

Environmental Integrity Project  
1303 San Antonio Street, Suite 200  
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VIA FACSIMILE AND CERTIFIED MAIL

Administrator Stephen L. Johnson  
U.S. Environmental Protection Agency  
Ariel Rios Building, Mail Code 1101A  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Fax Number: (202) 501-1450

December 12, 2008

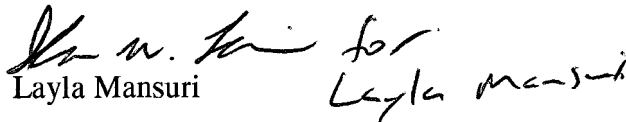
**Re: Petition for objection to proposed Ultramar, Inc. Title V federal operating permit for operation of Ultramar Refinery, Facility ID: 800026, 2402 E. Anaheim Street, Wilmington, CA 90744**

Dear Administrator Johnson:

Enclosed is a petition requesting that the Administrator of the U.S. Environmental Protection Agency object to the proposed Title V federal operating permit issued to Ultramar, Inc. (Ultramar), a subsidiary of Valero Energy Corporation, for operation of the Ultramar refinery. This petition is submitted by Environmental Integrity Project and Coalition For A Safe Environment (Petitioners) pursuant to Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), 40 C.F.R. § 70.8(d).

Thank you for your attention to this matter. If you have any questions, please call me at: 512-637-9478

Sincerely,

  
Layla Mansuri

**ENVIRONMENTAL INTEGRITY PROJECT**

*On behalf of Environmental Integrity Project and  
Coalition For A Safe Environment*

cc (facsimile and certified mail):

Dr. Barry R. Wallerstein, Executive Officer, South Coast Air Quality Management District  
Mr. David Sanders, Vice President and General Manager Ultramar, Inc.  
Gerardo Rios, U.S. Environmental Protection Agency Region 9 Air Permit Section Chief

**UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY**

**BEFORE THE ADMINISTRATOR**

IN THE MATTER OF )

PETITION FOR OBJECTION )

Proposed Clean Air Act Title V )  
Operating Permit Issued to Ultramar, Inc., )  
a Subsidiary of Valero Energy Corporation, )  
for Operation of Ultramar Refinery )  
\_\_\_\_\_ )

Facility ID: 800026

Pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Environmental Integrity Project and Coalition For A Safe Environment (Petitioners) petition the Administrator of the U.S. Environmental Protection Agency to object to the proposed Title V operating permit (permit) issued by the South Coast Air Quality Management District (AQMD) to Ultramar, Inc. (Ultramar), a wholly owned subsidiary of Valero Energy Corporation, for operation of the Ultramar Refinery in Wilmington, California. As required by these cited provisions, Petitioners are providing this Petition to the EPA Administrator, the AQMD, and Ultramar. Petitioners are also providing this Petition to the EPA Region IX Air Permit Section Chief.

Environmental Integrity Project (EIP) is a national nonprofit organization dedicated to advocating for more effective enforcement of environmental laws. EIP's ability to carry out its mission of improving the enforcement of environmental laws would be adversely impacted if EPA fails to object to this permit.

Coalition For A Safe Environment (the Coalition) was established in 2001 for the purpose to advocate, on behalf of its members, for environmental justice, public health and

public safety involved in international trade ports, goods movement, transportation, energy and petroleum industry issues. The Coalition has members in over 25 cities in California and in Baja California. The Coalition and its members have an interest in assuring that the Ultramar Title V permit contains all federally applicable requirements and monitoring adequate to assure compliance with those requirements. Members of the Coalition will be adversely impacted by the inadequate emission monitoring and testing in the current version of the permit as well as EPA's failure to object to this permit.

EPA must object to the proposed permit because it is not in compliance with the Clean Air Act. Specifically, the proposed permit does not contain adequate emissions monitoring, such as continuous monitoring of Particulate Matter (PM) or Compliance Assurance Monitoring (CAM) requirements; the permit does not require carbon monoxide emission testing with process analyzers; the permit fails to incorporate the requirements of the Valero Consent Decree and does not clearly identify emission limits.

### **BACKGROUND**

The Ultramar Refinery is located in Wilmington, near Los Angeles, California. The Refinery processes a blend of heavy and high-sulfur crude oils. The crude oil is processed into products such as gasoline, diesel, jet fuel and petroleum coke. The processes and equipment at the refinery include distillation, coking, cracking, isomerization, reforming, alkylation, hydrogen production, hydrotreating, blending, storage, sulfur recovery, flares and wastewater treatment. The refinery is connected by pipeline to marine terminals and associated dock facilities that can move and store crude oil. Refined products are distributed via the Kinder Morgan pipeline system and various third-party terminals in southern California, Nevada, and Arizona. In 2007, the AQMD issued nine notices of violation (NOVs) for various alleged violations at the Ultramar

refinery and asphalt plant including excess emissions, recordkeeping discrepancies, and other matters.

On July 7, 2008 AQMD issued an initial Title V permit for the Ultramar refinery and opened a public comment period. During the public comment period for the Refinery, Petitioners timely submitted written comments to AQMD on September 5, 2008. Petitioners raised all issues in this Petition in their comments to AQMD. See Attachment A (Petitioners' Comments to AQMD (September 5, 2008)).

EPA received the proposed Title V Permit from AQMD on July 17, 2008. EPA extended its 45-day review period to 90 days. The 90 day EPA review period ended on October 15, 2008. This Petition is timely filed since Petitioners submitted it within 60 days following the end of EPA's review period as required by CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2).

### **SPECIFIC OBJECTIONS**

“If any [Title V] permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter...the Administrator shall...object to its issuance.” CAA § 505(b)(1), 42 U.S.C. § 7661d(b)(1) (emphasis added). EPA “does not have discretion whether to object to draft permits once noncompliance has been demonstrated.” See *N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 334 (2nd Cir. 2003) (holding that EPA is required to object to Title V permits once petitioner has demonstrated that permits do not comply with the Clean Air Act).

#### **I. Title V Permits Must Include Monitoring Sufficient to Assure Clean Air Act Compliance**

The Clean Air Act requires that “each permit issued under [Title V] shall set forth ... monitoring ...requirements sufficient to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). On August 19, 2008, the D.C. Circuit Court of Appeals

struck down an EPA rule that would have prohibited AQMD and other state and local authorities from adding monitoring provisions to Title V permits if needed to “assure compliance.” See *Sierra Club, et al., v. EPA*, No. 04-1243, slip op., (D.C. Cir., August 19, 2008). The opinion instead emphasized the statutory duty to include adequate monitoring:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that “[e]ach permit . . . shall set forth . . . monitoring . . . requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirement insufficient “to assure compliance” with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards. *Id.* at 9.

The opinion also makes clear that the mere existence of “periodic monitoring” requirements may not be sufficient. *Id.* at 6. More specifically, by way of example, the court questioned whether annual testing could assure compliance with a daily emission limit. *Id.* at 5. In other words, the frequency of monitoring should bear some relationship to the averaging time used to measure compliance.

Compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the proposed permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance. The Administrator should object to the proposed permit because its monitoring provisions do not ensure compliance with the Clean Air Act and the D.C. Circuit’s opinion.

## **II. The Proposed Permit Must Require Continuous Monitoring of Particulate Matter (PM)**

Section D of the proposed permit limits PM emissions from the fluid catalytic cracking unit (FCCU) to less than or equal to 562 lbs per day and requires at least an annual stack test to

determine compliance with that limit. *Proposed Permit for Ultramar Refinery*, Section D, pg. 157 and pg. 181. The PM monitoring provisions fail to comply with the Act. As the D.C. Circuit Court explained, requiring an annual stack test to determine compliance with a standard that must be met 24 hours a day is inadequate and does not meet the requirement of the Clean Air Act. *Sierra Club*, slip op. at 5 and 15; 42 U.S.C. § 7661c(c). The D.C. Circuit held that Title V permits must include monitoring that assures compliance and that state permitting agencies like AQMD have the authority to require compliance through additional monitoring. *Id.* at 15. The proposed permit only requires an annual PM test, and this does not assure compliance with the Clean Air Act.

Although the Refinery's FCCU is subject to an opacity limit of 30%, the EPA has determined in its approval of Alabama's Proposed Approval of Revisions to the Visible Emissions Rule within the Alabama State Implementation Plan (the Alabama SIP), that "a reliable and direct correlation between opacity and PM emissions cannot be established without significant site-specific simultaneous testing of both PM emissions and opacity, particularly for short-term periods (e.g., 24 hours or less)." 72 Fed. Reg. 18429 (April 12, 2007); see also 73 Fed. Reg. 60957, 609659 (October 15, 2008) (Final Rule). EPA defines opacity "as the degree to which emissions reduce the transmission of light and obscure the view of an object in the background." *Id.* In the past, PM has been indirectly correlated with opacity given the fact that particulates of different size and shape can alter the way light is transmitted. However, EPA clearly rejects any direct correlation in the analysis given for approval of the Alabama SIP.

Thus, the Refinery's opacity limit of 30% does not indicate that PM emissions from the Refinery are in compliance with the limits reflected in the proposed Permit. Nor do annual stack tests reliably assure compliance with an emission limit that must be met on a daily basis. The

EPA should object to this Permit as proposed and require Ultramar Refinery to install a Continuous Emission Monitoring System (CEMS) for PM to measure compliance with the FCCU PM limit on a continuous basis.

### **III. The Proposed Permit Must Require Continual Carbon Monoxide (CO) Emissions Testing With Process Analyzers**

Section D of the proposed Permit states, “The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method.” *Proposed Permit for Ultramar Refinery*, Section D, pg. 189. In addition, Section D of the proposed permit limits CO emissions to less than or equal to 955 Lbs per day. *Id.* at 157. The EPA should object to this permit because the CO limit at the Refinery must be met daily, therefore measuring compliance once every five years, or even once a year, is not adequate to assure compliance with the Clean Air Act. Unless it can be shown to be technically impossible, the permit should require that analyzers are deployed on a continuous (or at least a daily) basis, or identify an alternate method that could be used to measure emissions consistent with the averaging time specified in the permit.

### **IV. The Proposed Permit Must Require Compliance Assurance Monitoring (CAM)**

Compliance Assurance Monitoring (CAM) requirements seek to increase compliance with emission limits by monitoring pollution control equipment. CAM monitoring applies to refineries, like Ultramar Refinery, whose permit application is submitted after April 20, 1998. 40 C.F.R. § 64 et seq.; 62 Fed. Reg. 54900, 54927 (October 22, 1997).

The refinery has been in operation since 1969 and has applied for numerous permits, including permit revisions, since the CAM regulations were established in 1997. For example,

AQMD received revisions to Ultramar Refinery's Permit application as recently as November, 2007. EPA should object to the proposed permit because it does not require that the Ultramar Refinery use CAM monitoring.

#### **V. The Proposed Permit Must Require Ultramar Refinery to Reduce Toxic Air Emissions**

On pages 90 and 91 in Section D of the proposed permit, two boilers are listed: (1) Boiler 86-B-9000 and (2) Boiler 86-B-9001. Boiler 9000 emits 39 mmBtu/hr and Boiler 9001 emits 127.8 mmBtu/hr. Under AQMD's Regional Clean Air Incentives Market (RECLAIM) program, both boilers are considered a "major source" of sulfur oxides (SO<sub>x</sub>), and Boiler 9000 is a "large" source of nitrogen oxides (NO<sub>x</sub>), whereas Boiler 9001 is a "major source" of NO<sub>x</sub>.

AQMD makes no reference to hazardous air pollutants (HAPs) in connection to the boilers listed in the proposed permit. AQMD must determine if the industrial boilers are major sources of HAPs. If so, Section 112(j) of the Clean Air Act requires that Ultramar Refinery propose HAP limits for the boilers, and that AQMD impose such limits. At a minimum, the proposed Title V Permit should include the Refinery's requirement to submit an application for HAP emission limits, and provide that the Permit will be reopened once AQMD sets HAP limits.

Section 112(d) of the Clean Air Act mandates that the EPA Administrator promulgate emission standards for *major sources* of hazardous air pollutants (HAPs). 42 U.S.C. § 7412(d) (emphasis added). Section 112(e) sets the schedule for the Administrator, "emission standards for all categories and subcategories shall be promulgated not later than 10 years after November 15, 1990." 42 U.S.C. § 7412(e)(1); § 7412 (e)(1)(E). These emission standards "shall require the maximum degree of reduction in emissions." 42 U.S.C. § 7412(d)(2).

If the Administrator fails to promulgate a standard by November 15, 1990, section 112(j)(2) requires the owner or operator of any major source to submit a permit application



containing emission limitations for hazardous air pollutants (HAPs) that is equivalent to the limitation that would have been promulgated. 42 U.S.C. § 7412(j)(2). The owner or operator has 18 months from the date set by 112(e) to promulgate the standard. Section 112(j) is often described as the “MACT Hammer” provision because it requires the maximum degree of reduction as explained in section 112(d)(2) above.

EPA was late in submitting the required national emission standard for hazardous air pollutants (NESHAP) for boilers, as the rule was not promulgated by November 15, 2000. 58 Fed. Reg. 63941, 63952 (December 3, 1993). Although EPA did subsequently release a “boilers rule” on September 13, 2004,<sup>1</sup> the rule was vacated by the D.C. Circuit Court in the case of *Natural Resource Defense Council v. EPA*, 489 F.3d 1250, 1262 (D.C. Cir. 2007).

Thus, there is currently no “boilers rule” in effect and the “MACT Hammer” of section 112(j) applies to the Refinery’s boilers. AQMD should require Ultramar to submit an application proposing a HAPs limit for its boilers. In addition, the EPA should object to this proposed permit if the Refinery boilers are indeed major sources of HAPs, and require AQMD to incorporate HAP limits into the proposed Permit.<sup>2</sup>

#### **VI. The Proposed Permit Should Require Remote Sensing Technology to Determine Actual Emissions of Volatile Organic Compounds (VOCs) From Ultramar Refinery**

Starting on page 150 of the proposed Permit, AQMD limits VOC leak rates to 500 ppmv. AQMD regulates leaks that emit more than 500ppmv but less than/equal to 1,000ppmv by setting a timeline for repairing the leak. Best Available Control Technology (BACT) requirements apply to VOC service fugitive components to control leaks of VOCs into the atmosphere.

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<sup>1</sup> 69 Fed. Reg. 55218 (September 13, 2004).

<sup>2</sup> 40 CFR Part 63.2 Subpart DDDDD; 69 Fed. Reg. 55218 (September 13, 2004), define a major source of HAPs as one that emits “10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.”

However, the infrequent measurement of VOC leaks may not be adequate to assure compliance with the emission standard. For large units, e.g. tanks, compliance with emission limits is based on emission factors that have been shown to be inaccurate.<sup>3</sup>

Differential Absorption LIDAR (DIAL) technology uses lasers to track emissions from refineries, including fugitive emissions from tanks and hard to measure emissions from flares.<sup>4</sup> Two different studies of refineries in Texas and the Canadian province of Alberta have confirmed that emissions from cokers, tanks, flares and other sources are substantially greater than predicted by EPA emission factors. EIP recommends that AQMD take advantage of this technology to measure actual emissions from such units, and make appropriate adjustments to the methods that are used to estimate emissions. AQMD should also require periodic use of infrared cameras to pinpoint major sources of leaks from process units.

## **VII. The Proposed Permit Must Include the Requirements of the Valero Consent Decree**

AQMD Rule 204 states, “To assure compliance with all applicable regulations, [AQMD] may impose written conditions on any permit.”<sup>5</sup> In addition, AQMD Rule 3004 mandates that Ultramar’s permit include a variety of compliance requirements such as compliance certification, monitoring, reporting, testing, and recordkeeping.<sup>6</sup> AQMD Rule 3004 applies directly to Title V

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<sup>3</sup> Environmental Integrity Project (EIP), *Re: Request for Correction of Information Under the Data Quality Act and EPA’s Information Quality Guidelines*, (5-6), (2008), available at <http://www.environmentalintegrity.org/pub521.cfm>.

<sup>4</sup> *Id.* at 6; Clearstone Engineering Ltd., *A Review of Experiences Using DIAL Technology to Quantify Atmospheric Emissions at Petroleum Facilities 2* (Sept. 6, 2006).

<sup>5</sup> AQMD Rule 204, available at [http://www.aqmd.gov/rules/reg/reg02\\_tofc.html](http://www.aqmd.gov/rules/reg/reg02_tofc.html); see also, 40 C.F.R. § 52.220 (217)(i)(C)(1), incorporating AQMD Rule 204 by reference into the California State Implementation Plan.

<sup>6</sup> AQMD Rule 3004(a)(10), available at [http://www.aqmd.gov/rules/reg/reg30\\_tofc.html](http://www.aqmd.gov/rules/reg/reg30_tofc.html).

permits and mandates that the permit include a provision stating that any non-compliance with regulatory requirements and facility permit conditions is a violation of the Clean Air Act.<sup>7</sup>

Importantly, section 10(C) of Rule 3004 covers facilities that are not in full regulatory compliance at the time that a Title V permit is issued. This section requires the permit to, “include a compliance schedule of remedial measures, including an enforceable sequence of actions with milestones, to be taken by the owner or operator to achieve compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any: i) Judicial consent decree or administrative order to which the source is subject...”<sup>8</sup>

Ultramar is currently subject to the terms of the Valero consent decree from the U.S. District Court (Western District of Texas) that was decided on November 23, 2005.<sup>9</sup> In addition, Ultramar is subject to the AQMD Hearing Board Order for Case No. 3845-69, regarding compliance with District Rule 1118.<sup>10</sup> Thus, according to Rule 3004, AQMD must incorporate the requirements of the consent decree into the Ultramar Refinery Title V Permit. Any alleged acts of noncompliance in the Valero complaint that are not already corrected through compliance with the consent decree, must be incorporated into the Permit and enforced under the AQMD Regulations.

### **VIII. The Proposed Permit Should Clearly Identify Emissions Limits**

Section H of the permit currently contains emissions limits that apply to the FCCU unit. While Petitioners appreciate the effort to cross-reference rule sections with Section D, for future permits, AQMD should include the emissions limits from Section H into the charts provided in

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<sup>7</sup> AQMD Rule 3004(a)(7)(B), *available at* [http://www.aqmd.gov/rules/reg/reg30\\_tofc.html](http://www.aqmd.gov/rules/reg/reg30_tofc.html).

<sup>8</sup> AQMD Rule 3004(a)(10)(C) and 3004(a)(10)(C)(i), *available at* [http://www.aqmd.gov/rules/reg/reg30\\_tofc.html](http://www.aqmd.gov/rules/reg/reg30_tofc.html).

<sup>9</sup> <http://www.epa.gov/compliance/resources/cases/civil/caa/valero.html>.

<sup>10</sup> [http://www.aqmd.gov/webappl/fim/prog/hbdisplay.aspx?fac\\_id=800026](http://www.aqmd.gov/webappl/fim/prog/hbdisplay.aspx?fac_id=800026).

Section D. Specifically, limits should be listed in the “Emissions and Requirements” column for the public to more easily connect emissions limits with the equipment releasing the emissions.

### **CONCLUSION**

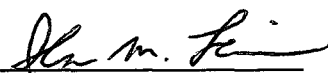
The proposed permit does not contain adequate emissions monitoring, such as continuous monitoring of Particulate Matter (PM) or Compliance Assurance Monitoring (CAM) requirements. The permit does not require Carbon Monoxide emission testing with process analyzers. Moreover, the Administrator should object to the proposed permit because it fails to incorporate the requirements of the Valero Consent Decree and clearly identify emission limits. Without the measures, Title V’s purpose of increasing enforcement and compliance will be defeated.

For all of these reasons, the proposed Permit is not in compliance with the Clean Air Act or its implementing regulations, and the EPA therefore must object to the proposed permit.

Respectfully submitted,

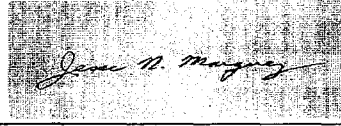
### **ENVIRONMENTAL INTEGRITY PROJECT**

1303 San Antonio Street, Ste. 200  
Austin, TX 78701  
(512) 637-9478 (phone)  
(512) 584-8019 (facsimile)

By:  *for Layla Mansuri*  
Layla Mansuri  
State of Texas Bar No. 24040394  
Email:lmansuri@environmentalintegrity.org

**COALITION FOR A SAFE ENVIRONMENT**

P.O. Box 1918  
Wilmington, CA 90748  
(310) 834-1128 (phone)  
(310) 704-1265

A rectangular area containing a handwritten signature in cursive script, which appears to read "Jesse N. Marquez". The signature is written in dark ink on a light background.

By: \_\_\_\_\_  
Jesse N. Marquez  
Executive Director, Coalition For A Safe  
Environment

DATED: December <sup>12</sup>~~11~~, 2008

**CERTIFICATE OF SERVICE**

I declare under penalty of perjury under the laws of the United States that I have provided copies of the foregoing Petition to persons or entities below on December 11, 2008, as specified:

12

**VIA FACSIMILE AND CERTIFIED MAIL**

Administrator Stephen L. Johnson  
U.S. Environmental Protection Agency  
Ariel Rios Building, Mail Code 1101A  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Fax Number: (202) 501-1450

**VIA FACSIMILE AND CERTIFIED MAIL**

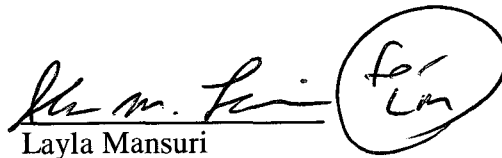
Dr. Barry R. Wallerstein, Executive Officer  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, California 91765  
Fax Number: (909) 396-3340

**VIA FACSIMILE AND CERTIFIED MAIL**

David Sanders  
Vice President and General Manager  
Ultramar, Inc.  
2402 E. Anaheim Street  
Wilmington, CA 90744  
Fax Number: 562-495-5421

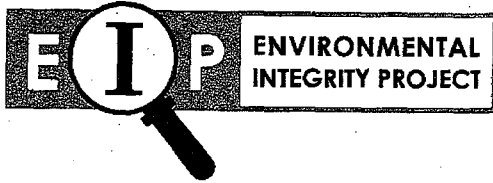
**VIA FACSIMILE AND CERTIFIED MAIL**

U.S. Environmental Protection Agency  
Attn: Air Permit Section Chief  
Region 9  
75 Hawthorne Street  
San Francisco, California 94105  
Fax Number: 415-947-3579

A handwritten signature in black ink, appearing to read "Layla Mansuri". To the right of the signature is a circular stamp containing the handwritten initials "fer" over "Lm".  
Layla Mansuri

# **Attachment A**

**SEPTEMBER 5, 2008 COMMENTS ON THE PROPOSED ULTRAMAR,  
INC. PERMIT FOR OPERATION OF ULTRAMAR REFINERY  
(FACILITY NO. 800026)**



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Washington, DC 20036  
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September 5, 2008

VIA CERTIFIED MAIL

Mr. Jay Chen  
South Coast Air Quality Management District (AQMD)  
Engineering and Compliance  
21865 Copley Dr.  
Diamond Bar, CA 91765-4182

Dear Mr. Chen,

***RE: Comments on Title V Permit for the Ultramar Refinery, Facility ID: 800026, 2402 E. Anaheim Street, Wilmington, CA 90744***

Environmental Integrity Project (EIP) appreciates the opportunity to comment on the draft Title V permit for the Ultramar Refinery. EIP is a nonpartisan, nonprofit environmental group that advocates for more effective enforcement of environmental laws. EIP's comments and suggestions follow:

**The D.C. Circuit Court of Appeals Recently Confirmed that Title V Permits Must Include Monitoring Sufficient to Assure Compliance.**

The Clean Air Act requires that "each permit issued under [Title V] shall set forth...monitoring...requirements sufficient to assure compliance with the permit terms and conditions<sup>1</sup>. On August 19, 2008, the D.C. Circuit Court of Appeals struck down a USEPA rule that would have prohibited AQMD and other state and local authorities from adding monitoring provisions to Title V permits if needed to "assure compliance."<sup>2</sup> The opinion instead emphasized the statutory duty to include adequate monitoring:

"By its terms, this mandate means that a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards."<sup>3</sup>

The opinion also makes clear that the mere existence of "periodic monitoring" requirements may not be sufficient<sup>4</sup>. More specifically, by way of example, the court questioned whether annual

<sup>1</sup> 42 U.S.C.A. §7661c(c).

<sup>2</sup> *Sierra Club, et al., v. EPA*, No. 04-1243, slip op., (D. C. Cir., August 19, 2008)

<sup>3</sup> *Id.* at 9.

<sup>4</sup> *Id.* at 6.



testing could assure compliance with a daily emission limit<sup>5</sup>. In other words, the frequency of monitoring should bear some relationship to the averaging time used to measure compliance.

AQMD should review the Title V monitoring provisions to ensure that it is in compliance with the Clean Air Act and the court's recent opinion. Wherever possible, the permit should require continuous emission monitoring that measures compliance based on the averaging period in the underlying standard. For example, compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance.

*AQMD Must Require Continuous Monitoring of Particulate Matter (PM) from Ultramar*

Section H of the Title V permit limits PM emissions from the FCCU to less than or equal to 562 LBS PER DAY, and Section D requires at least an annual stack test to determine compliance with that limit<sup>6</sup>. As the United States Court of Appeals for the DC Circuit recently determined, requiring an annual stack test to determine compliance with a standard that must be met 24 hours a day is inadequate, and does not meet the requirement of 40 C.F.R section 70.6 (c)(1) of the Clean Air Act<sup>7</sup>.

The court clearly answers the question it poses, "Where *annual* testing cannot assure compliance with a *daily* emission limit, may the permitting authority supplement the monitoring requirement 'to assure compliance with the permit terms and conditions,' as the Act commands?"<sup>8</sup> The court holds that 1) Title V permits must include monitoring that assures compliance and 2) state permitting agencies like AQMD have the authority to require compliance through additional monitoring<sup>9</sup>. In the case of Ultramar, the requirement for annual testing of PM does not assure compliance with Part 70 Rules of the CAA.

While the FCCU is subject to an opacity limit of 30%, the USEPA has determined in its approval of Alabama's Proposed Approval of Revisions to the Visible Emissions Rule within the Alabama State Implementation Plan (SIP), that "a reliable and direct correlation between opacity and PM emissions cannot be established without significant site-specific simultaneous testing of both PM emissions and opacity, particularly for short-term periods (e.g., 24 hours or less)."<sup>10</sup>

EPA defines opacity "as the degree to which emissions reduce the transmission of light and obscure the view of an object in the background."<sup>11</sup> In the past, PM has been indirectly correlated with opacity given the fact that particulates of different size and shape can alter the way light is transmitted. However, EPA clearly rejects any direct correlation in the analysis given for approval of the Alabama SIP.

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<sup>5</sup> *Id.* at 5.

<sup>6</sup> Section H at 109, Section D at 181.

<sup>7</sup> Slip op. at 5 and 15; 42 U.S.C. §7661c(c).

<sup>8</sup> Slip op. at 5; 42 U.S.C. §7661c(c).

<sup>9</sup> Slip op. at 15.

<sup>10</sup> 40 CFR Part 52 at 3 available at <http://www.epa.gov/EPA-AIR/2007/April/Day-12/a6948.htm>.

<sup>11</sup> 40 CFR Part 52 at 2-3.

Thus, Ultramar's opacity limit of 30% does not indicate that PM emissions from the refinery are in compliance with the limits reflected in the permit. Nor do annual stack tests reliably assure compliance with an emission limit that must be met on a daily basis. Ultramar should be required to install a PM CEMS (continuous emissions monitor) to measure compliance with the FCCU PM limit on a continuous basis. As discussed above, AQMD, as a state agency, has the authority to supplement inadequate monitoring requirements under the Part 70.6(c)(1) Rule of Title V of the Clean Air Act<sup>12</sup>.

#### *AQMD Must Test Carbon Monoxide (CO) Emissions Continually With Process Analyzers*

In Section D of the permit, AQMD states that "The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method."<sup>13</sup> Section H of the permit limits CO emissions to less than or equal to 955 LBS PER DAY<sup>14</sup>. Because the CO limit must be met daily, measuring compliance once every five years, or even once a year, is not adequate to assure compliance. Unless it can be shown to be technically impossible, Ultramar should be required to deploy analyzers on a continuous (or at least a daily) basis, or identify an alternate method that could be used to measure emissions consistent with the averaging time specified in the permit.

#### *AQMD Must Require Compliance Assurance Monitoring (CAM) For Ultramar*

CAM monitoring requirements are important, because they assure that pollution control equipment is in good working order, which means that emission limits are more likely to be met. CAM monitoring applies to refineries whose applications are submitted after 04/20/98<sup>15</sup>.

Ultramar's application was originally submitted in February, 1998<sup>16</sup>. However, it has been ten years since AQMD received the application and there have been numerous revisions to the application, the most recent occurring in November, 2007 (submittal of 500 C1 and 500 C2 forms). Thus, CAM monitoring should apply and AQMD must require that Ultramar use CAM monitoring for the refinery.

#### *AQMD Must Require Ultramar to Submit An Application To Reduce Toxic Emissions From Its Boilers*

On pages 90 and 91 in Section D of the Ultramar Permit, two boilers are listed: 1) Boiler 86-B-9000 and 2) Boiler 86-B-9001. Boiler 9000 emits 39 MMBTU/HR and Boiler 9001 emits 127.8

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<sup>12</sup> Slip op. at 15.

<sup>13</sup> Section D, page 189.

<sup>14</sup> Section H, page 109.

<sup>15</sup> EPA, *Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule*, (2004), available at <http://www.epa.gov/ttn/emc/cam.html>; AQMD website, <http://www.aqmd.gov/titlev/CAM.html>.

<sup>16</sup> Page 1, Statement of Basis of Permit.

MMBTU/HR. Under the RECLAIM program, both boilers are considered a "major source" of SOX, Boiler 9000 is a "large" source of NOX, whereas Boiler 9001 is a "major source" of NOX.

AQMD makes no reference to hazardous air pollutants (HAPs) in connection to the Boilers listed. It is therefore vital that AQMD determine if the industrial boilers are major sources of HAPs. If so, Section 112(j) of the Clean Air Act requires that Ultramar submit applications that propose HAP limits for the boilers, and that AQMD impose such limits. At a minimum, the Title V permit should reflect the requirement to submit an application, and provide that the permit will be reopened once limits are established by AQMD.

Section 112(d) of the Clean Air Act mandates that the EPA Administrator promulgate emission standards for *major sources* of hazardous air pollutants (HAPs)<sup>17</sup>. Section 112(e) sets the schedule for the Administrator, "emission standards for all categories and subcategories shall be promulgated not later than 10 years after November 15, 1990."<sup>18</sup> These emission standards "shall require the maximum degree of reduction in emissions."<sup>19</sup>

If the Administrator fails to promulgate a standard by November 15, 1990, section 112(j)(2) requires the owner or operator of any major source to submit a permit application containing emission limitations for hazardous air pollutants (HAPs) that is equivalent to the limitation that would have been promulgated<sup>20</sup>. The owner or operator has 18 months from the date set by 112(e) to promulgate the standard<sup>21</sup>. Section 112(j) is often described as the "MACT Hammer" provision because it requires the maximum degree of reduction as explained in section 112(d)(2) above.

EPA was late in submitting the required national emission standard for hazardous air pollutants ("NESHAP") for boilers, as the rule was not promulgated by November 15, 2000<sup>22</sup>. Although EPA did subsequently release a "boilers rule" on September 13, 2004<sup>23</sup>, the rule was vacated by the D.C. Circuit Court in the case of *Natural Resource Defense Council v. EPA*, 489 F.3d 1250, 1262 (C.A.D.C. 2007).

Thus, there is currently no "boilers rule" in effect and the "MACT Hammer" of section 112(j) falls on the boilers at the Ultramar Facility. Although the 18 month deadline for owners/operators to apply for a permit has already passed (it was May 15, 2002), AQMD should require Ultramar to submit an application proposing a limit on HAPs from the two boilers. In addition, if the two boilers are indeed major sources of HAPs, then AQMD should incorporate HAP limits into the permit<sup>24</sup>.

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<sup>17</sup> 42 U.S.C.A §7412(d).

<sup>18</sup> 42 U.S.C.A §7412(e)(1); §7412 (e)(1)(E); also see §7412(e)(3) for when Administrator must publish the schedule.

<sup>19</sup> 42 U.S.C.A §7412(d)(2).

<sup>20</sup> §7412(j)(2) and §7412(j)(2)(5).

<sup>21</sup> §112(j)(2).

<sup>22</sup> 58 Fed. Reg. 63941, 63952.

<sup>23</sup> 69 Fed. Reg. 55218.

<sup>24</sup> Note: For Boilers subject to Subpart DDDDD, 40 CFR Part 63.2 (69 Fed. Reg. 55218 (September 13, 2004)), defines a major source of HAPs as one that emits "10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants..."

AQMD should also determine whether any other units are subject to the “MACT Hammer,” because if they do, they need to comply with the CAA requirements.

*AQMD Should Deploy Remote Sensing Technology To Determine Actual Emissions of Volatile Organic Compounds (VOCs) Emitted From Ultramar*

Starting on Page 150 of the permit, AQMD limits VOC leak rates to 500 ppmv. AQMD regulates leaks that emit more than 500ppmv but less than/equal to 1,000ppmv by setting a timeline for repairing the leak. Best Available Control Technology (BACT) requirements apply to VOC service fugitive components to control leaks of VOCs into the atmosphere. However, the infrequent measurement of VOC leaks may not be adequate to assure compliance with the emission standard. For large units, e.g. tanks, compliance with emission limits is based on emission factors that have been shown to be inaccurate<sup>25</sup>.

Differential Absorption LIDAR (“DIAL”) technology uses lasers to track emissions from refineries, including fugitive emissions from tanks and hard to measure emissions from flares<sup>26</sup>. Two different studies of refineries in Texas and the Canadian province of Alberta have confirmed that emissions from cokers, tanks, flares and other sources are substantially greater than predicted by USEPA emission factors. EIP recommends that AQMD take advantage of this technology to measure actual emissions from such units, and make appropriate adjustments to the methods that are used to estimate emissions. AQMD should also require periodic use of infrared cameras to pinpoint major sources of leaks from process units.

*AQMD Must Include the Requirements of the Valero Consent Decree in the Ultramar Permit*

Under Rule 204 of the AQMD State Implementation Plan (SIP), entitled “Permit Conditions,” “To assure compliance with all applicable regulations, the Executive Officer may impose written conditions on any permit.<sup>27</sup>” AQMD can therefore require compliance with CAA regulations by imposing written conditions in the Ultramar permit.

Rule 3004 which applies directly to Title V permits is entitled, “Permit Types and Content.”<sup>28</sup> This rule mandates that Ultramar’s Title V permit include a provision stating that any non-compliance with regulatory requirements and facility permit conditions is a violation of the Clean Air Act<sup>29</sup>. In addition, Rule 3004 mandates that Ultramar’s permit include a variety of compliance requirements such as compliance certification, monitoring, reporting, testing, and recordkeeping<sup>30</sup>. Importantly, section 10(C) covers facilities that are not in full regulatory compliance at the time that a Title V permit is issued.

<sup>25</sup> Environmental Integrity Project (EIP), *Re: Request for Correction of Information Under the Data Quality Act and EPA’s Information Quality Guidelines*, (5-6), (2008), available at <http://www.environmentalintegrity.org/pub521.cfm>.

<sup>26</sup> *Id.* at 6; Clearstone Eng’g Ltd., *A Review of Experiences Using DIAL Technology to Quantify Atmospheric Emissions at Petroleum Facilities 2* (Sept. 6, 2006).

<sup>27</sup> Rule 204; available at [http://www.aqmd.gov/rules/reg/reg02\\_tofc.html](http://www.aqmd.gov/rules/reg/reg02_tofc.html). Here, AQMD is the Executive Officer.

<sup>28</sup> Rule 3004; available at [http://www.aqmd.gov/rules/reg/reg30\\_tofc.html](http://www.aqmd.gov/rules/reg/reg30_tofc.html).

<sup>29</sup> Rule 3004(a)(7)(B).

<sup>30</sup> Rule 3004(a)(10).

This section requires the permit to, "include a compliance schedule of remedial measures, including an enforceable sequence of actions with milestones, to be taken by the owner or operator to achieve compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any: i) Judicial consent decree or administrative order to which the source is subject...<sup>31</sup>"


Ultramar is currently subject to the terms of the Valero consent decree from the U.S. District Court (Western District of Texas) that was decided on November 23, 2005<sup>32</sup>. In addition, Ultramar is subject to the AQMD Hearing Board Order for Case No. 3845-69, regarding compliance with District Rule 1118<sup>33</sup>. Thus, according to rule 3004, AQMD must incorporate the requirements of the consent decree into the Ultramar permit. Any alleged acts of noncompliance in the Valero complaint that are not already corrected through compliance with the consent decree, must be incorporated into the permit and enforced under the AQMD SIP.

*AQMD Should Re-Organize Pending Permits So As To Clearly Identify Emissions Limits*

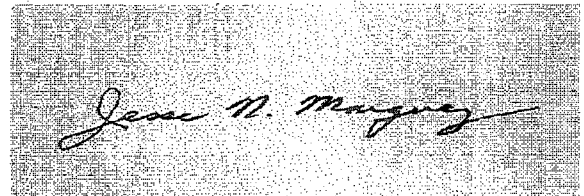
Section H of the permit currently contains emissions limits that apply to the FCCU unit. While EIP appreciates the effort to cross-reference rule sections with Section D, for future permits, AQMD should include the emissions limits from Section H into the charts provided in Section D. Specifically, these limits should go under the column "Emissions and Requirements" so that the public can more easily connect the emissions limit with the equipment releasing the emissions<sup>34</sup>.

Thank you for the opportunity to comment on the Ultramar Permit.

Sincerely,



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<sup>31</sup> Rule 3004(a)(10)(C) and 3004(a)(10)(C)(i).

<sup>32</sup> <http://www.epa.gov/compliance/resources/cases/civil/caa/valero.html>.

<sup>33</sup> [http://www.aqmd.gov/webappl/fim/prog/hbdisplay.aspx?fac\\_id=800026](http://www.aqmd.gov/webappl/fim/prog/hbdisplay.aspx?fac_id=800026).

<sup>34</sup> All charts, even those in Section H, should have clear emissions limits when necessary.

**cc:**

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