



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

October 8, 2004

Mr. Jack Broadbent
Air Pollution Control Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

**Re: EPA Review of Proposed Title V/ Major Facility Review Permits:
Chevron Products Company (Richmond) #A0010,
ConocoPhillips Company #A0016 (Rodeo),
Shell Oil Products US #A0011 (Martinez),
Tesoro Refining and Marketing Company (Martinez) #B2758 & B2759,
Valero Refining Company #B2626 (Benicia)**

Dear Mr. Broadbent:

We are enclosing with this letter the results of our review of the proposed permits the District submitted to EPA on August 25th, 2004 for Chevron Products Company; ConocoPhillips Company; Shell Oil Products US, Tesoro Refining and Marketing Company; and Valero Refining Company. Please note the following attachments to this letter: Attachment 1, "List of Objection and Reopening Issues;" Attachment 2, "List of Applicability and Monitoring Determinations;" Attachment 3, "List of Issues Addressed by BAAQMD by Letters dated October 6 and 8, 2004;" and Attachment 4, "List of Comments."

With respect to the issues identified in Attachment 1, EPA formally objects to the issuance of the proposed permits, pursuant to our authority under Clean Air Act ("CAA") section 505(b)(1) and the implementing regulations at 40 CFR § 70.8(c) (see also, BAAQMD Rule 2-6-411). Under CAA section 505(b)(1) and 40 CFR § 70.8(c), EPA may object to a proposed Part 70 permit that is determined not to be in compliance with applicable requirements or the requirements of Part 70. After EPA objects to a permit, the permitting authority has 90 days to revise and submit a proposed permit in response to the objection.

For the reasons set forth in our letter to you dated February 4, 2004, EPA is also invoking its reopening authority under section 505(e) of the Act and 40 CFR §70.7(g)(1). Pursuant to those authorities, EPA is notifying the District that cause exists to reopen the permit for the first issue identified in Attachment 1 ("Monitoring Required by 40 CFR NSPS VV, NSPS QQQ, and NESHAP V"). According to 40 C.F.R. §70.7(g)(2), BAAQMD has 90 days to submit to EPA a proposed determination in response to this notification. We believe that 90 days is a reasonable time frame for BAAQMD to submit revised permits to EPA in response to this notification.

With respect to the issues identified in Attachment 2, the District has agreed to submit applicability determinations to EPA by February 15, 2005 and to publish a notice to include any necessary revisions to the permits by April 15, 2005. This process will ensure that any unresolved applicability issues are addressed in a timely manner. The issues identified in Attachment 3 are those for which the District has agreed to make certain changes to the permits before issuing them. EPA appreciates the District's efforts to address EPA's concerns in these areas.

We are committed to working with you to resolve the issues we have identified as expeditiously as possible. If you have any questions concerning these issues, please contact me at (415) 947-8715 or have your staff contact Gerardo Rios, Chief of the Permits Office, at (415) 972-3974.

Sincerely,

Signed by

Deborah Jordan
Director, Air Division

Attachments

cc:

Adams, Broadwell, Joseph & Cardozo - Daniel Cardozo, et. al.
California Air Resources Board - Mike Tollstrup
Chevron Products Company - Jim Whiteside
Communities for a Better Environment - Will Rostov
Conoco-Phillips Company - Willie W. C. Chiang
Golden Gate University - Marcie Keever, et al
Shell Martinez Refinery - Aamir Farid
Tesoro Refining and Marketing Company - J. W. Haywood
Valero Refining Company - John U. Roach

Attachment 1
List of Objection and Reopening Issues

1. Monitoring Required by 40 CFR NSPS VV, NSPS QQQ, and NESHAP V
All Refineries

The permits lack monitoring to assure compliance with the following standards: 40 CFR 60.482-10(c), 60.692-5(a), and 61.242-11(c). These standards require that enclosed combustion devices be designed and operated to reduce VOC emissions by 95% or to provide a minimum residence time at a specified temperature.

The permits do not contain any way to show compliance with the residence time requirement, nor has the District indicated an intent to add a compliance method. We understand that residence time is to some degree a design specification in that the combustion chamber is designed to a specified volume to provide a target residence time for a given throughput. However, throughput to enclosed combustion control devices such as thermal oxidizers can vary, altering the residence time even for properly designed devices.

The standards cited above specifically require that enclosed combustion devices be designed *and operated* to provide a minimum residence time at a minimum temperature. Unless the District is able to adequately demonstrate that the control devices subject to these standards were designed to achieve the required residence time at the maximum anticipated flow rate, and that appropriate parameters are being monitored to assure compliance pursuant to 40 CFR 60.486(d), 60.697(d), and 61.246(d), flow rate monitors must be installed and operated.

2. Federal Enforceability of Permit Terms
Conoco-Phillips

The District has changed the designation for fuel limits that apply to many combustion sources from federally enforceable to not federally enforceable. For example, see Condition #1694 in Table IV - A.2 for Source S-3, and similar conditions that are listed for all of the combustion units other than gas turbines, flares, emergency engines, and newly added heater S-26. Limits created through prior NSR permits are federally enforceable Title V permit requirements. Please see March 31, 1999 letter from John Seitz, Director of EPA's Office of Air Quality Planning and Standards, to Doug Allard, CAPCOA President.

Please note also that the statement of basis states that Conoco-Phillips has relied on throughput limits in this condition to determine that New Source Review does not apply in at least several cases, as noted in Application 5814, attachment F. For instance, section 2.7.1 states that due to the condition 1694 "existing permit conditions limiting

fuel use ... increased production of steam will not be considered a modification and increase will not be quantified.”

The District has agreed to review the following applicability and monitoring determinations by February 15, 2005 and to publish a public notice of any necessary revisions to the permits by April 15, 2005.

3. 40 CFR Part 63 (MACT), Subpart CC applicability for Flares
All Refineries

The Refinery MACT (40 CFR Part 63, Subpart CC) is not included in the applicable requirements tables for flares in any of the refinery Title V permits. Subpart CC contains an exemption from testing, monitoring, recordkeeping, and reporting (TMRR) requirements for refinery fuel gas systems or emission points routed to refinery fuel gas systems (40 CFR 63.640(d)(5)). The revised statements of basis for the Chevron, Shell, and Valero permits indicate that the District considers all emissions from emission points connected to a vapor recovery system the fuel gas system to be exempt, even if the vapor recovery system is not operated and the emissions are flare instead. (See, for instance, p20 of the Valero Statement of Basis) The District therefore proposes to exempt all flares from Subpart CC's testing, monitoring, recordkeeping, and reporting (TMRR) requirements. (The statements of basis for Conoco-Phillips and Tesoro do not contain any applicability determination for flares.)

The District's position that flares are categorically exempt from Subpart CC when used as a alternative to a fuel gas system (see Valero p20) is incorrect. Gases directed to a flare instead of the fuel gas system are not part of the fuel gas system, even if there is common piping between where gases are released from a unit and where the system branches off to either the flare, or the fuel gas system. While the statements of basis for the five refineries generally do not contain enough information to determine applicability, the information in the Valero permit and Statement of Basis indicate that Valero flares S-18 and S-19 are examples of incorrect applicability determinations.¹

The District has agreed to review the applicability determinations regarding flares and MACT Subpart CC. For all flares subject to MACT Subpart CC, the Title V permit for any such flare must include the applicable requirements of MACT CC, such as 40 CFR 63.643(a)(1), 63.644(a)(2), and 63.653(a)(1), and Subpart A (note that the Tesoro permit contains citations to 63.11 but not the other requirements in Tables IV-U, IV-Xb, IV-Xc,

¹Table II A of the Valero permit states that four permitted flares S-16, S-17, S-18, and S-19 burn refinery waste gas. The District requires that Valero use S-18 and S-19 as a routine emissions control device (p. 413 of Table IV and pp 432-3 of section VI), as opposed to other units (p 485 in Section VI of the permit) that are required to vent to the refinery fuel gas system or a boiler.

and Xd).

4. Unit-specific NESHAP Subpart FF Requirements

Tesoro

Although the requirements of 40 CFR Part 61, Subpart FF are applicable to the Tesoro refinery, the District did not identify the subpart as an applicable requirement in any unit-specific tables in the permit. The complexity of the regulation, coupled with the lack of specificity in the permit, make the compliance obligations of the facility unclear.

5. Regulation 8-2 and Hydrogen Plant Vents

Shell and Tesoro

The Shell and Tesoro permits fail to include Regulation 8-2, Miscellaneous Operations, as an applicable requirement for CO₂ vents (also called “dearator”) or other vents at Shell Hydrogen Plants 1, 2 and 3 and Tesoro Hydrogen Plant 1. CO₂ generation is an inherent part of the steam-methane reforming process of generating hydrogen at refineries, which also results in volatile organic compound and/or Hazardous Air Pollutant byproducts that are controlled at all of the three other refineries.² Thus, the Statement of Basis will need to explain any decision that the rule does not apply; and the permits must contain all conditions, including all control devices and compliance requirements, necessary to assure compliance with Rule 8-2 limits. See for example Shell Proposed Table IV-B, Table IV-AL, Table IV-CR, Table VII-A, Table VII-AE, and Table VII-CA

6. Cooling Tower Monitoring

All Refineries

The District has requested information from the refineries regarding the current operation and maintenance practices for their cooling towers. This information will be used to make an applicability determination and include all conditions necessary to assure compliance with Regulation 8-2.

7. Unpermitted Cooling Towers

ConocoPhillips

²Shreve’s Chemical Process Industries Fifth Edition confirms that the products of the hydrogen plant are hydrogen and CO₂ (p.107). Chevron permits includes scrubbers and scrubber monitoring (see p.40 of Table II-B, on-line version); Conoco-Phillips has installed a scrubber as noted in our prior comments; and the Valero permit (Table IV-D4, Section VI, and Table IV-D4) requires incineration of all hydrogen plant unit # S1010 dearator vent emissions in a boilers. In addition, refineries have installed reformulated catalysts.

The ConocoPhillips permit does not contain any requirements for the facility's cooling towers nor does it identify the cooling towers as emission units. The refinery has submitted permit applications for these units and the District is in the process of issuing Authority to Construct permits for the cooling towers and will also add amend the Title V permit.

8. Slop Oil Vessels and Sludge De-watering Operations

Tesoro

In response to a comment (# 118) requesting that the District determine if the Tesoro refinery contains any slop oil vessels or sludge de-watering operations, the District will conduct a thorough review to determine if they are present at the facility.

9. NSPS QQQ Requirements for Oil-Water Separators

Shell

The Shell permit is missing NSPS Subpart QQQ requirements for the facility's oil-water separators and slop oil vessels.

10. NSPS Subpart QQQ and Reg. 8-8 Wastewater Requirements for Slop Oil Vessels

Chevron

The District has previously taken the position that NSPS Subpart QQQ and Reg 8-8 requirements do not apply to the slop oil vessels at the Chevron refinery on the basis that the facility uses controlled tanks - not vessels - for slop oil accumulation. NSPS Subpart QQQ and Reg 8-8, however, do not appear to distinguish between tanks and vessels. Beyond this question of interpretation, however, applicability of these regulations to Chevron's slop oil vessels has not been evaluated.

11. NSPS Subpart QQQ Applicability Determination for New Process Units

Valero

The NSPS Subpart QQQ applicability determination for S-161 in the Valero Statement of Basis indicates that two process units have been constructed in the refinery since 1987. It further states that process wastewater from these units is hard-piped to an enclosed system. While the District discussed the applicability of Subpart QQQ for S-161, it did not discuss the applicability of the subpart specifically for the hard piping and enclosed system installed after 1987. The hard piping appears to meet the definition of a "sewer line" under 60.691 and may be regulated under 60.692- 1(c). Furthermore, it is not clear if the enclosed system that receives the process waste is included in the permit or if it was considered in the applicability determination.

12. NESHAP Subpart FF Requirements for Biotreaters

Shell

The District's position that biotreaters are categorically exempt from NESHAP Subpart FF requirements is inconsistent with Subpart FF's definition of "wastewater treatment systems," which includes biological treatment units. Subpart FF, however, also contains exemptions for biotreaters in some cases. Therefore, applicability of Subpart FF to the biotreaters at the Shell refinery has not been fully evaluated.

13. NESHAP Subpart FF – 10% Annual Average Water Content

Valero, Shell, Chevron

The District's applicability determinations for NESHAP Subpart FF for Valero and Shell and Response to Comment regarding the Chevron permit contain incorrect statements. For example, the District's applicability determination regarding Valero's sewer pipeline and process drains states:

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

While it is true that some waste streams may go uncontrolled under the chosen compliance option, there is a restriction in Subpart FF, which the District did not discuss in its applicability determinations. Section 61.342(e)(1) states that, "the owner or operator shall manage and treat facility waste with a flow-weighted annual average water content of less than 10% in accordance with the requirements of paragraph (c)(1) of this section." As a result, the only waste streams that may go uncontrolled under 61.342(e)(2) are those with an annual average water content greater than 10%. It is not clear from the District's applicability determinations that the waste streams in S-161 and S-32105 meet this requirement. Similar issues arise for the Shell and Chevron permits.

The District's silence on this issue raises a question as to whether the control requirements of 61.342(e)(1) were considered at all for the operations at the refineries. Therefore, the District should verify that all uncontrolled waste streams under the 6BQ compliance option meet the water content requirement under 61.342(e)(2). If the waste streams do meet the requirement, the District should revise the statements of basis to reflect that finding. If the annual average water content in any of the uncontrolled waste streams is less than 10%, the District should add the appropriate requirements to the

permit and revise the applicability determinations and response to comments accordingly.

14. NESHAP Subpart FF– 6BQ

The District stated that facilities are allowed to choose whether the benzene waste streams are controlled or uncontrolled as long as the uncontrolled stream quantities total less than 6 Mg/yr; this statement is not entirely correct. Section 61.342(e)(2) requires all wastes with a water content of 10% or greater (hereafter referred to as “aqueous waste”) to comply with the wastewater provisions in the subsequent paragraphs. For the purposes of the 6.0 Mg/yr limit, this compliance option does not distinguish between “treated” and “untreated” aqueous wastes. Therefore, the sum of all aqueous wastes (controlled and uncontrolled) must be equal to or less than 6.0 Mg/yr. It is not clear if, in selecting which waste streams to leave untreated, the refinery applied the misinterpretation of the regulation that is communicated in the District’s applicability determination. If that is the case, it is possible that the refinery will need to control additional waste streams so the total benzene quantity in both the controlled and uncontrolled systems is less than the 6 Mg/yr limit. To ensure that the permit assures compliance with the requirements of Subpart FF, the District should verify that the refinery properly meets the 6 Mg/yr limit. In doing so, the District should determine whether or not its previous misinterpretation of the regulation led to inappropriate conclusions regarding what waste streams may go untreated.

13. Electro-Static Precipitator Particulate Monitoring

Chevron, Shell, Tesoro, Valero

The District has committed to working with EPA to analyze the relevant technical data and develop permit conditions that require Shell, Tesoro, and Valero to monitor ESP operating parameters. We anticipate that the District will select appropriate monitoring parameter(s) and specific range(s) and revise the permits accordingly.

Four of the refineries operate electro-static precipitators (ESPs) to control emissions from fluidized catalytic cracking units (FCCU), carbon monoxide boilers (burning FCCU gas), cokers, and at Valero other units as well (Table II-A of permitted sources in the proposed Conoco permit does not list any ESP). These emissions can amount to thousands of tons per year, if they are not controlled. Bay Area SIP rules 6-310 and 6-311 limit the concentration and mass of the particulate emissions from the ESP in each case, but lack monitoring. Therefore the permits must be revised to include periodic monitoring under 70.6(a)(3)(B).

The District has added annual testing to permits that previously lacking PM testing for the FCCU emissions. Annual testing at the ESP outlet, however, is inadequate because there is no way to determine whether the control device is operating at a level that meets

the applicable requirements during the rest of the year.³

The District has also added opacity monitoring for the opacity limit that is also contained in Rule 6 where the opacity monitoring was lacking in the permit, and in some cases appears to cite it as a monitoring requirement for the particulate limits (for instance, see Tesoro Table VII-V). While we agree that monitoring for the opacity limit is appropriate, no connection has been established in the rule or in the permit between compliance with the opacity limit in the SIP and the particulate limits.

The Chevron permit (see Table VII.C.2.1) requires four source tests per year and parameter monitoring for the applicable New Source Review limit. The District should either demonstrate that it has already conducted a review that shows that the NSR monitoring in the Chevron permit is adequate periodic monitoring for the SIP, or conduct a similar monitoring review for the Chevron permit.

Also, we recommend correcting the monitoring listed in Shell permit Table VII-AG for 63.1654(a)(1)(i), which appears to indicate that meeting the NSPS opacity limit of 30% will satisfy the monitoring requirements for the lb PM/lb coke burn-off emission rates. While opacity could be selected as a monitoring approach for the PM limit, it is incorrect to assume that compliance with the NSPS Subpart J 60.102(a)(2) opacity limit for these units assures compliance with the separate PM limit under 63.1654(a)(1)(I).

³We understand that the testing will occur at the outlet of the ESP. We suggest clarifying in the revised permits the relationship between emissions at the FCCUs, as well as other emission units, and the ESPs; and where source testing will occur.

15. Support Facilities

All refineries

Certain operations at the refineries may qualify as support facilities. Examples of such operations include:

- loading racks at each of the refineries;
- hydrogen plants located at the Tesoro and Shell refineries, which are owned and operated by Air Products;
- the wastewater operation located at the Shell refinery, which is owned and operated by Sierra Processing; and
- the facility identified as Shell Chemical Lp (ID 12870) in the CARB Emissions Inventory database.

It is currently unclear whether these operations are support facilities. The District has agreed to determine if these operations require Title V permits and to require permits for any operations that are support facilities. Specifically, the District has agreed to meet the following schedule:

November 1, 2004	Provide a list of all permitted facilities adjacent to each refinery.
January 1, 2005	Provide EPA with an analysis of each pairing to determine whether a) a support facility relationship exists, and b) whether the pairing comprises a single facility for Title V purposes.
February 1, 2005	Transmit to each facility determined to be subject to Title V a letter requiring submittal of a title V permit application.

16. Recordkeeping for NSPS QQQ and NESHAP Subpart FF Compliance Options

Chevron

The Benzene Waste Operations NESHAP (Subpart FF) contains several different options that facilities may use to comply with the general standards under 40 CFR 61.342 if the total annual benzene quantity from the facility waste is greater than or equal to 10 Mg/yr; among them are:

- 61.342(c) - waste management and treatment requirements for facilities at which the total annual benzene quantity from the facility waste is equal to or greater than 10 Mg/yr
- 61.342(d) - an alternative to the requirements under 61.342(c)
- 61.342(e) - an alternative to the requirements under 61.342(c) and (d)
- 61.342(f) - off-site treatment option as an alternative to 61.342(c)(1)(i) (not available to facilities complying under 61.342(e))

The proposed Chevron permit contains all four compliance options (see Table IV.G.1.1).

Attachment 3
Issues Addressed in District Letters Dated October 6 and 8, 2004

The manner in which the District included all of these requirements in the permit leaves it unclear as to which option the facility has selected and with which requirements it must comply.

Similarly, the Wastewater NSPS (40 CFR Subpart QQQ) contains several compliance options. For individual drain systems, a source may comply with the requirements of 60.692-2 or 60.693-1. If a source complies with NSPS Subpart QQQ using the requirements of 60.692-2, pursuant to 60.692-2(a)(3) the source must conduct weekly inspections of all drains out of active service unless the source chooses to comply with 60.692-2(a)(4) which allows the source to tightly seal the drains and conduct semiannual inspections. For oil-water separators the source may comply with the requirements of 60.692-3 or 60.693-2. If a source complies with NSPS Subpart QQQ using the requirements of 60.692-3, pursuant to 60.692-3(b) an oil-water separator with a design capacity to treat more than 16 liters per second must use a closed vent system and control device unless the source meets the requirements of 60.692-3(c)(1), in which case the source may comply with 60.692-3(a) or (c)(2).

The District has agreed to add a federally enforceable condition prior to issuing the permit requiring that Chevron maintain records of the compliance option it is using at any given time.⁴

1. NSPS Subpart A requirements for Flares

Chevron, Shell, and Tesoro

NSPS Subpart A is not included in the permits for all flares subject to the requirements of 40 CFR Part 60, Subpart A (i.e. Subpart J flares, including those used for emergencies and process upsets only). As the District concurred (for instance in the revised Statement of Basis for Shell), Subpart A is an applicable requirement for all flares meeting the applicability criteria of 40 CFR 60.100(a) and (b), including flares that are exempt from the H₂S limit pursuant to 40 CFR 60.104(a)(1).

The District has agreed to review the applicability of Subpart A and to add any applicable requirements prior to issuance.

2. Valero Permit Shield from Rule 8-2 Not Public Noticed

Valero

⁴ For clarity, EPA also recommends that the District remove the citation to 61.342(a), which applies to facilities whose waste benzene quantity is less than 10 Mg/yr because the benzene quantity from the facility waste exceeds this threshold.

Attachment 3
Issues Addressed in District Letters Dated October 6 and 8, 2004

Valero's permit contains a shield against Rule 8-2 on the basis that the flares meet the 90% control efficiency exemption criteria of 8-1-110. This permit shield was never public noticed.

The District has agreed to delete this shield. If the District chooses to re-propose Valero's permit with the shield in it, the permit must demonstrate that the flares are meeting the basis for the shield.

3. Tesoro Permit Shield from Rule 8-2

Tesoro

Tesoro's permit contains a shield against Rule 8-2 on the basis that all seven flares at the refinery are subject to Regulation 10, which incorporates the New Source Performance Standards (NSPS) by reference. While the permit indicates in Section IV that all flares are subject to Regulation 10, only three flares appear to be subject to NSPS.

The District has agreed to delete this shield.

4. Assuring Compliance with 40 CFR NSPS VV, NSPS QQQ, and NESHAP V

40 CFR 60.482-10(c), 60.692-5(a), and 61.242-11(c) require that enclosed combustion devices be designed and operated to reduce VOC emissions by 95% or to provide a minimum residence time at a specified temperature. Though the District indicated in its Response to Comments #21 that temperature monitoring would be added to Section VII of the permits, temperature monitoring is missing from Chevron's Table VII.H.2.1 for 60.692-5(a), ConocoPhillip's Table VII-AB for 60.692-5(a) and 60.482-10(c), and Tesoro's Table VII-CF for 60.692-5(a).

The District has agreed to include this temperature monitoring prior to issuing the permits.

5. Facility-Wide Permit Shields

Shell

Section X, Table A-10 of the Shell permit contains 23 facility-wide permit shields, including: shields from six benzene regulations; six SOCMi regulations; NSPS Subpart D, Da, and Dc; the hazardous waste MACT for combustion equipment; two regulations for gasoline bulk loading terminals; one for chromium water treatment compounds; one regulation (40 CFR part 63 subpart SS) for certain MACT categories; one regulation for sulfuric acid plants; and one sulfur dioxide standard.

Attachment 3
Issues Addressed in District Letters Dated October 6 and 8, 2004

As we noted in our letters of October 31, 2003, April 14, 2004, and July 28, 2004, these shields must be appropriately supported and justified. Section 70.6(f)(1) allows the inclusion of a shield provided that the permitting authority “determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.” EPA has determined that the Shell permit does not adequately support 22 of the 23 shields.⁵ The permit does not cite a specific regulatory basis, which in many cases is necessary to part of an applicability determination. It also lack facts and analysis, which are generally necessary to explain the District’s determination that the source qualifies for an exemption. Conclusory statements that a regulation does not apply do not satisfy the requirement to include an applicability determination in the permit. Thus, the permit lacks an applicability determination as the justification for the shields.

The District has agreed to review these shields and to clarify to EPA’s satisfaction, the basis for any shield in the permit prior to issuing the permit, or will delete the shield from the permit.

⁵The shield from 9-1-302 states the regulatory basis for the exemption (fence-line monitoring of SO_x in lieu of limits on individual stacks), and we located a corresponding permit condition requiring fence-line SO_x monitoring in Section IV of the permit (which we recommend cross-referencing in the permit shield determination).

Attachment 3
Issues Addressed in District Letters Dated October 6 and 8, 2004

1. New Source Review and Throughput Limits for Shell gas turbine/supplemental steam generators #1 and #2 (unit S-4190/4191, and S-4192/4193)

Shell has requested an increase to throughput limits on the cogeneration plants in condition 18618. They have requested an increase from 470 mmbtu/hr to 548 mmbtu/hr for the turbines and 222 mmtu/hr to 258 mmbtu/hr for the supplemental steam generators (to be expressed as a daily average). We believe that Shell needs to clarify in the Statement of Basis why New Source Review does not apply. Please note that District will need to re-examine the 24-hour start up and shut-down exemptions that currently apply under condition 12271 items #22 and 24 for any new BACT and/or offset review.

Shell permit condition 18618 cross-references local District rule 2-1-234.3 for NSR applicability determinations in some circumstances. Please remove this citation, or replace it with a citation to SIP approved Rule(s) for any discussion of NSR applicability in this section. Please note that the description states that condition 18618 applies to “grandfathered” units that have not undergone NSR, but the condition also includes the gas turbines. As noted below, these units are subject to New Source Review rather than “grandfathered” units.

2. Clarity of Reg 8-8 requirements in Table IV.G.1.4

Chevron

Although the requirements of Reg 8-8-301 (wastewater separators greater than 760 liters per day and smaller than 18.9 liters per second) and Reg 8-8-302 (wastewater separators larger than or equal to 18.9 liters per second) apply to separators of different capacities, Table IV.G.1.4 (separator cluster 30c) contains references to both sets of requirements. As a result, it is unclear which requirements apply to each of the three separators in the cluster. To clarify the permit, EPA recommends that the District remove citations to the section of the regulation that does not apply (if they are all in the same capacity range) or divide the units into two separate tables and include the appropriate requirements in each table. Such clarification would be particularly useful for the corresponding table in Section VII (Table VII.G.1.4) because Regs 8-8-301 and 8-8-302 each have alternative compliance options and it is difficult to tell from the permit what requirements apply to each unit. As noted in other comments regarding compliance options, we believe that the District needs to add a permit condition that requires recordkeeping of the compliance option that the refinery is using for each unit at any given time.

3. Monitoring for Reg 8-8-112

Chevron

Table IV.G.1.4 of the Chevron permit contains a reference to the exemption under Reg 8-8-112 for separators with wastes that meet certain organic compound concentration or temperature criteria. However, table VII.G.1.4 is missing the monitoring requirement in Reg 8-8-502, which applies to sources operating under exemption. The District previously indicated that the exemption was included in the permit for informational purposes and operational flexibility even though the refinery may not currently operate under it. While it is true that the Permittee may choose which compliance option it wishes to use, the permit must assure compliance with each option that is included in the permit. As a result, the District should add the monitoring and recordkeeping requirements of Reg 8-8-502 to Table VII.G.1.4. Note that this comment also applies to Process Drain Clusters 20d and 20q. As noted earlier, we believe that the District also needs add a condition that requires the refinery to maintain records of which compliance option it uses.

4. Permit Reformatting

General

We understand that the District intends to reformat the permits. We believe that the consolidation of the applicable emission limits and monitoring into a single section will be very helpful. We have found that having a table of contents for the permit (see Chevron) very helpful. A table of contents for Section VI permit conditions (see Valero) will also be helpful if the District is not able to integrate those conditions into the new, consolidated list of applicable requirements and monitoring.