



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 19, 2007

Jay Chen
Senior Manager
Refinery, Energy and RECLAIM Administration
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 97165-4182

RE: Preliminary EPA Comments on the Proposed Initial Title V Permit for the Air Liquide Hydrogen Plant at the Chevron, El Segundo Refinery

Dear Mr. Chen:

The purpose of this letter is to provide the South Coast Air Quality Management District (SCAQMD) with EPA's preliminary comments on the proposed initial title V permit for the Air Liquide Hydrogen Plant (ID 148236), located within the Chevron, El Segundo refinery. EPA received the proposed permit on November 16, 2007. EPA's 45-day review period ends on December 30, 2007.

We appreciate the opportunity to review this proposed permit, and are providing our initial comments in the attached document. Please revise the permit to address these issues prior to issuing a final permit. Please also consider these comments as you prepare the initial title V permits for all of the refineries located within the SCAQMD's jurisdiction.

Please do not hesitate to contact me at (415) 972-3974, or Kathleen Stewart of my staff at (415) 947-4119, with any questions you may have on our comments. We look forward to working with you and your staff to address these issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerardo C. Rios".

Gerardo C. Rios
Chief, Air Permits Office

Enclosures

cc: Mukesh Bhatt, Air Liquide

EPA COMMENTS

AIR LIQUIDE HYDROGEN PLANT CHEVRON EL SEGUNDO REFINERY

DECEMBER 19, 2007

1. Applicability Determinations in the Statement of Basis

40 C.F.R. § 70.7(a)(5) requires that a title V permitting authority provide EPA with a “statement that sets forth the legal and factual basis for the draft permit conditions.” In providing guidance to permitting authorities on what constitutes an adequate Statement of Basis over the years, EPA has stated that among other things, a Statement of Basis should include federal regulatory applicability determinations, including exemptions. For a review of Statement of Basis requirements, please refer to EPA’s August 1, 2005 comment letter on the proposed Exxon Mobil permit.

Rather than providing applicability determinations in the Statement of Basis for the Air Liquide title V permit, SCAQMD refers the reviewer generically to past engineering evaluations for the hydrogen plant. While we understand the desire to streamline the permits and Statement of Basis, there are several problems with this approach, as we indicated during our previous review of the proposed title V permit for Exxon Mobil.

First, past engineering evaluations are not submitted with the proposed permit package, and thus are not readily available to the public or to EPA. The applicability determinations provide crucial information related to the review of title V permits. In this case, EPA did not receive engineering evaluations until December 13, three weeks into our review period.

Second, past engineering evaluations may not address recently promulgated federal standards, for instance MACT subpart UUU for petroleum refineries, nor would they address revisions to existing standards, for instance the soon-to-be-revised NSPS J. They also would not deal with recent court-decisions potentially affecting the source, such as court-ordered vacatures of federal standards.

Finally, the title V permit is intended to provide a comprehensive look at all of the Clean Air Act requirements that may apply to a source, thus, it goes against the intent of title V to have applicability determinations for separate pieces of equipment scattered throughout old construction permits rather than cohesively analyzed and summarized in a Statement of Basis for the title V permit. Neither EPA nor the public should have to sort through hundreds of pages of old engineering evaluations to understand the rationale behind what is and is not included in the title V permit as applicable requirements.

The Statement of Basis must address all potentially applicable federal requirements. Past applicability determinations from old engineering evaluations should be gathered and discussed in the title V Statement of Basis. The determinations should be up-to-date and holistic, rather than done in the piece-meal fashion that is necessary when doing determinations in the context of issuing construction permits for individual pieces of equipment. At a minimum, please include all federal requirements that might apply to equipment at the facility being permitted, in this case, the units and components that make up the hydrogen plant; indicate which pieces of equipment are subject to each standard; and explain in detail any determinations that a specific requirement does not apply to a given piece of equipment.

For the purposes of the comments below, EPA has relied on the engineering evaluations provided on December 12 and 13, 2007. For any future permit proposed by SCAQMD, lack of adequate applicability determinations in the actual text of the title V Statement of Basis will be considered grounds for an objection. Further, in the future, EPA will not start its 45-day review clock until all supporting documents have been received, including engineering evaluations cited in the Statement of Basis, consistent with our agreement with the title V subcommittee, as set forth in a letter to Mr. David Dixon, dated February 19, 1999 (attached for your reference, see points 1 and 3).

2. Applicable requirements in summary table for Section H, pages 1-10

The summary tables at the beginning of Sections D and H usually contain citations to the applicable NSPS and NESHAP standards. Although the permit includes some of these standards as applicable requirements (see for instance page 35), the summary table does not include these standards; the requirements should be added to this table for consistency and clarity.

3. NSPS Subpart A

NSPS Subpart A applies “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...” The proposed title V permit for Air Liquide includes NSPS subparts GGG and J as applicable requirements but excludes NSPS subpart A. Because the Air Liquide hydrogen plant contains affected facilities as that term is defined in NSPS J and GGG, subpart A should be included in the permit as an applicable requirement.

4. NSPS Subpart J – Petroleum Refineries

Although NSPS subpart J is included as an applicable requirement for the flare in condition H23.5, there are no specific requirements in the permit for the flare pursuant to NSPS Subpart J. It appears, but is not entirely clear, that the ground flare at the hydrogen plant is to be used solely for emergencies, startups and shutdowns. For instance, Condition S15.1 seems to authorize routine use of the flare:

All vent gases under normal operating conditions shall be directed to Chevron vapor recovery system and/or flare system.

Please address the intended use of the flare in the Statement of Basis, indicate how SCAQMD intends to regulate this flare pursuant to NSPS Subpart J, and add specific applicable emission limits and monitoring requirements as needed for compliance with NSPS Subpart J.

5. NSPS GGG – VOC Equipment Leaks at Refineries

NSPS GGG is included in the permit as an applicable requirement but it is unclear from the permit what applies to each piece of equipment. Please clearly indicate in the Statement of Basis which equipment is subject to the requirements of GGG, and include applicable emission limits and standards (including equipment leak thresholds) specifically in the permit.

6. MACT DDDDD – Boilers and Process Heaters

The engineering evaluation dated 8/9/06 indicated that the reformer process heater would be subject to MACT subpart DDDDD. This MACT standard was vacated by the DC Circuit Court on July 30, 2007. Please be aware that SCAQMD may be required to do a case-by-case MACT determination for this unit in the near future, pursuant to Section 112j of the Clean Air Act. In a proposal for an information collection request (72 FR 62226) EPA stated that:

Owners and operators of affected sources must submit title V permit applications or amendments and comply with terms and conditions established under those permits or modifications related to case-by-case MACT. The terms and conditions can include performance testing, monitoring, recordkeeping, and reporting.

More guidance from EPA will be forthcoming in 2008.

7. CAM

The Statement of Basis indicates that Compliance Assurance Monitoring (CAM) does not apply to any of the permitted emission sources at the facility. As a matter of practice, a Statement of Basis should always give the precise reason why CAM does not apply. In this case the simplest explanation is that CAM will not be triggered until renewal. If CAM will not be triggered at renewal, it would be best to explain the reason why. Please amend the Statement of Basis appropriately.

8. SIP Rule 1118 – Control of Emissions from Refinery Flares

Please clarify in the Statement of Basis or permit how emissions from the hydrogen plant flare will be counted towards the SO₂ performance targets in Rule 1118 (do

they count towards the total refinery cap or is the hydrogen plant flare subject to its own separate cap?). In addition, these performance targets should be included specifically in the permit per EPA's White Paper 2 which gives EPA's guidance on incorporation of standards by reference in title V permits. In general, EPA considers incorporation by reference to meet the requirements of title V so long as all emission limits and standards are included specifically in the permit and compliance obligations are clear and unambiguous.

9. SIP Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

The Statement of Basis and/or permit should indicate whether the hydrogen plant is in light liquid service or heavy liquid service for purposes of clarifying which requirements from Rule 1173 apply. This could be done either by indicating in the permit or Statement of Basis whether the components are in light or heavy service, or by specifying the specific leak standards that apply in the permit.

10. SIP Rule 1109 – Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries.

It appears that SIP Rule 1109 should be included in the permit as an applicable requirement for the reformer process heater. Please add the requirements of 1109, specifically including the applicable emission limit, or explain in the Statement of Basis why the SIP rule is not applicable.

11. SIP Rule 1123 – Refinery Process Turnarounds

Please clarify in the Statement of Basis whether SIP Rule 1123 applies to vessels at the hydrogen plant and add the requirements of the rule to the permit if appropriate.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

February 19, 1999

Mr. David Dixon
Chairperson, Title V Subcommittee
San Luis Obispo County
Air Pollution Control District
3433 Roberto Court
San Luis Obispo, CA 93401

Dear Mr. Dixon:

I am writing to provide a final version of our response to your July 2, 1998 letter in which you expressed concern about Region IX's understanding of the Subcommittee's tentative resolution to the 45-day EPA review period issue. I have also included a summary of the Subcommittee's agreement on two title V implementation issues originally raised by some Subcommittee members at our meeting on August 18, 1998. Our response reflects many comments and suggestions we have received during the past several months from members of the Title V Subcommittee and EPA's Office of General Counsel. In particular, previous drafts of this letter and the enclosure have been discussed at Subcommittee meetings on October 1, 1998, November 5, 1998, January 14, 1999, and February 17, 1999. Today's final version incorporates suggested changes as discussed at these meetings and is separated into two parts: Part I is "guidance" on what constitutes a complete Title V permit submittal; and Part II is a five-point process on how to better coordinate information exchange during and after the 45-day EPA review period.

We will address the letter to David Howekamp from Peter Venturini dated August 7, 1998 regarding permits issued pursuant to NSR rules that will not be SIP approved in the near future. This issue was also discussed at the August 18 Title V Subcommittee meeting.

I appreciate your raising the issues regarding the 45-day EPA review clock to my attention. Your efforts, along with the efforts of other Title V Subcommittee members, have been invaluable towards resolving this and other Title V implementation issues addressed in this letter. The information in the enclosure will clarify Title V permitting expectations between Region IX and the California Districts and will improve coordination of Title V permit information. It is important to implement this immediately, where necessary, so the benefits of this important program can be fully realized as soon as possible in the state of California as well as other states across the country.

If you have any questions please do not hesitate to call me at (415) 744-1254.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Haber", with a long horizontal flourish extending to the right.

Matt Haber
Chief, Permits Office

Enclosure

cc: California Title V Contacts
California Air Pollution Control Officers
Ray Menebroker, CARB
Peter Venturini, CARB

Enclosure

Neither the guidance in Part I nor the process in Part II replace or alter any requirements contained in Title V of the Clean Air Act or 40 CFR Part 70.

PART I. Guidance on Information Necessary to Begin 45-day EPA Review

A complete submittal to EPA for a proposed permit consists of the application (if one has not already been sent to EPA), the proposed permit, and a statement of basis. If applicable to the Title V facility (and not already included in the application or proposed permit) the statement of basis should include the following:

- additions of permitted equipment which were not included in the application;
- identification of any applicable requirements for insignificant activities or State-registered portable equipment that have not previously been identified at the Title V facility,
- outdated SIP requirement streamlining demonstrations,
- multiple applicable requirements streamlining demonstrations,
- permit shields,
- alternative operating scenarios,
- compliance schedules,
- CAM requirements,
- plant wide allowable emission limits (PAL) or other voluntary limits,
- any district permits to operate or authority to construct permits;
- periodic monitoring decisions, where the decisions deviate from already agreed-upon levels (e.g., monitoring decisions agreed upon by the district and EPA either through: the Title V periodic monitoring workgroup; or another Title V permit for a similar source). These decisions could be part of the permit package or could reside in a publicly available document.

Part II - Title V Process

The following five-point process serves to clarify expectations for reviewing Title V permits and coordinating information on Title V permits between EPA Region IX ("EPA") and Air Pollution Districts in California ("District"). Districts electing to follow this process can expect the following. Districts may, at their discretion, make separate arrangements with Region IX to implement their specific Title V permit reviews differently.

Point 1: The 45-day clock will start one day after EPA receives all necessary information to adequately review the title V permit to allow for internal distribution of the documents. Districts may use return receipt mail, courier services, Lotus Notes, or any other means they wish to transmit a package and obtain third party assurance that EPA received it. If a District would like written notice from EPA of when EPA received the proposed title V permit, the District should notify EPA of this desire in writing. After receiving the request, Region IX will provide written response acknowledging receipt of permits as follows:

(Date)

Dear (APCO):

We have received your proposed Title V permit for (Source Name) on (Date). If, after 45-days from the date indicated above, you or anyone in your office has not heard from us regarding this permit, you may assume our 45-day review period is over.

Sincerely,

Matt Haber
Chief, Permits Office

Point 2: After EPA receives the proposed permit, the permit application, and all necessary supporting information, the 45-day clock may not be stopped or paused by either a District or EPA, except when EPA approves or objects to the issuance of a permit.

Point 3: The Districts recognize that EPA may need additional information to complete its title V permit review. If a specific question arises, the District involved will respond as best it can by providing additional background information, access to background records, or a copy of the specific document.

The EPA will act expeditiously to identify, request and review additional information and the districts will act expeditiously to provide additional information. If EPA determines there is a

basis for objection, including the absence of information necessary to review adequately the proposed permit, EPA may object to the issuance of the permit. If EPA determines that it needs more information to reach a decision, it may allow the permit to issue and reopen the permit after the information has been received and reviewed.

Point 4: When EPA objects to a permit, the Subcommittee requested that the objection letter identify why we objected to a permit, the legal basis for the objection, and a proposal suggesting how to correct the permit to resolve the objection.

It has always been our intent to meet this request. In the future, when commenting on, or objecting to Title V permits, our letters will identify recommended improvements to correct the permit. For objection letters, EPA will identify why we objected to a permit, the legal basis for the objection, and details about how to correct the permit to resolve the objection. Part 70 states that "Any EPA objection...shall include a statement of the Administrator's reasons for objection and a description of the terms and conditions that the permit must include to respond to the objections."

Point 5: When EPA objects to a permit, and a District has provided information with the intent to correct the objection issues, the Subcommittee members requested a letter from EPA at the end of the 90-day period stating whether the information provided by the District has satisfied the objection.

While we agree with the Districts' desire for clear, written communication from EPA, a written response will not always be possible by the 90th day because the regulations allow a District 90 days to provide information. To allow EPA ample time to evaluate submitted information to determine whether the objection issues have been satisfied, we propose establishing a clear protocol. The following protocol was agreed to by members of the Subcommittee:

1. within 60 days of an EPA objection, the District should revise and submit a proposed permit in response to the objection;
2. within 30 days after receipt of revised permit, EPA should evaluate information and provide written response to the District stating whether the information provided by the District has satisfied the objection.

