adequacy for existing monitoring is appropriate because the District has traditionally applied the same factors to assessing monitoring that are called for by Title V." *See* Dist. Resp. Comments at 17, 55. The District claims it reviewed all monitoring in the Refinery permit for sufficiency and determined that, with very few exceptions, the existing monitoring was sufficient. *See id.* However, the District has no legal basis for such a presumption, which is not authorized by either Title V, its implementing regulations, or BAAQMD Regulation 2-6-503. To the contrary, Title V specifically authorizes a review of all monitoring requirements to assure compliance with permit conditions and other applicable requirements.

Petitioners have identified specific requirements for which adequate monitoring is either absent from the Refinery permit or is insufficient to assure compliance with applicable requirements. These issues are discussed below. Until sufficient monitoring is incorporated into Refinery permit, the Administrator should object to the permit.

Finally, although Petitioners agree that, in some cases, existing monitoring is adequate on its face, and the District need not explain how it was derived, such as with CEM monitoring, the

District should have explained its CEM equivalency determination in the Statement of Basis. *See* Dist. Resp. Comments at 17-18.

2. Inadequate Monitoring To Assure Compliance

a. Insufficient Monitoring for Opacity, Filterable Particulate, and Nuisance Fallout

A large number of Refinery sources have federally enforceable limits for opacity, filterable particulate ("FP"), and nuisance fallout, pursuant to BAAQMD Regulations 6-301, 6-310, and 6-305, respectively. These sources and the applicable limitations are listed in Table VII of the Refinery permit.³⁶ For these sources, the District proposes no monitoring to ensure compliance with the applicable limits. This is inconsistent with federal regulations on monitoring. *See* 40 C.F.R. §§ 70.6(a)(3) & (c)(1). The District must impose additional monitoring requirements to ensure compliance in these and other similar cases.

b. Flare Monitoring

Certain flaring events at the Refinery that may violate SIP opacity limits are not being monitored. The District only requires visible inspection of flaring events that last longer than 15 minutes, with visual opacity inspection within an hour of the event. However, the District's opacity rule sets limits that should not exceed more than 3 minutes in any hour. *See* BAAQMD Regulation 6. Thus, flaring events that last less than 15 minutes may violate opacity, but are not proposed to be monitored. In response, the District vaguely states: "A flaring event that lasts less than 15 minutes has already been corrected. It is conceivable that repeated short flaring events could be a problem that evades detection. It is uncertain whether such events are common or constitute a significant source of emissions. However, the new flare monitoring rule will provide data to decide if this is a real problem, and appropriate steps can then be taken." *See* Dist. Resp. Comments, § 6.VII. at 59.

The District implies that opacity limitations need only be monitored if the emission is "significant" or is "a real problem." The District's opacity regulation does not allow for such exemptions. A flaring event that lasts between 3 and 15 minutes could still exceed opacity limits, and such violations should not go unmonitored.

c. Pressure Release Valves

Refinery workers have reported that pressure relief valve liftings occur frequently at the Refinery without being reported to the District. *See* Attachment 2 at 22. The Refinery permit should include requirements to install certain "tell-tale" indicators (*e.g.*, simple flag devices that pop up and stay up when a valve opens) for every pressure relief valve. In addition, there should be recordkeeping and reporting requirements for every occurrence of a tell-tale indicator. The

³⁶ Examples of sources at the Tesoro Refinery that have opacity and FP limits are: the catalyst fines hopper at the FCCU, (S-99), the sandblasting operation (S-781), the coke storage pile, (S-821), fluid coker (S-806), and the sulfur collection pit (S-1405).

District should require newer devices now available that can monitor additional parameters such as pressure and flow, and the District should require more frequent inspections.

In response to public comments, the District states that it reviewed the monitoring for this source category in 1998 during rulemaking for BAAQMD Regulation 8-28. "Based upon this review, the District believes the monitoring requirements are adequate. All of the suggestions offered on the draft permits were made, considered, and rejected for technical, cost-related, or other reasons, during the Rule development process. It has proven difficult to devise monitoring of pressure relief valves in a way that yields meaningful compliance data at a reasonable cost." *See* Dist. Resp. Comments, § 6.VII. at 61.

It is difficult to understand why the District has rejected the monitoring Petitioners requested. In fact, the South Coast Air Quality Management District ("SCAQMD") has promulgated Rule 1173 in which tell-tale indicators and other electronic monitoring devices are required monitoring for PRVs. Specifically, SCAQMD Rule 1173 provides for the following types of monitoring for pressure relief devices ("PRDs"):

(1) The operator shall monitor atmospheric PRDs located on process equipment by one of the following options:

(A) Install tamper proof electronic valve monitoring devices capable of recording the duration of each release and quantifying the amount of compounds released on twenty percent of the atmospheric process PRD inventory, with at least one in each crude distillation unit, coker unit and fluid catalytic cracking unit. The operator shall install the electronic valve monitoring devices during the first turnaround after December 31, 2003; or

(B) Use of electronic process control instrumentation that allows for real time continuous parameter monitoring, starting July 1, 2004, and telltale indicators for the atmospheric process PRDs where parameter monitoring is not feasible. The telltale indicators shall be installed no later than December 31, 2004.

SCAQMD has obviously concluded that meaningful compliance data can be obtained using various available forms of monitoring, including tell-tale indicators, at a reasonable cost. Petitioners request that additional monitoring be required for PRVs in the Refinery permit. The District should also require monitoring of additional parameters such as pressure and flow and should require more frequent inspections.

d. Leak Rates for Valves and Fittings

Petitioners noted in previous comments that EPA inspections have found much higher leak rates for refinery valves (including for Bay Area refineries) than were reported by the refineries.³⁷ This is an indication that the current monitoring requirements are inadequate. In response, the District states, "[f]rom a Title V standpoint, the monitoring is adequate. The District's air quality

³⁷ See "Oil Refineries Fail to Report Millions of Pounds of Harmful Emissions," U.S. Representative Henry A. Waxman, November 1999, available at http://reform.house.gov/min/pdfs/pdf_inves/pdf_enviro_oil_refine_rep.pdf (last accessed November 7, 2003).

planning and rule development process are the appropriate method for reviewing and improving this particular monitoring requirement." Dist. Resp. Comments at 17.

EPA found an average leak rate of 5%, compared to 1.3% reported by the Refineries. EPA estimated VOC emissions from unreported leaks at over 80 million pounds per year, including 15 million pounds of HAPs. Thus, on average, EPA monitoring found approximately *four times more* leaking valves than were being reported by the refineries. Given this information, the District has an obligation to provide a more detailed basis for its decision not to require additional monitoring. In particular, the District should provide sufficient justification that the current monitoring requirements in the Refinery permit are, in fact, sufficient to identify at least the same level of non-compliance as was identified in the EPA study.

e. Process Vessel Depressurization

Petitioners note that there are no requirements in the Refinery permit specifying monitoring or protocols for determination of the partial pressure of hydrocarbon gases in the vessels, necessary to show compliance with BAAQMD Regulation 8-10-301.4. In response, the District added the monitoring and recordkeeping requirement of 8-10-401 to the permit. BAAQMD Regulation 8-10-401 reads as follows:

Turnaround Records: Refinery personnel shall keep records of each process unit turnaround, listing as a minimum:

- 401.1 The date of unit shutdown and/or depressurizing,
- 401.2 The approximate process vessel hydrocarbon concentration when the organic emissions were first discharged into the atmosphere, and
- 401.3 The approximate quantity of total precursor organic compounds emitted into the atmosphere. These records shall be kept for at least two (2) years and be made available to the APCO during any compliance inspection.

It is unclear how this type of monitoring could ensure compliance with the requirements of section 301.4 of the rule, which states that organic vapors are to be contained and treated, "until the pressure within the process vessel is as close to atmospheric pressure as practicably possible, in no case shall a process vessel be vented to the atmosphere until the partial pressure of organic compounds in that vessel is less than 1000 mm Hg (4.6 psig)." BAAQMD Regulation 8-10-301.4. The permit conditions define an acceptable partial *pressure* of organic vapors and thus require a measurement of both vapor phase organic concentration *and* tank pressure. The Refinery permit should be amended to correct this oversight.

f. Tanks

Tanks are exempt in Section VII of the Refinery permit from monitoring under BAAQMD Regulation 8-5 based on their grouping as low vapor tanks. At a minimum, the permit should require periodic monitoring to assure compliance. In response, the District stated that the requirement contained in BAAQMD Regulation 8-5-117 that is applicable to these tanks -i.e., that the vapor pressure of material stored be less than 0.5 psia – has been added to the

appropriate tables in the permits. In addition, the District stated that vapor pressure monitoring has been added, with a frequency of P/E. Petitioners request that these revisions be made in the Refinery permit.

g. Miscellaneous Monitoring Deficiencies

The following issues were raised in public comments on one or all of the Refinery permits. While the specific examples raised in item 3 below may refer to another Refinery, these issues also exist for this Refinery permit. (All other items in this section refer specifically to the Valero permit). Petitioners maintain that the EPA Administrator object to the Refinery permit based on the following deficiencies.

1. Monitoring for diesel backup generators: The Statement of Basis for the Valero Refinery indicates that the federally enforceable opacity limits for diesel backup generators, S-240, 241, and 242 require no monitoring "because the source will be used for emergencies and reliability testing only." *See* Valero Statement of Basis at 22. This is not a valid reason for omitting opacity monitoring for any permit. The District failed to include the appropriate monitoring for diesel backup engines in the Refinery permit.

2. Process upset indicators in place of actual opacity monitoring: The Statement of Basis for the Valero Refinery indicates that S-157, 160, 167, 168, 174, and 175 need no monitoring because the "source is capable of exceeding visible emissions or grain loading standard only during process upset. Under such circumstances, other indicators will alert the operator that something is wrong." *See* Valero Statement of Basis at 21. The problem with the District's reasoning is that while process upset may indicate the possibility of exceeding a limitation, it does not provide a clear indication of compliance or non-compliance. Therefore without opacity monitoring, the opacity limitations will remain unenforceable. The District should have required some form of monitoring in these instances for this Refinery permit.

3. Monitoring for sources burning liquid fuels: The Statement of Basis for the Martinez Refinery proposes "visual inspection" monitoring for grain loading limitations at a number of sources that that burn liquid fuels. *See* Martinez Statement of Basis at 60. The Statement of Basis states that "adequate monitoring for combustion of liquid fuels is a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5 year period." *Id.* It is unclear whether this means that a visual inspection should be completed at least once in 5 years. The Statement of Basis and the Refinery permit must clearly indicate that monitoring is required at least once every 5 years.

B. Deficient Source Specific Permit Conditions

The following issues that were raised in public comments in 2002, and responded to in part by the District, are issues that require the Administrator to object to the Refinery permit. In part A, Petitioners list deficiencies in the Refinery permit to which the District responded in 2002. The public's 2002 comments at issue are excerpted below from the District's response to comments, which in many cases does not reflect the true nature of the comments. The District response is then placed in quotes, followed by a reference to the page and/or paragraph number of the

District document from which the response was taken. Finally, Petitioners' response is then provided in italicized text. In part B of this section, Petitioners discuss additional unresolved deficiencies in the Refinery permit and Statement of Basis.

a). Permit Deficiencies Discussed by the District in Its Response to 2002 Public Comments

1. **Public Comment:** The Statement of Basis needs to include process flow diagrams showing the how the sources, waste streams, and abatement devices are connected. Reviewers should not have to submit a Public Records Act request, go to the District office, and sift through the voluminous and disorganized permit and plant files in the hope of finding this type of relevant information.

District Response: "Assembling this information would extremely resource-intensive. The comment does not explain why this information is needed to review the Title V permit. See discussion in Section IV, above, regarding the role of public review." *See* Dist. Resp. Comments at 12.

Supplemental Comment: The District has a responsibility to allow for meaningful public review of proposed Title V permits. In order to fulfill this responsibility the District must prepare and make available relevant information that can be used by the public to verify that the permit terms and conditions for a facility are correct. This includes process flow information. In the one instance in which Petitioners were able to locate a detailed process flow diagram for one portion of the Valero Refinery, we were able to use this information to correct an error in the draft permit. In particular we found that the District had incorrectly stated that devices A-1 through A-5 abated source S-34, and that the District failed to indicate that a number of other sources were abated by these control devices. Had we and other members of the public obtained easy access to additional information of this type, it is likely that we would have been able to identify additional problems in the permits for all the refineries.

2. Public Comment [In the context of a public comment made on the Martinez Refinery the District has followed up on the public's allegations of permit condition violations at that refinery. However, the District has not done so for allegations made by public commenters at this Refinery. What follows is the discussion of the investigation by the District at Martinez and Petitioners' request that the same investigation be performed at this Refinery for possible 1999 increases in NOx at 3 sources and a boiler modernization project.]: The Martinez Refinery reduced NOx from the CO Boilers to generate IERCs to meet Reg. 9-10 in Application 18185. The modifications reduce the availability of oxygen in the initial combustion zone to inhibit NOx conversion. However, it also simultaneously increased CO concentrations due to lowered oxygen levels. The District's criteria pollutant emission inventory for 1993 to 2001 indicates that these modifications increased CO emissions from about 48 ton/yr

District Response: "The comment appears directed at whether the Shell refinery is complying with its Regulation 9, Rule 10 limit. It is not clear how the commenter intends that this comment, assuming it is correct, should be addressed in the Title V context. Nevertheless, the

prior to 1999 to about 469 ton/yr in 1999 and thereafter, or by nearly a factor of ten.

District has considered the substance of the comment and responds below.

One of the 'fuels' that is combusted in the CO Boilers is the exhaust from the Fluid Catalytic Cracking Unit (FCCU, S-1426), which contains an appreciable amount of carbon monoxide (approximately 8 to 9%, by volume). Carbon monoxide (CO) is the product of incomplete combustion and can be further burned to completion, yielding carbon dioxide (CO2) and useful energy. Rather than wasting the energy contained within the CO exhaust from the FCCU and emitting large amounts of CO in the process, the refinery burns the CO in one of 3 CO Boilers. CO emissions from the 3 CO Boilers (S-1507, 1509 & 1512) are calculated based on reported fuel use multiplied by an emission factor. The District has historically used an emission factor of 0.035 pounds of CO emitted per 1000 cubic feet of CO burned as fuel. The apparent increase in CO emissions that occurred in 1999 was caused by a change in the way the refinery reported CO fuel usage from the FCCU to the CO Boilers. Prior to 1999, Shell reported only the portion of the exhaust from the FCCU that was actually carbon monoxide, which was approximately 8-9% of the total exhaust stream from the FCCU. Starting in 1999, Shell began reporting the entire exhaust stream from the FCCU as CO fuel to the CO Boilers. This resulted in an approximately 10-fold increase in reported fuel usage, even though the 'CO' portion of the FCCU exhaust did not change. The District did not correct the emission factor to compensate for the change in reporting, so the calculated CO emissions increased by a factor of 10. This is a calculation error, and not an increase in real emissions.

District staff has reviewed source test data for the 3 CO Boilers for the period 1994 - 2002. Actual CO emissions from the CO Boilers averaged 6.0 lb/hr for the period 1994 - 1998. For the period 1999 - 2002, the average CO emissions from the CO Boilers were 5.2 lb/hr. Based on this data, CO emissions have actually decreased slightly since 1999.

To correct this problem for subsequent years, the District will revise the emission factor that is used to calculate CO emissions from the CO Boilers. The new CO emission factor of 0.00184 lb CO per 1000 cubic feet of CO fuel has been calculated from the average emissions of 5.2 lb/hr and the average CO fuel (reported as total exhaust from the FCCU) for calendar years 1999-2001." *See* Dist. Resp. Comments at 22-23.

Supplemental Comment: The District should have included information and analysis in the Statement of Basis regarding the reported inventory increases in 2000 NOx emissions from the Refinery CO boilers, as well as, the replacement of several large components of the FCCU (S-5) that may have taken place shortly before the apparent emissions increases. See 2002 Comment Letter, § 21.

3. Public Comment: According to the District's 2001 inventory, a number of tanks have VOC emissions that exceed 2 TPY. They are therefore "significant" sources, as defined in 2-6-239, and should have been listed in Table II.

District Response: "The District is investigating this issue, and will amend the permit appropriately after the investigation is complete. However, as discussed above, the emissions inventory is a tool used for planning purposes, and is not necessarily an accurate tool for determining emissions from a particular source." *See* Dist. Resp. Comments at 26.

Public Comment: Those tanks with emissions in excess of 5 TPY also require permits, pursuant to BAAQMD Regulation 2-1-319.1.

District Response: "The District is investigating this issue, and will incorporate the results into future permits, if necessary. See the preceding response regarding the emissions inventory." *See* Dist. Resp. Comments at 26 & 27.

Supplemental Comment: Petitioners request that the District complete an investigation at the Refinery into unpermitted tanks, and ensure that all significant sources at the Refinery are correctly reported in the Refinery permit prior to its finalizing.

4. Public Comment: Section 112(j) requires refineries to submit an application for case-bycase MACT determinations for any categories where EPA has missed the deadline (the MACT hammer).

District Response: "Each of the facilities is in compliance with this requirement. The requirement to meet future milestones has been added to the generally applicable requirements section (Section III)." *See* Dist. Resp. Comments at 33.

Supplemental Comment: It appears that MACT hammer milestones have not yet been placed into the Section III of the Refinery permit. These milestones must be included in the Refinery permit.

5. Public Comment: Subpart UUU requirements have not been incorporated into the Refinery permit.

District Response: "Subpart UUU has a future effective date of April 11, 2005. The refineries have not yet submitted permit applications indicating their compliance strategies. Since the compliance strategies are not yet known, Subpart UUU has been cited at the subpart level in the Section IV tables for each affected source instead of using the customary detailed citations." *See* Dist. Resp. Comments at 33.

Supplemental Comment: It appears that this suggestion has only been implemented in the permit for the Martinez Refinery. Subpart UUU language must be added to Section IV of the Refinery permit as appropriate.

6. Public Comment: Emissions from the flares must be monitored to assure compliance with Regulation 8. The District seems to be improperly exempting flares from SIP Regulation 8-2, presumably because the SIP Regulation 8-2-110.3 exempts "[a]ny operation or group of operations which are related to each other by being part of a continuous process, or a series of 8, Rule 2 or Rule 3, and for which emissions of organic compounds are reduced at least 85% on a mass basis." If this is the case, the exemption is inappropriate because, in practice, flares do not appear to achieve the required 85% destruction efficiency on a consistent basis. Therefore, the District should either regulate flares under Regulation 8-2 or develop a monitoring procedure that can verify a greater than 85% destruction efficiency at refinery flares and have at least 90% of the organic carbon oxidized to carbon dioxide.

District Response: "Flares are not subject to Regulation 8-2 because they are control devices controlling emissions from process vessels, which are subject to other regulations (e.g., 8-10 and 8-28). Regulation 8-2 applies to sources that have not been addressed by other regulations. Though the District agrees that it would be useful to monitor control efficiency from flares, the technical barriers to doing so are considerable. There is no established means for routinely monitoring the control efficiency of refinery flares. The District will continue to consider this issue as technical understanding progresses." *See* Dist. Resp. Comments at 34.

Public Comment: The Miscellaneous Operations regulation requires that sources without set standards meet a 15 lb/day limit. *See* BAAQMD Reg. 8-2-301. This rule applies to flares (which have no set emission limit in the District's regulations), and other sources as well, but apparently is not currently being enforced by the District. During some periods, the District was applying this rule to such sources. The Refinery permit does not currently list these sources as subject to the 15 lb/day limit. Flares (discussed above) only list throughput limits and efficiency, but do not list explicit emissions limits. This limit should be added to the flare sections in the Refinery permit, and also explicitly identified as applying to Pressure Relief Valve (PRV) liftings.

District Response: "Emergency flares are not subject to Regulation 8, Rule 2. Flares are abatement devices controlling emissions from controlled releases from process units, which are subject to Regulation 8-10 (Process Vessel Depressurization) and Regulation 8-28 (Episodic Releases). Because flare emissions are limited by these other regulations, flares do not meet the definition of 'miscellaneous source' contained in Regulation 8-2-201." *See* Dist. Resp. Comments at 35.

Supplemental Comment: BAAQMD Regulation 1-219 defines an "operation" as "[a]ny physical action resulting in a change in the location, form, or physical properties of a material, or any chemical action resulting in a change of the chemical composition, or chemical or physical properties of a material." Since flaring is a chemical action resulting in a change of chemical composition and physical properties of organic gases, flares are an operation. BAAQMD Regulation 8-2-201 defines a miscellaneous operation as "[a]ny operation other than those limited by the other Rules of this Regulation 8 and the Rules of Regulation 10." BAAQMD Regulation 8-10 (process vessel depressurization) allows for flaring of organic vapors but does not place any limitation on the emissions from flares, whether by placing limitations on destruction efficiency or otherwise.

The flaring of emissions from process vessel depressurization appears to be a "miscellaneous operation" that is subject to Regulation 8-2, unless the District can show that such flares qualify for an exemption under BAAQMD Regulation 8-1-110.3. This latter regulation exempts "[a]ny operation or group of operations which are related to each other by being a part of a continuous process, or a series of such operations on the same process material, which are subject to Regulation 8, Rule 2 or Rule 4, and for which emissions of organic compounds are reduced at least 85% on a mass basis."

Therefore, the District should have either regulated the flaring of process vessel depressurization emissions under Regulation 8-2 or developed a monitoring procedure that

could verify a greater than 85% destruction efficiency for these types of flares. In addition, in order for these flares to qualify for an exemption under Regulation 8-1-110.3, a test method would need to be developed to verify that "at least 90% of the organic carbon shall be oxidized to carbon dioxide."

7. Public Comment: The Refinery cooling towers should be subject to Regulation 8-2-301 until the District adopts a formal RACT rule addressing the serious problem with cooling tower VOC emissions.

District Response: "The District has examined this issue and has concluded that the cooling towers are subject to Regulation 8-2-301. The District has determined that the cooling towers are in compliance because the concentration of precursor organic compounds is much less than 300 ppm total carbon on a dry basis. This conclusion is based on use of the AP-42 factor for organics in refinery cooling towers. The detailed calculations have been included in each statement of basis." *See* Dist. Resp. Comments at 36.

Supplemental Comment: Source testing should be required for the cooling towers at the Refinery. The AP-42 emission factor for VOCs from refinery cooling towers is rated "D" meaning the quality of this factor is below average. The emission factor for PM10 from cooling towers is rated "E" or of poor quality. Source tests should also include determination of air and water circulation rates in the cooling towers.

8. Public Comment: The requirement to inspect primary rim seals for internal floating roofs once every 10 years is not adequate, as it means that a tank would not be monitored for the entire 5-year period covered by the Refinery permit.

District Response: "The once-per-ten year inspection requirement reflects the District's judgment that emissions from landing, evacuating, and inspecting internal floating roof seals would exceed any potential emission reductions gained from discovery of worn seals. This inspection requirement strikes an appropriate balance aimed at maximizing emissions reductions." *See* Dist. Resp. Comments at 37.

Supplemental Comment: The Statement of Basis should have, but did not include, calculations and data supporting the District's opinion regarding the emissions trade-off related to a monitoring frequency that is more frequent than 10 years.

9. Public Comment: The tables discussing the flares do not apply the applicable requirement in 40 C.F.R. § 60.18. Moreover, no monitoring has been designed to assure compliance with 40 C.F.R. § 60.18.

District Response: "This comment is correct only for the draft Valero permit Tables IV and VII have been corrected." *See* Dist. Resp. Comments at 34.

Supplemental Comment: Petitioners could not find this correction in the Refinery permit. The Refinery permit must include these applicable requirements.

10. District Response (Flares): "Most organizations submitting comments on these refinery permits also participated in the refinery flare monitoring rule. Accordingly, the District decided to defer questions of whether to imposition of new monitoring requirements until the rulemaking process was completed. The Title V permits will therefore require monitoring of flares that complies with existing requirements, and will be modified at a future time to include the requirements of the flare monitoring rule." *See* Dist. Resp. Comments at 58.

Supplemental Comment: Petitioners were able to locate Regulation 12-11 monitoring requirements in the Martinez and Tesoro Refinery permits but could not find the requirement in this Refinery permit. Regulation 12-11 requirements should be placed in the Refinery permit and designated as federally enforceable.³⁸

11. Public Comment: The Refinery permit tables should include information on the type and quantity of fuel used in all combustion sources. This information is required as part of the basis for various permit conditions placed upon the sources.

District Response: "Information that is part of the basis for permit conditions is not required to be included in the permit. The permit is required to contain the applicable requirements themselves." *See* Dist. Resp. Comments at 24.

Public Comment: Table II-A should include information on the type and quantity of fuel used in all combustion sources. This information is required as part of the basis for various permit conditions placed upon the sources.

District Response: "The District disagrees. Information such as this, that may be relevant to determining applicability of requirements, does not belong in the permit. The permit must reflect the applicable requirements themselves." *See* Dist. Resp. Comments at 26.

Supplemental Comment: According to 40 C.F.R. § 70.7(*a*)(5), every Title V draft permit must be accompanied by a "statement that sets forth the legal and factual basis for the draft permit conditions." Petitioners understand this to mean that the information upon which the permit conditions are based should to be located either in a Statement of Basis or the permit or both. Neither the Refinery permit or the Statement of Basis contain the required information.

For example, in the Refinery permit, the process capacity and process throughput for source S-6 (coker burner) are provided in Table II-A, but no information is given on the quantity of fuel that this source uses. Yet in Table VII-A5, the District states that S-6 is exempt from monitoring for hazardous air pollutants ("HAPs") under 40 C.F.R. § 63.644 because "large heaters are exempt from monitoring." See Refinery Permit at 518. However, the District has not determined the basis for this exemption from the federal regulation, which would be that the burner has a design

³⁸ The District has authority under federally approved BAAQMD Regulation 2-1-403 to add flare monitoring requirements equivalent to those of BAAQMD Regulation 12-11 into the Refinery permit. "The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants." BAAQMD Reg. 2-1-403. Further, EPA stated that BAAQMD Regulation 12-11 should be incorporated into the Refinery permit and designated as federally enforceable. *See* EPA Sept. Letter, Enclosure A at 1.

heat input capacity of 44 megawatts or greater.

b). Other Permit Condition Deficiencies

i. Permit Application Fails to List Insignificant Sources

Valero's permit application fails to list insignificant sources at the Refinery. *See* Valero Major Facility Review Permit Application, p. 8. BAAQMD Regulation 2-6-405.4 requires every source at a facility to be listed in the Title V permit application even if the source is exempt or insignificant. Further, in response to a comment by the California Air Resources Board on the changes to BAAQMD Regulation 2-6, the District stated that it "requires a listing of all sources in the [Title V] permit application (Section 2-6-405.4) whether significant or insignificant." *See* BAAQMD Staff Report, Proposed Amendments to BAAQMD Regulation 2, Rule 6, April 17, 2001, p.12.³⁹ This lack of information in the permit application inhibits meaningful public review of the Title V permit.

ii. Issues Relating to Flares S-16 through S-19

Missing Requirements. None of the review materials available to Petitioners provide a complete list of sources at the Refinery that are abated by the flares. In addition, the permit materials do not contain any information related to construction or modification of the flares or sources connected to the flares. Under these circumstances, Petitioners find it difficult to make an independent determination as to whether the permit contains all applicable federal requirements for the flares. The District should describe the potential applicability of the following federal regulations to the flares:

- 40 C.F.R. § 63 Subpart A (for S-16 through S-19)
- 40 C.F.R. § 60 Subpart A (for S-16 through S-19)
- 40 C.F.R. § 60 Subpart J (for S-16 through S-18)

40 C.F.R. Subpart J governs fuel gas combustion devices and defines them as "any equipment, such as process heaters, boilers and *flares* used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid." *See* 40 C.F.R. § 60.101 (emphasis added). Subpart J governs flares which commence construction or modification after June 11, 1973. *See* 40 C.F.R. § 60.100. The provisions of Subpart A apply to sources governed under Subpart J. *See* 40 C.F.R. § 60.1(a).⁴⁰ Subpart A requires that "[a]t all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment *in a manner consistent with good air pollution control practice for minimizing emissions.*" *See* 40 C.F.R. § 60.11(d) (emphasis added).

³⁹ Available at http://www.baaqmd.gov/pln/ruledev/2-6/r0206sr2.pdf (last accessed November 7, 2003).

⁴⁰ "Except as provided in Subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility." 40 C.F.R. § 60.1(a).

Any flares that come under 40 C.F.R. § 60 Subpart J must also comply with Subpart A of that chapter and comply with 40 C.F.R. § 60.11(d). The District should implement additional operating requirements at the Refinery consistent with Subpart A. According to 40 C.F.R. § 63 Subpart CC, flares abating Group 1 process vents would be subject to 40 C.F.R. § 63 Subpart A. Assuming that the above cited regulations are applicable, they must be added to Tables IV-A8 and IV-A9. In addition, related monitoring and reporting requirements must be added to Table VII-A8.

iii. Miscellaneous Problems with Tables IV and VII

Table VII (Refinery Permit at 414). The type of monitoring required to assure compliance with 40 C.F.R. § 61.357 is provided by 40 C.F.R. § 61.354 and § 61.355. These consist of test methods and procedures, not "reports," as stated in the table.

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CONCLUSION

Because of the violations of 40 C.F.R. Part 70 identified in this petition, the Administrator must object to the Title V permit issued to Valero Refining Company – California.

Dated: November 24, 2003

Respectfully submitted,

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