

Enclosure

AQMD RESPONSE TO EPA'S COMMENTS DATED JULY 8, 2009 ON THE PROPOSED TITLE V PERMIT FOR EXXONMOBIL REFINING & SUPPLY COMPANY, TORRANCE REFINERY
Response Date: December 30, 2009

1. NOV/compliance - & language in I1.x conditions

- a. According to the District Facility Information Detail database, Notice of Violation #P52789 is still pending but the Statement of Basis indicates that the facility has no outstanding notices of violation or notices to comply. Please discuss the current status of NOV #P52789 in the Statement of Basis. For each outstanding or unresolved compliance issue, the District should either include any necessary compliance schedules in the permit or explain in the statement of basis why one is not necessary. Also please ensure that the compliance discussion in the Statement of Basis is up to date at the time of permit issuance.

AQMD Response: All the compliance issues have been resolved for this facility. The NOV #P52789 was resolved as the annual source test was conducted for the H2 plant #1 (Unit 4, Process 6, System 1) and the source test report was approved by the AQMD on September 18, 2009. All other NOVs currently listed on FIND were resolved as this facility has come into compliance with the specific rule requirements cited for each associated NOV.

The only revision for the NCs and NOVs discussion on Page 32 of the SOB was the date "April 3, 2009," which was replaced with "December 30, 2009."

- b. For conditions in section I that refer to a District-issued variance, such as I1.1, please include language in the permit to indicate that the variance does not affect federal or citizen enforceability of the underlying applicable requirements. Please also confirm that there is no statement in the permit that refers to a permit shield.

AQMD Response: Condition I1.1 below was revised to include the requested language as underlined. The District also confirms that there is no statement in the permit that refers to a permit shield.

I1.1 The operator shall comply with all the requirements of the condition and compliance schedule as specified in the variance case no. 1183-414, issued on July 15, 2008, in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones or compliance required in the schedule of compliance and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.

The variance (or Order for Abatement) referenced in this condition does not affect federal or citizen enforceability of the underlying SIP approved rules for which the applicant is receiving the variance (or Order for Abatement).

*[RULE 3004(a)(10)(C), 12-12-1997; RULE 518, 8-11-1995]
[Devices subject to this condition: C891, C894]*

Please note that the notification of final compliance for variance case no. 1183-414 was submitted to the District Hearing Board on October 29, 2009 by ExxonMobil. Additionally, the QA/QC plan for the flare gas analyzers and flow meters has been submitted to the District for review and is pending final approval.

2. Single Source/Support Facility Issue

The statement of basis is silent as to whether the Terminal Island and other related facilities are part of the refinery itself or are support facilities for the refinery. While it is ExxonMobil's responsibility to identify such facilities, comply with any applicable requirements that result from such a grouping, and appropriately account for emissions from these facilities in applicability determinations, the District should also ensure that these facilities are properly treated.

The District should identify in the statement of basis facilities and operations which are not included in the proposed permit but that may potentially be considered support facilities or as part of the refinery. The District should also specify the date by which it will determine whether such facilities are part of the same stationary source or are support facilities of the ExxonMobil refinery.

AQMD response:

The AQMD will perform Support Facility and Same Source determinations for the following facilities: San Pedro Marine Terminal (Facility ID # 800092) and ExxonMobil Pipeline Company (Facility ID # 800090). If the AQMD determines they are a Support Facility, each facility will be issued its own Title V permit with the appropriate applicable requirements. The AQMD will work with EPA on these determinations and plans to have this completed by March 31, 2009.

3. EPA-issued NA-NSR permit

Although the Statement of Basis states that EPA has not issued any PSD permits to this facility, it does not discuss permit NSR 4-4-9 (LA 76-02), which EPA issued to Mobil Oil Corp. for the construction of a 300,000 barrel crude oil floating roof storage tank at Terminal Island. The District should ensure that the requirements from this permit are included in the title V permit. Permit NSR 4-4-9 (LA 76-02) is enclosed for reference.

AQMD response:

Section 7 of the Statement of Basis was amended to discuss the NSR permit #LA 76-02 issued by the EPA to grant an authorization to construct a 300,000 bbl floating roof storage tank (Tank #3000x07). The tank was constructed at 551 Pilchard St., San Pedro, CA 90731, a terminal island located 13.54 miles away from the Torrance Refinery, and is currently operated by ExxonMobil Pipeline Company (Facility ID #22906 linked to ID #800090), with a different and separate ownership from ExxonMobil Refining & Supply (ID #800089), who owns the ExxonMobil Torrance Refinery. The subject tank is currently operating under permit no.

M13119 at this facility. Since this NSR equipment does not belong to the refinery, its NSR permit conditions will not be listed in the refinery's Title V permit.

4. NSPS Subpart D, Da, Db, Dc

The statement of basis notes that the following boilers are not subject to NSPS Db, however, due to their firing rates (above 250MMbtu/hr), it appears that they may be subject to subparts D or Da. Please clarify whether Subparts D or Da apply to these boilers. If the regulation applies, the permit must be modified to include the applicable requirements. If the regulation does not apply, the Statement of Basis should provide an explanation.

Device	Description	Page
C164	Boiler 2F-3 CO waste heat; natural gas and refinery gas; 464 MMbtu/hr	D-22 & H-7
D803	Boiler 2F-4; natural gas and refinery gas; 309 MMbtu/hr	D-146
D805	Boiler 75F-4; natural gas and refinery gas; 291 MMbtu/hr	D-146
D1236	Boiler 30F-1; LPG & refinery gas; 340 MMbtu/hr	D-147
D1239	Boiler 30F-2; LPG & refinery gas; 340 MMbtu/hr	D-148

AQMD response:

Please note that the correct reference to device D805 is Boiler 75F-1 instead of 75F-4 shown in above table.

Subpart D (>250 MMBtu/hr Fossil-Fuel-Fired Steam Generators Constructed/Modified after 8/17/71)

Boilers 2F-3 & 2F-4 were constructed in 1966 and have not been modified or reconstructed since 8/17/71; therefore, they are not subject to Subpart D.

Boiler 75F-1 was constructed in 1960 and has not been modified or reconstructed since 8/17/71. Therefore, it's not subject to Subpart D.

Boilers 30F-1 & 30F-2: Even though these boilers were constructed after 8/17/71, they are not subject to Subpart D pursuant to Section 60.40b(j) of Subpart Db. Current permit Condition H23.19, imposed on Devices D1236 & D1239, was revised to remove Subpart D applicability (note that Subpart Db applicability will be retained as indicated below).

The SOB was revised as follows:

Non-Applicability Determinations Table 4.1 (Page 5): Indicate that five boilers (2F-3 (Device C164), 2F-4 (Device D803), 75F-1 (Device D805), 30F-1 (Device D1236) & 30F-2 (Device D1239)) are not subject to Subpart D.

Subpart Da (>250 MMBtu/hr Electric Utility Steam-Generating Units)

Since all five fired boilers produce steam for use in the refinery process units and not to generate electricity, they do not meet the definition of Electric Utility Steam-Generating Units of Subpart Da. This determination is already included on Page 8 of the SOB – “This refinery does not meet the definition of an electric utility”.

Subpart Db (>250 MMBtu/hr Industrial-Commercial-Institutional Steam-Generating Units Constructed/Modified after 6/19/84)

Boilers 30F-1 & 30F-2 are subject to Subpart Db and tagged with Condition H23.19 to indicate applicability of Subpart Db.

5. NSPS Subpart J

- a. The permit contains citations to the requirements of NSPS Subpart J that cite to a date of October 4, 1991. However, NSPS Subpart J has been modified several times since then, most recently on June 24, 2008 (73 FR 35837). The permit should reflect, and require compliance with, the most recently promulgated version of NSPS Subpart J. Please update all citations for NSPS J and other applicable requirements (NSPS Subparts Db, and QQQ, and NESHAP UUU), including citations in Section D, Section H, and Section K prior to finalizing this permit. Please also correct these citations in subsequent refinery permits that are proposed for EPA review.

AQMD response: The permit will be revised to update the dates of the federal rules (J, Db, QQQ, NESHAP UUU) with the latest amended dates.

- b. Heater 22F-2 (unit #D917) is subject to fuel usage limits of condition C1.4 (page D-246) of 1.6 MM cubic feet per day, due to offset requirements. Condition D12.3 (page D-267) requires the operator to install and maintain a flow meter to accurately indicate the fuel usage of this heater but this condition does not require the operator to monitor the meter or record its output. Please explain how the permit ensures that ExxonMobil fulfills its monitoring and recordkeeping obligations.

AQMD response: The associated recordkeeping requirements for Conditions C1.4 and D12.3 are listed in Conditions E6 & E8 of Section E of the Title V permit. Since this heater is subject to RECLAIM rules, the monitoring and recordkeeping requirements are specified in Sections F & G, respectively. Discussions of these Sections E, F, and G are included in Section 6 of the SOB.

- c. Please provide an applicability determination for whether or not the following units are subject to NSPS J or Ja. If they are subject to the NSPS, include the appropriate conditions, such as B61.3, D90.12, H23.13 and E193.16 or other analogous emission limits and monitoring requirements. If these units are not subject to NSPS J, please explain why in the statement of basis.

Device	Description	Page
D269	Heater 20F-1A/B, natural gas and refinery gas, 79 MMbtu/hr w/LNB	D-37

D924	Heater 19F-1, natural gas and refinery gas, 288 MMbtu/hr w/LNB	D-46
D925	Heater 24F-1, waste heat, natural gas PSA gas and refinery gas, 931 MMbtu/hr w/LNB	D-51 H2S req of NSPS J?
D1912, D1943	Sulfur Plant – Claus Train A & B Condensers	D-86 D-88 NSPS J emission limits; System level SOX req. (S13.6) but no monitoring tagged with NSPS J?
D668, D671	Sulfur Pits	D-87, H-32 D-89, H-32 System level SOX req. but no monitoring tagged with NSPS J?
D1375	Sulfur Pit	D-91, H-33 Please clarify why there are fewer requirements than other two pits
D2390	Eductor steam, sulfur pit	D-93 clarify if any requirements of emission points
C686, C687, C1776	Incinerators – natural gas, process gas, refinery gas, propane	D-93, D-96, D-96, H-38 respectively
D803	Boiler 2F-4, natural gas and refinery gas, 309 MMbtu/hr w/LNB	D-146 monitoring
D805	Boiler 75F-4, natural gas and refinery gas, 291 MMbtu/hr w/LNB	D-146 monitoring
D1236	Boiler 30F-1, LPG & refinery gas, 340 MMbtu/hr w/LNB	D-147 monitoring
D1239	Boiler 30F-2, LPG & refinery gas, 340 MMbtu/hr w/LNB	D-148 monitoring
C891	Flare- Elevated, West	D-157, H-56
C892	Flare- Elevated, East	D-158
C894	Flare- Ground	D-158, H-56
C1558	Flare- clean service	D-161

AQMD Response:

Subpart Ja: This subpart applies to equipment constructed/modified after 5/14/07. Please note that none of the 21 devices listed in the comment table above are subject to Subpart Ja. Please also note that Device D2390 is a steam eductor, which is not an emission point as explained in the table below.

Subpart J: Out of 21 devices listed in the comment table, 19 devices are subject to Subpart J (Steam eductor Device D2390 and Sulfur storage pit Device D1375 are not). As per CD requirements, applications were submitted for these 19 devices as follows:

- o Complete evaluation: As indicated in the Attachment 2 of the SOB, PCs were issued to Devices C626 (waste gas incinerator (28F-11)) and D1375 (S storage pit) on 10/30/08. Complete conditions were already imposed in the permit.
- o Pending evaluation: EPA's request to impose Conditions B61.3 (specifying 160 ppmv H2S limit) and D90.12 (determining the continuous monitoring method) on pending application equipment cannot be done at this time, because this requires a complete engineering evaluation. A Title V permit revision will be issued to incorporate these changes when the evaluation is completed (by summer of 2010).

The Attachment 2 referenced in Section 9 – “Consent Decree” of the SOB will be revised to include this explanation as follows:

- Title Page: Attachment 2
Consent Decree: Applications ~~Submitted~~ Submitted for Subpart J Compliance and Status
- Table Pages (Pages 1 & 2):
 - o Table Header: ExxonMobil Consent Decree – Applications ~~Submitted~~ Submitted for Subpart J Compliance and Status
 - o Table Footer: The following footnote will be inserted to explain the pending evaluation status indicated in the Status Column:
“Imposing Conditions B61.3 (specifying 160 ppmv H2S limit) and D90.12 (determining the continuous monitoring method) on pending application equipment cannot be done at this time because this requires a complete engineering evaluation.”

Consent Decree (CD): To accommodate CD requirement that these pending evaluation equipment be subject to Subpart J on the CD entry date as of 12/13/05, Conditions H23.13 and E193.16 will be imposed at this time in the permit to address Subparts J and A applicability and tagged with CD. Additional explanation is provided in the following table.

Device	Explanation	Permit Action
D269	Heater 20F-1A/B: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time. Possible to split to 2 permit units.	Impose E193.16 & H23.13 conditions
D922	Heater 20F-2: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 & H23.13 conditions
D924	Heater 19F-1: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time. AMP monitoring condition should also be included. Possible to split to 3 permit units.	Impose E193.16 & H23.13 conditions
D925	Heater 24F-1: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 (already tagged with H23.33 for SOx limits per Subpart J)

D1912, D1943	Sulfur Plants – Claus Train A & B Condensers: Pending evaluation. Identifying the control equipment venting and method of monitoring are not certain at this time.	Tag CD to existing S13.6 condition
D668, D671	Accumulator Sulfur Pits: Pending evaluation. Identifying the control equipment venting and method of monitoring are not certain at this time.	Tag CD to existing S13.6 condition
D1375	Storage Sulfur Pit: As specified in equipment description, this pit is for storage function and the other two (D668 & D671) are for accumulating function. This pit is listed in a separate system as it is not part of the sulfur recovery system. Since its vent gas containing H ₂ S is sent to the fuel gas combustion device (Incinerator C626), it's not subject to Subpart J.	PC 10/30/08. No change in the permit at this time.
D2390	Eductor: Not an emission point as this eductor serves the storage pit (Device D1375).	No change in the permit at this time.
C686, C687, C1776	Incinerators: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time. AMP monitoring condition should also be included.	Impose E193.16 & H23.13 conditions
D803	Boiler 2F-4: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 & H23.13 conditions
D805	Boiler 75F-1 (not 75F-4): Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 & H23.13 conditions
D1236	Boiler 30F-1: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 & H23.13 conditions
D1239	Boiler 30F-2: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose E193.16 & H23.13 conditions
C891	Flare 65F-3: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Impose H23.13 condition (E193.2 was already imposed)
C892	Flare 65F-4: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Same as above
C894	Flare 65F-8: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time.	Same as above
C1558	Flare 55F-1: Pending evaluation. The limit to monitor and the specific method to monitor are unknown at this time. AMP monitoring condition should also be included.	Same as above

It should be noted that Device C626 will be removed from Table 4.1 (pp. 5 & 6) of the SOB as it is subject to Sub J.

- d. The permit contains conditions for heater D367 in section H (H28.8 and K40.4) and in section D (B61.3, D90.12, E193.16 and H23.13). The requirements for NSPS J only appear in section D and it is unclear what will happen to these requirements when the section H requirements are converted to a PTO and moved over to section D. Please clarify the process by which the section H requirements are transferred to section D (for example, are the section H conditions added to the conditions already

present in section D or do the requirements in section H replace what is presently in section D?).

AQMD Response: As listed in Attachment 2 (No. 15) of the SOB, PO Section D was issued for this heater (Heater 4F-1) on 2/20/08 per CD AN 455133 and therefore, Conditions B61.3, D90.12, E193.16 and H23.13 were imposed in Section D. This application (AN 455133) is a subsequent application of AN 403013, PC Section H issued on 6/6/03. Section H permit will be revised to add all four conditions, B61.3, D90.12, E193.16 and H23.13, currently listed in Section D, for completeness.

- e. The following emission units are in the Sulfur recovery plant. Please clarify which of the following devices from the sulfur recovery plant are emissions points. For each emission point, please clarify what conditions in addition to S13.6 address the requirements of 60.104(a)(2)

Device	Page
D666	D-85
D2007	D-85
D1944	D-85
D667 (fuel?)	D-86
D669	D-87
D2008	D-87
D1945	D-87
D670 (fuel?)	D-88

AQMD response: These pieces of equipment have no emission points since they are not vented to the Tail Gas unit or Tail Gas Incinerator as explained in the table below. For two waste heat boilers (Devices D1944 & D1945), the permit will be revised to add "unfired" wording.

Explanation
D666 is a reactor and not an emission point
D2007 is a reactor and not an emission point
D1944 is a waste heat boiler. "Unfired" to be added in the permit
D667 is a product combustor and no vent stream to atmosphere
D669 is a reactor and not an emission point
D2008 is a reactor and not an emission point
D1945 is a waste heat boiler. "Unfired" to be added in the permit
D670 is a product combustor and no vent stream to atmosphere

6. NSPS GGG and GGGa - Standards of Performance for Equipment leaks in Petroleum Refineries
- a) The permit and Statement of Basis do not clearly address whether NSPS GGG and GGGa apply to the emission units in the following table. Please clarify whether the

emission units are subject to the New Source Performance Standards. NSPS GGG applies to affected facilities that commence construction, reconstruction, or modification after January 4, 1983, and on or before November 7, 2006. NSPS GGGa applies to affected facilities that commence construction, reconstruction, or modification after November 7, 2006. Affected facilities include compressors and the group of all equipment within a process unit, as defined in 60.590a(c). Equipment is defined as each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service within a process unit.

The statement of basis incorrectly states that the regulation does not apply to any of the fugitive components or compressors at the refinery because the “process units/compressors were constructed prior to November 7, 2007 and have not been modified since.” Some of the compressors or fugitive components listed below have been issued PTCs which indicate that ExxonMobil may have commenced construction, reconstruction, or modification of the compressors or fugitive components either before or after November 7, 2006.

If NSPS GGG or GGGa applies, the permit must be modified to include the applicable requirements. If the regulations do not apply, the Statement of Basis should explain why.

Process	Emission Unit	Type	PTC issuance date
Crude Distillation	D2254	Fugitive component	10/18/2006
Coking & Residual Conditioning	D119	Fugitive component	--
Hydrotreating	D1834	Fugitive component	--
Hydrotreating	D225	Compressor	1/7/2005
Hydrotreating	D1803	Fugitive component	1/7/2005
Hydrotreating	D329	Compressor	1/7/2005
Hydrotreating	D330	Compressor	1/7/2005
Hydrotreating	D331	Compressor	1/7/2005
Hydrotreating	D1244	Compressor	1/7/2005
Hydrotreating	D1810	Fugitive component	1/7/2005
Hydrotreating	D572	Compressor	1/7/2005
Hydrotreating	D574	Compressor	1/7/2005
Hydrotreating	D575	Compressor	1/7/2005
Hydrotreating	D576	Compressor	1/7/2005
Hydrotreating	D1834	Fugitive component	1/7/2005
Catalytic Reforming	D248	Compressor	--
Catalytic Reforming	D300	Compressor	--
Hydrogen Production	D355	Compressor	--
Hydrogen Production	D356	Compressor	--
Hydrogen production	D2235	Compressor	6/28/2006
Hydrogen production	D390	Compressor	6/28/2006
Hydrocracking	D1915	Compressor	--

Hydrocracking	D437	Compressor	--
Hydrocracking	D1277	Compressor	--
Gas Production Process	D1298	Compressor	--
Gas Production Process	D542	Compressor	--
Loading/Unloading	D1847	Fugitive component	--
Petroleum Miscellaneous	D869	Compressor	--
Air Pollution Control	D980	Compressor	--
Air Pollution Control	D981 thru D984	Compressors	10/18/2006
Air Pollution Control	D985	Compressor	--
Air Pollution Control	D986	Compressor	--
Air Pollution Control	D1556	Compressor	--
Air Pollution Control	D1939	Compressor	--

AQMD Response:

Subpart GGG Start Constructed/Modified after 1/4/83 and on or before 11/7/06:

EPA's comment table includes six (6) fugitive devices (D119 should be compressor instead of fugitive device and D869 should be fugitive instead of compressor) and 30 compressor devices as follows:

1. 6 fugitive devices (D2254-H, D1834-D&H, D1803-H, D1810-H, D1847-D & D869-D):
 - D2254-H, D1834-D & D869-D: Condition H23.34 was already imposed to address Subpart GGG and tagged with GGG and CD. EM now requests¹ that all the fugitive components be subject to and complied with Subpart GGGa. Condition H23.34 will be modified to 1)remove GGG, 2)add GGGa, and 3)tagged with GGGa and CD.
 - D1834-H, D1803-H, D1810-H: To be consistent with Section D, permit will be revised to impose Condition H23.34 to these devices listed in Section H to address Subpart GGGa applicability.
 - D1847-D: The fugitive device does not trigger Subpart GGG/GGGa and R1173 since it is not in VOC service. Therefore, current Condition H23.10 addressing R1173 will be removed from this device.

The discussion of Subpart GGGa replacing Subpart GGG will be included in the SOB.

2. 30 compressors (15 in Section D and 15 in Section H), Condition H23.14 (GGG) was imposed on only one device (D2235-H). GGG determination from other 29 compressors is discussed as follows:
 - o 13 exempted compressors: D225, D329, D330, D331, D1244, D572, D575, D576, D248, D300, D1915, D437, and D1277 are exempt per 60.593(b) and 60.593a(b) for hydrogen service (greater than 50% by volume). The SOB will be revised to include this discussion.

In addition, the SOB will also be revised to discuss four compressors (3K-1A/B/C (D1276, D1278, D1280), and 3K-2B (D1279)) that are exempt from GGG or GGGa as for hydrogen service, but were not included in EPA's comment table above.

- o Six compressors installed prior to 1/4/83: These six devices (D574, D355, D356, D1298, D1556, and D1939) are not subject to GGG/GGGa due to their construction date. However, EM has accepted¹ GGGa applicability and the devices will be tagged with modified condition H23.34 for GGGa compliance requirements.
- o 10 Compressors subject to GGGa: EM accepted¹ that the GGGa is applicable to 10 compressors (D119, D390, D542, D980, D981, D982, D983, D984, D985, and D986). Condition H23.34 will be imposed in the permit to address this Subpart GGGa.

¹In a letter to the EPA dated August 24, 2009, ExxonMobil has notified the EPA of its decision to comply with the requirements of 40CFR 60 Subpart GGGa for all affected facilities at the Torrance refinery to streamline federal fugitive requirements. This notification, however, did not include the removal of Consent Decree (CD) requirements entered in 2005, which forms the basis for the refinery-wide applicability of Subpart GGG requirements. As such, the District believes the CD requirements referencing Subpart GGG applicability must carry over to Subpart GGGa applicability even though ExxonMobil has requested the tagging of the CD be removed from the Title V permit. Condition H23.xx has been tagged to the following affected devices (miscellaneous fugitive component and compressors) that are subject to the compliance requirements of Subpart GGGa.

Device ID	Equipment	Regulation	Summary of Applicability Determination
All misc. fugitive emissions components except device D1847	Fugitive Emissions Components	40 CFR 60, Subpart GGGa	Volunteer acceptance of NSPS by facility.
D119, D355, D356, D390, D525, D542, D574, D980, D981, D982, D983, D984, D985, D986, D1298, D1556, D1939,	Compressor	40 CFR 60, Subpart GGGa	Volunteer acceptance of NSPS by facility.

- b) Please explain the permit requirements that apply to D2352. The emission unit is listed in the section H tables as having a cancelled PTC.

AQMD Response: AN 369332 was entered for this device. D2352 was incorrectly tagged with a cancelled AN. It's now correctly tagged with AN 369332.

7. NESHAP Subpart CC

- a) Condition 2.a. on page 3 of section J in the proposed permit must specify that the concentration requirement of 20 parts per million by volume must be “on a dry basis, corrected to 3 percent oxygen” as required by 40 CFR 63.643.

AQMD Response: Changes have been made for Group 1 emission point.

- b) Condition 1 on page 4 of section J in the proposed permit requires the refinery to determine whether an emission point is a Group 2 emission point for storage vessels using § 63.654(i)(1)(iv). Section 63.654(i)(1)(iv) states that a “storage vessel is

determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.” Based on how the permit is written, it must also include § as part of the determination method since these regulatory citations specify precisely the method for determining weight percent of total organic HAP for purposes of group determination.

AQMD Response: Section J template for 40CFR63 Subpart CC, #2 5-25-2001, found on Page 3 of Section J, for Group 2 emission points has been amended to include sections 63.646(b)(1) and (2) for storage tanks presented in the table of Condition 1.

- c) The statement of basis should be clarified regarding the definition of Group 2 miscellaneous process vents. Page 16 of the statement of basis states that a “Group 2 miscellaneous process vent has a total organic HAP concentration of greater than or equal to 20 ppmv and total VOC emissions of less than 33 kg/day at the outlet of the final recovery device (if any) and prior to any control device and prior to any discharge to the atmosphere.”

Section 63.641 defines a Group 1 miscellaneous process vent as a miscellaneous process vent for which the total organic HAP concentration is greater than or equal to 20 parts per million by volume, and the total volatile organic compound emissions are greater than or equal to 33 kilograms per day for existing sources and 6.8 kilograms per day for new sources at the outlet of the final recovery device (if any) and prior to any control device and prior to discharge to the atmosphere. A Group 2 miscellaneous process vent is defined as a miscellaneous process vent that does not meet the definition of a Group 1 miscellaneous process vent. The definition provided in the Statement of Basis does not encompass all Group 2 miscellaneous process vents since it deviates from the definition in the regulation. Therefore, the definition for Group 2 miscellaneous process vents should include the correct definition in the statement of basis.

AQMD Response: The Statement of Basis has been revised (Page 17) to define Group 2 miscellaneous process vents as any miscellaneous process vents, as described in 40 CFR 63.641, which do not meet the definition of Group 1 miscellaneous process vents under this subpart. This change in definition does not necessitate any changes in the facility permit.

According to 63.641, Group 1 miscellaneous process vents for existing sources are miscellaneous process vents that have total VOC emissions of greater than or equal to 33 kilograms per day. By deduction, Group 2 miscellaneous process vents for existing sources are miscellaneous process vents with total VOC emissions of less than 33 kilograms per day.

8. NESHAP Subpart UUU

- a) Please clarify whether NESHAP UUU applies to the emission units in the following table. The regulation applies to FCCU process vents associated with regeneration of the catalyst used in the unit, CRU process vents associated with regeneration of the catalyst used in the unit (including vents that are used during the unit depressurization,

purging, coke burn, and catalyst rejuvenation), SRU process vents associated with sulfur recovery, and each bypass line serving a new, existing, or reconstructed FCCU, CRU, or SRU. If the regulation applies, the permit must be modified to include the applicable requirements. If the regulation does not apply, the statement of basis should explain why.

Unit	Emission Unit	Type/Name	PTC issuance date
FCCU	S2305	Turbine	--
	S2307	Turbine	--
	S1739	Stack	12/9/2008
	C164	Boiler	3/27/2007
	C1590	Cyclone	--
	C2314	Cyclone	--
CRU	--	--	--
SRU	D651, D652, D663, D664	Knock out pots	--
	D666	Furnace	--
	D1946, D2007, D2008	Reactors	--
	D655, D1909 through D1911, D1913, D1914, D1942	Condensers	--
	D668, D671	Sulfur Pits	7/6/1999
	D1366, D1947, D1368	Regenerators	--
	D653	Contacting Vessel	--

AQMD Response: For clarification, S2305 & S2307 should be D2305 & D2307. Subpart UUU applicability for each device is discussed in the table below and the permit will be revised accordingly as specified in the action column.

Device ID	Subject to UUU	Explanation	Action
FCCU			
D2305	N	These devices are not catalyst regeneration flue gas vent and therefore, are not tagged with Subpart UUU. Only the FCCU's regenerator Device D151 is tagged with UUU.	Revise permit to add "Unfired" to D2305 & 2307 Subpart UUU currently tagged to ESPs Devices C165-166, C2283-84 will be removed
D2307	N		
S1739	N		
C164	N		
C1590	N		
C2314	N		
SRU			
D651, D652, D663, D664	N	These devices are not process vents since they are not vented to the Tail Gas (TG) Unit or TG Incinerator and therefore, are not tagged with Subpart UUU.	none
D666	N		
D1946, D2007, D2008	N		
D655, D1909 through D1911, D1913, D1914, D1942	N		
D1366, D1947, D1368	N		

D668, D671	Y	These devices are vented directly to the TG Incinerator and therefore, they are subject to Subpart UUU.	Subpart UUU will be tagged to D668, D671 & D653
D653	Y		

b) The permit must include the applicable operating limits for the inorganic HAP limits that apply to the CRU. Since Condition 6 of section J in the proposed permit for the CRU requires the refinery to meet the percent reduction or concentration emission limits, the permit must include the corresponding operating limits for both emission limits as required in 63.1567, and table 23 of NESHAP UUU. Currently, the permit only contains the operating limit for meeting the concentration limit. The operating limits from table 23 are provided below for the inorganic HAP limits of "reduce uncontrolled emissions of HCl by 97 percent by weight or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen."

Control Device	Operating Limit
Internal scrubbing system or no control device meeting outlet <u>HCl concentration limit</u> .	<ul style="list-style-type: none"> The daily average HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test.
Internal scrubbing system meeting <u>HCl percent reduction standard</u> .	<ul style="list-style-type: none"> The daily average pH or alkalinity of the water (or scrubbing liquid) exiting the internal scrubbing system must not fall below the limit established during the performance test; and The daily average liquid-to-gas ratio must not fall below the limit established during the performance test.

AQMD Response:

Section J (Page 11): Condition 6 of the Template #1 prepared for the CRU per 40CFR63 Subpart UUU will be revised as follows:

- o To include the emission limits of inorganic HAP set forth in Item 1 of Table 22 of Sub UUU (92% or 30 ppmv) since EM's CRU - Unit 2 is a semi-regenerative catalytic type; and
- o To include the operating limits set forth in Table 23 of Subpart UUU associated with the concentration and percentage limits of inorganic HAP as per EPA's comment.

Section J (Pages 14 & 15): Please note that Pages 14 & 15 of Section J will be removed since they are duplicates of Pages 16 & 17.

Section D: The following changes will be made for Systems 1 & 2 (Platinum Reformer Nos. 1 & 2) of Process 5:

Devices D275-D278, D237-D240, D245-D247: Remove the HAP UUU #1 currently listed in the Emission Column since these devices are not process vents.

- c. Condition P13.2 in the proposed permit specifies that processes 3 (FCCU) and 23 (Research Operations) are subject to the requirements of NESHAP UUU. Please clarify whether processes 5 (CRU) and 12 (SRU) should be tagged with this condition. If so, the permit should be modified to reflect this change.

AQMD Response: As specified in the SOB, "Section J lists permit conditions pertaining to Federal NESHAP/MACT requirements." To be consistent and to avoid redundancy, Condition P13.2 will be removed from Sections D & H. This condition will not be imposed to CRU and SRU.

- d. Please specify the NESHAP UUU compliance options for the emission and operating limitations that apply to ExxonMobil's FCCU, CRU, and SRU in the permit or Statement of Basis.

AQMD Response: The SOB will be revised to specify the options as follows:

Process	Emission Limit	Operating Limit
FCCU	<u>Metal HAP:</u> PM (1lb/1000 lb of coke burn-off) & Opacity (30%) listed as Option 1 of Table 1. <u>Organic HAP:</u> CO (500 ppmv)	Not applicable Not applicable
CRU	<u>Organic HAP:</u> Exempt per 63.1562(f)(5) – "Gaseous streams routed to a fuel gas system". <u>Inorganic HAP:</u> HCl (30 ppmv) listed in Table 22 for existing semi-regenerative CRU	Daily average HCl concentration (with internal scrubbing system (scrubber 19C-16))
SRU	<u>HAP:</u> SO _x (250 ppmv)	Not applicable

9. Source test requirements

- a. Please explain in the statement of basis why source testing is not required to assure compliance with the CO limits for boiler C164.

AQMD Response:

Source testing for CO is not required for the CO boiler (device C164) because its emissions, along with the regenerator flue gas (device D151), are vented, via the ESPs, to the FCCU main stack (2F-7), which is equipped with CEMS for CO monitoring pursuant to condition D82.2. Note that the CO boiler does not independently vent to a stack. Therefore, compliance with the 500 ppmv CO emissions limit for D151 automatically assures compliance with the CO emissions limit for C164. For clarification purposes, condition D82.2 has also been tagged to the CO boiler.

- b. The following conditions require the permittee to conduct source tests for various pollutants. In each case that is listed, the permit is not specific about one or more of the following: the required test method, averaging period, or test location. The District should add these details the conditions listed in this table and all other conditions which require source tests.

Please also answer any additional questions (in bold) in the final column for each testing requirement.

Condition	Page	Device	Measure:	Underlying requirement	Notes and additional questions
D28.8	H-118	D367 527mmbtu furnace burning LPG, NG and refinery gas	NO _x , SO _x , ROG, PM10, and CO	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring	No method, location or averaging time Frequency = initial (within 60d of achieving max prod. Rate no later than 180d) after startup and every five years Conducted at ≥80% of firing rate What limits is this demonstrating compliance with? Please justify the 5- yr testing frequency for PM10, CO and ROG Have NO_x and SO_x CEMS been certified?
D28.22	D-270	D925	CO, NO _x , Sox, SO ₂ , O ₂ , and NH ₃	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring Rule 2005	Initial – within 90d of modification At outlet To determine emission rates in lb/hr of ROG, CO, PM, NO _x and SO _x No method, averaging time
D28.23	D-270	D925	ROG, CO, PM	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring	Annual after initial At outlet No method or averaging time
D182.3	D-278	D925	Efficiency of SCR	Rule 2005 Rule 3004(a)(4)- Periodic	After 6/29/06 and before first mod submit method Until then, keep

				Monitoring	records of NH3 After, test control efficiency annually
D182.4	D-278	D925	PM10	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring	After 6/29/06 and before first mod submit method Until them PM10=PM After the PM10 test conducted annually
D28.25	D-270	C952	CO & PM	Rule 1303(a)(1)- BACT Rule 3004(a)(4)- Periodic Monitoring	Once every three years @ outlet No method or averaging time
D28.1	H-116	C1772	CO, NH3, NOx, PM10, VOC, SCR efficiency	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring Rule 2005	Initial = 90-d from startup @ outlet No method or averaging time
D28.4	H-116	C1772	CO, PM, control efficiency of SCR and NH3 emissions	Rule 1303(b)(2)- Offset Rule 3004(a)(4)- Periodic Monitoring	Annual starting w/ title V permit issuance @ outlet No method or averaging time Please provide more details of the operating requirements (which boiler and duct burner etc)

AQMD Response:

D28.8 – Heater 4F-1, D367:

Condition D28.8 is for initial source test as well as periodic monitoring of some pollutants. The emissions results from the initial test are needed to verify that the baseline emissions used for offsets calculations remain unchanged.

The District granted provisional approval of the CEMS and a Draft Final Certification letter was issued to ExxonMobil for reviewing and commenting on the conditions. Final certification of the CEMS is expected by early 2010. Upon certification, source testing for NOx and SOx can be

substituted with CEMS data and the testing requirement for these pollutants will likely be removed when the permit to construct (PC) is converted to a permit to operate (PO). Please note that there are no ROG and PM10 limits in the permit so periodic testing is not required and these testing requirements will also be likely dropped when converting to PO. The CO testing for Rule 407 compliance meets the Periodic Monitoring guidelines of source testing once every 5 years.

D28.22, D28.23, D182.3, D182.4, D28.25, D28.1 & D28.4:

The issue of adding source test methods and other details to refinery Title V permits is currently being discussed with the EPA. Based on the outcome of this discussion, the Title V permit for this facility will be amended accordingly.

10. Other clarifications

- a. Please describe the differences in the “connect to” columns in the equipment tables of section D and H for the following equipment:

Page numbers and devices listed as ‘connected to’ in sections D and H

Device	Section D	Section H
C164, Boiler	D-22; D151, C165, C166	H-7; D151, D2278, D2404
C891, West Flare	D-157; D895, D1591, D1592	H-56; none
C894	D-158; D1384, D1591, D1592	H-56; none
D151 and C2314	D-20; includes C2314	H-4; C2314 not present

AQMD Response:

The “connect to” description for each process is presented in the table below. In addition, the permit action is included accordingly.

Description & Permit Action
<p><u>C164, boiler:</u> The flue gas from the regenerator is venting as follows:</p> <p>Section D: Regenerator 2C-3 (D151) => Cyclones (C1590 & C2314) => CO boiler (C164) => ESPs.</p> <p>Section H: Regenerator 2C-3 (D151/D2404) => Cyclones (C1590 & C2314) => split to 2 streams:</p> <ul style="list-style-type: none"> • Stream 1 => CO boiler (C164) => ESPs; • Stream 2 => expander with walnut shell injection D2278 and then to CO boiler. <p><u>Permit action:</u> C2314 will be connected to D151 in Section H to be consistent with Section D.</p>
<p><u>C891 (Flare 65F-3) and C894 (Flare 65F-8)</u> Knockout pots D895, D1591 & D1592 in Section D are located before the flare stack to separate the vapor and water.</p>

<u>Permit action:</u> D895, D1591 & D1592 will be removed as they are not emission sources.
<u>D151 (regenerator) & C2314 (4th stage cyclone).</u> Same as C164 boiler above. <u>Permit action:</u> Same as C164 above.

- b. Heater D922 (page D-37) is listed as non-operational; please describe the reasoning behind conditions E313.1 and E315.1 for this status (page D-290). Please confirm that the requirements listed in condition E315.1 from Rules 2011 and 2012 are the only requirements that would be applicable to the heater when it is considered operational. Please clarify whether the switch from non-operational to operational would trigger an NSR and/or title V permit action. If no permit revision is required prior to the source converting this equipment to ‘operational’ status, the permit should contain all requirements that would apply at that time. The permit should also require the operator to document when the equipment begins operation.

AQMD Response:

This condition was added at the time RECLAIM was implemented in the District. Many refineries had asked for this condition for the equipment that they did not want to install monitoring equipment because of the low usage or non-operation of the equipment. The facility has kept the permits for these pieces of equipment active. The permit allows them to change from non-operational to operational status without any permitting action. However, once the equipment is changed to operational status, as stated in condition E315.1, condition E313.1 is voided (i.e. they cannot go back to non-operational status without a permitting action). No NSR would be triggered if the equipment is brought into operation per the conditions laid out in E313.1. Also, this condition states that the operator will notify the EO 30-days prior to starting operation.

In order to change the operational status of the equipment in the permit, the facility is required (implicitly) to submit an admin change application to remove “Non Operated” from D922 equipment description.

Heater D922 is subject to the Consent Decree requirements and has a pending application (A/N 455132) submitted for Subpart J applicability. District will review federal NSPS and NESHAP applicability at this time and include any applicable regulations whose determination can be made prior to issuance of the final Title V permit. Further applicable regulations/monitoring/etc. can only be added after final completion of the evaluation of this application. Note that Heater D922 is listed in the AQMD response to EPA comment 5c (see table under paragraph titled ‘Consent Decree’) as being subject to Subpart J per Consent Decree but is pending a complete engineering evaluation.

- c. Page D-290 condition E318.1 lists D833 as non-operational as long as it operates less than 30 calendar days a year. Please describe the monitoring, recordkeeping and reporting requirements associated with this operational limit and any other differences between the two classifications. Please also confirm that the requirements listed in condition E318.1 from Rule 2011 are the only requirements that would be applicable

to the heater when it is operational. If no permit revision is required prior to the source converting this equipment to ‘operational’, the permit should contain all requirements that would apply at that time.

AQMD Response:

Please see above response to 10(b).

Heater D833 is also subject to the Consent Decree requirements and has a pending application (A/N 455159). District will review federal NSPS and NESHAP applicability at this time and include any applicable regulations whose determination can be made prior to issuance of the final Title V permit. Further applicable regulations/monitoring/etc. can only be added after final completion of the evaluation of this application.

- d. Please confirm that turbines D2305, D2307 (page D-20), D169, D170 and D171 (page D-28) are unfired.

AQMD Response:

These five turbines are unfired. “Unfired” will be added in the equipment description for clarification.

- e. Condition 42.2 (page D-239) requires compliance with the requirements of Rule 1105.1 by May 30, 2009. Please confirm that the facility is in compliance with this rule at this time or whether the facility is subject to compliance deadlines specified in Rule 1105.1(d)(1).

AQMD Response:

The construction was completed in Feb 09 and EM source test report was received on 5/26/09, which is under the review by our source test department.

- f. Please explain why the periodic monitoring and Rule 1105.1 requirements that apply to cyclone C2314 (e.g. conditions E102.2 and K67.16) do not apply to cyclone C1590.

AQMD Response:

Cyclone C1590 is upstream of cyclone C2314 and has no emission point to the atmosphere. The dust laden portion from C1590 is fed to C2314 for removal of larger size PM and the remaining flue gas portion from C1590 is routed to the FCC ESPs for further removal of finer PM. As such, C2314 is the final (4th stage) cyclone that is equipped with hopper where dust collection/loading operations take place and, hence, is the only emission point that would be subject to dust collection conditions E102.2 and K67.16 for these cyclones.

- g. Please clarify if there is a recordkeeping requirement to ensure compliance with the operational requirements of condition E193.19 (page H-143).

AQMD Response:

Recordkeeping requirements are covered under Section E, Condition E-6 as well as required per conditions C12.2/D29.4 and also the R1105.1 approved compliance plan (AN 458651 listed in Section I).

- h. Please clarify what requirements flare C1558 must meet in order to not have any visible emissions requirements, such as condition D323.1 for the other flares.

AQMD Response:

Condition D323.1 will be imposed on this clean service flare C1558 with a semi-annual frequency per district Periodic Monitoring guideline.

- i. Please clarify if the information required by conditions K171.5, K171.10, K171.15 has been submitted.

AQMD Response:

Yes, the information required by conditions K171.5, K171.10 and K171.15 has been submitted.

- j. Condition C1.15 (page D-248) limits operation of nine diesel-fired emergency engines to 199 hours per year. Please clarify that these engines are limited to 199 hours of emergency use only, particularly if emergency use is the underlying reason for the offsets exemption.

AQMD Response:

Please note that the 199 hours include the annual testing and maintenance, in addition to emergency use. For clarification purposes, the condition has been amended to specify the maximum time allowed for annual testing and maintenance for these emergency diesel-fired engines.

11. Responses to Previous EPA Comments, dated August 2, 2005, on Initial ExxonMobil Title V Permit

On August 1, 2005, EPA provided comments on the proposed initial title V permit for the ExxonMobil refinery (see Enclosure 2: “EPA Review of the Proposed Title V Permit for ExxonMobil (facility ID 80089)”). EPA did not receive a response to these comments and it is not clear whether or how several of them were addressed. We have included the following comments below from this letter.

a. NSPS QQQ

- 1. NSPS Subpart QQQ is an applicable requirement for several emission units at the facility. The Subpart QQQ requirements appear to be imposed on the facility exclusively by subpart-level references in conditions H23.5 and H23.18. This level of detail makes it difficult to determine what specific requirements apply to each unit. For example, 60.692-3 (Standards: Oil-water separators) requires a closed vent system and control device for each separator tank or piece of auxiliary equipment with a certain design capacity. Because the design capacity of a unit is not always apparent, it is difficult to tell by looking at the permit whether this requirement applies to a given unit. The oil-water separator (D680) is required by Condition E336.8 to be connected to the wastewater air pollution control system. However, that requirement is

tagged only with the District's BACT rule so it is still unclear whether the incinerators are actually required by the NSPS.

Control devices required pursuant to 40 CFR 60.692-3(b) must meet a specific control efficiency or operate with a specified minimum residence time and temperature. The permit is lacking control requirements that satisfy the NSPS but because of the inadequate level of detail in the permit, it is not possible to determine whether the requirements are not applicable or if their absence is due to an oversight by the District. In an attempt to resolve this issue, EPA asked the District via e-mail to clarify whether any emission units at the facility were subject to the control requirements under 40 CFR 60.692-3(b). The District responded by indicating that it should have the information within a few days. The District's own inability to determine which requirements apply to the facility by simply looking at the permit reinforces the notion that the permit lacks an adequate level of detail with respect to this regulation.

The example discussed above is not the only instance in which clarification is needed. In addition to the standards of 60.692-2 and 60.692-3, the NSPS contains alternative standards that may be used for individual drain systems, oil water separators, slop oil tanks, storage vessels, and other auxiliary equipment. In cases where a regulation contains multiple compliance options, the permit must clearly indicate which compliance option the facility has selected. If the facility desires the flexibility to use multiple options, any alternatives should be incorporated into the permit as alternative operating scenarios and the Permittee should maintain a log to record which option is utilized at any given time. For guidance on the use of alternative operating scenarios, the District is referred to the May 20, 1999 letter from John Seitz to Mr. Robert Hodanbosi and Mr. Charles Lagges regarding title V interface issues.

To resolve this issue, the District should provide a detailed discussion of the applicability of Subpart QQQ in the statement of basis and the requirements of Subpart QQQ must be incorporated into the permit in great enough detail to determine which specific requirements apply to each affected emission unit. The District is reminded that it may still be appropriate to incorporate certain requirements into the permit by reference to Subpart QQQ. However, any references used must be specific enough to define how the applicable requirement applies to each unit at the facility and provide for practical enforceability of the regulation or applicable requirement. For a more complete discussion about the use of incorporation by reference, the District is referred to EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, dated March 5, 1996.

[AQMD Response:](#) Please note that EPA's former comments in 2005 on Subpart QQQ were already addressed as equipment description and conditions were changed as shown in the proposed permit. These changed items are discussed below and therefore, no

further changes will be made to the SOB or permit at this time, except devices D684 and D685 as discussed in response to No. 11(b)(1) below.

11(a)(1), formerly 4(A):

Oil-water separator (Device D680) - a VOC emission point equipped and operated with a closed vent system and control device:

- o Equipment description: As shown in the proposed permit, the description was already revised to add "fixed roof" as to clarify the applicable standards set forth under Section 60.692-3(a). The alternative standards of Section 60.693-2 are not applicable.
- o Emission limit of 500 ppmv of VOC listed in the emission column was already tagged with Subpart QQQ, in addition to R1176, as shown in the proposed permit, to indicate the limit set forth under Section 60.692-5(e)(1) for oil-water separator equipped and operated with a closed vent system.
- o New Condition E336.11 was already created and tagged with Subpart QQQ, in addition to R1176 and BACT, to address Section 60.692-3(b) requirements, as shown in the proposed permit.

Control Equipment (Devices C686 & C687): See response to 11(b)(2) below.

2. If a control device is required for the oil water separator and any auxiliary equipment pursuant to 60.692-3(b), the permit appears to lack the emission standards discussed above and other Subpart QQQ requirements. If the District finds that a control device is required, the following should be added to the permit at a minimum:
 - a. a condition requiring 95% control OR a minimum residence time and temperature of 0.75 seconds and 1,500 degrees F, respectively; and
 - b. a condition imposing the 500 ppm limit on the closed vent system pursuant to 60.692-5(e)(1).

The NSPS contains additional operational requirements for equipment with control devices such as the requirement to install a flow indicator pursuant to 60.692-5(e)(3) and the requirement to install a temperature monitoring device and continuous recorder pursuant to 60.695(a)(1). EPA notes that while the District may choose to incorporate these requirements into the permit by reference, the permit should still be clear about which specific requirements apply to each affected emission unit or control device.

AQMD Response:

11(a)(2), formerly 4(B):

Incineration system as VOC emissions control devices (Devices C686 & C687):

- a. New Condition A72.1 was already imposed to Devices C686 & C687, as shown in the proposed permit, to address the control efficiency requirements of 95% or greater for ExxonMobil's combustion devices as per Section 60.692-5(a).

[b. New Condition E440.1 was already imposed to Devices C686 & C687, as shown in the proposed permit, to address the 500 ppm limit on the closed vent system per Section 60.692-5\(e\)\(1\) requirements.](#)

b. SIP Rule 1176

1. Pursuant to Rule 1176(e)(2)(A) sumps and wastewater separators must be provided with (i) a floating cover, (ii) a fixed cover and closed vent system vented to a control device as specified in paragraph (e)(6), or (iii) an alternative control measure approved in writing by the EO. The permit is unclear about how ExxonMobil is required to comply with this requirement. For example, page 82 of Section D only indicates that device D680 (oil water separator) is “covered;” it does not say whether the cover is a floating cover or a fixed cover. Condition E336.8 of the permit further states that this device must be directed to the air pollution control system.

Although one might deduce that the cover mentioned on page 82 and the control device referred to in Condition E336.8 constitute a system that is meant to comply with Rule 1176(e)(2)(A)(ii), the permit does not establish a clear compliance obligation for the source. Especially in situations such as this where a rule offers more than one compliance option, the permit must be clear about which option the Permittee has selected. In the present case, the permit could benefit from a condition that explicitly requires device D680 to be equipped with a fixed cover and closed vent system that is vented to the control system serving the wastewater treatment system. In the alternative, at a minimum, the District should tag Condition E336.8 with a citation to Rule 1176(e)(2)(A)(ii) to indicate that the control system is in fact used to comply with the wastewater separator requirements of the rule. The District should follow the same procedure for other sumps and wastewater separators at the facility that are subject to the requirements of Rule 1176(e)(2).

AQMD Response:

11(b)(1), formerly 5(A):

Oil-water separator (Device D680) - a VOC emission point equipped and operated with a closed vent system and control device: As shown in the proposed permit, the description of Device D680 was already revised to add “fixed roof” as to clarify the applicable requirements set forth under R1176(e)(2). For Devices D684 and D685, the permit will be revised to add “Fixed roof”.

New Condition E336.11 was already created and tagged with Subpart QOO, in addition to R1176 and BACT, to address Section 60.692-3(b) requirements, as shown in the proposed permit for Devices D680, D681, D683, and D689, while Condition E336.8 was already imposed and tagged with R1176 and BACT for Devices D684, D685, and D1773.

2. As stated above, a control device that is used to comply with sump and separator requirements of Rule 1176(e)(2)(A)(ii) must meet the requirements of paragraph (e)(6) of the same rule. Paragraph (e)(6) requires that control devices either: (A) achieve a control efficiency of 95 percent or greater, as

determined by an annual performance test; (B) not emit VOC emissions greater than 500 ppm above background levels, as determined by monthly monitoring; or (C) achieve a level of control determined by the Control Officer to be equivalent to those specified in subparagraphs (A) or (B). In telephone conversations on July 27 and July 29, 2005, the District explained that its interpretation of the rule allows facilities to switch between compliance methods at will without specifying in advance which method will be used. The District further stated that it would require a finding of simultaneous non-compliance with the requirements of paragraphs (e)(6)(A) and (e)(6)(B) before it could issue a notice of violation for non-compliance with the air pollution control device requirements of Section (e)(6). While EPA gives the District deference in interpreting its own rule, the District has an obligation to issue a permit that assures compliance with all applicable requirements. The current permit does not do so with respect to Rule 1176(e)(6) because it only contains general references to the rule and does not establish a clear compliance obligation for the source.

EPA agrees that the Permittee is entitled to choose any compliance option allowed by the rule. EPA further agrees that the Permittee should have the flexibility to switch between compliance options as necessary. However, in cases where such flexibility is given to a facility, the permit must require that the Permittee demonstrate continuous compliance with either of the options at any given time. As an example of how the permit may not establish a clear compliance obligation for the source, the District is referred to the hypothetical situation in Attachment 2.

This issue can be resolved through the use of alternative operating scenarios pursuant to 40 CFR 70.6(a)(9). Specifically, the permit could require that the facility maintain a contemporaneous log of the scenario under which it is operating. In addition, the permit would explicitly state that the Permittee must be able to demonstrate compliance at any given time with the scenario identified in the log. For example, language similar to that below provides the Permittee with operational flexibility while assuring compliance with Rule 1176. The District may, of course, develop different language that accomplishes the same objective.

Air Pollution Control devices used as a means for complying with Rule 1176(e)(2) shall meet either of the requirements in subparagraphs 1176(e)(6)(A) or 1176(e)(6)(B). Contemporaneously with making a change from one method of compliance to another, the Permittee shall record in a log at the facility a record of the scenario under which it is operating. At all times, the Permittee must maintain source test results or monthly monitoring records, as appropriate, that demonstrate compliance with the chosen option.

AQMD Response:

11(b)(2), formerly 5(B):

Incineration system as VOC emissions control devices (Devices C686 & C687):

New Condition A72.1 was already imposed to Devices C686 & C687, as shown in the proposed permit, to address the control efficiency requirements of 95% or greater for ExxonMobil's combustion devices as to comply with R1176(e)(6)(A).

c. Electrostatic Precipitators (ESPs)

1. Condition C12.1 requires continuous monitoring of the voltage, current, and spark rate at each ESP field for devices C165 and C166. The condition further states, "if the daily average ESP total power input falls below the level measured in the most recent source test which demonstrated compliance with the emission limit, a source test shall be performed within 90 days at the new minimum daily average ESP total power level." EPA has the following concern with this requirement:

- The 90-day source test requirement is triggered in part by operation outside of the parameter range measured during the most recent source test that "demonstrated compliance with the **emission limit**." The ESPs and the emission units they serve have multiple emission limits, some of which depend on process rates that may vary from source to source. As a result, the permit is unclear about which limits the minimum power value is based upon and when the source test requirement would actually be triggered.

To address this issue, the permit should explicitly state what the minimum power requirement is. EPA understands that the minimum power requirement has not yet been established and will be based on the results of an initial source test. Once that test has been conducted and the minimum power requirement has been determined, the specific value should be added to the permit. Prior to the source test, the District should add a power requirement to the permit that is based on the design of the control devices.

AQMD Response:

11(c)(1), formerly 9(A):

EPA suggests that the District impose a minimum level of power in the permit condition for the ESP. Please note that the power consumption level does not correlate to the total PM emissions and therefore, the level of power consumption cannot be used as the basis to determine that the FCCU is in operation with the PM emissions exceeded the limits. The power level, however, would be a good indicator to trigger a new source test, in which the actual PM emission will be determined. Furthermore, if the FCCU would still be in compliance at the new lower power consumption level, then a new monitoring parameter can be established.

EPA also comments that there are no emission limits stated in the condition C12.1. Please note that this condition is only required for the ESP in order to establish the complying power consumption level. All emission limits are imposed on the regenerator (Device D151), which is the basic equipment. Please see more discussion in 11(c)(2) below.

Please note that Permit to Construct was issued to ExxonMobil on March 23, 2007 (Revision 54 of Section H), to install two new ESPs to comply with PM10 and NH3 limits set forth in R1105.1 adopted on November 7, 2003. The new ESPs are in parallel (Devices C2283 & C2284) and located downstream of the two existing ESPs (C165 & C166). The revision No. 54 includes:

- The change of equipment description to add "idle mode" for the two existing ESPs and
- Existing Conditions C12.1 & D29.3 previously imposed on the two existing ESPs were replaced with Conditions C12.2 & D29.4 imposed on all the four ESPs. The construction was completed in February 2009 and source test report conducted per D29.4 requirements was submitted on May 26, 2009, which is under the review of the source test department.

Once the permit to construct is converted to permit to operate, Conditions C12.1 and D29.3 will be removed.

2. Condition D29.3 requires that the Permittee conduct an annual performance test for PM emissions but it does not say with which limits the test is intended to demonstrate compliance. Please clarify whether this test is to fulfill NSPS J requirements in addition to other PM emission limits. The District should clarify this by either referencing the rules or emission limits in the condition itself or by citing the underlying applicable requirements in the condition's tag. In addition, the condition states that the test should be performed at the outlet of the SCR. Please consider whether the District intended for the test to be conducted at the outlet of the ESP rather than the SCR.

AQMD Response:

11(c)(2), formerly 9(B):

EPA comments that the source test condition D29.3 for the FCCU regenerator does not state any emission limits. This is not correct. The condition specifies that the test is to determine PM emission. The emission limits are stated in the Emissions and Requirements column in the permit description. Several PM emission limits are stated for the regenerator, including limits in District Rules 404, 405, and 409, and 40CFR 60 Subpart J. In addition, the test can also be used to show compliance with 40CFR 63 Subpart UUU, as indicated in the Template UUU #2 in Section J of the Permit.

The EPA also suggests that the District revise the condition to indicate the test is to be conducted at the outlet of the ESP, instead of the outlet of the SCR. At ExxonMobil, the air pollution control system for FCCU includes the SCR following the ESP. The District believes that a true source test must be conducted at the outlet of the entire system, which

is at the exhaust stack at the outlet of the SCR. Furthermore, at the outlet of the ESP, in between the ESP and the SCR, there is no appropriate location for a source test.

As discussed above in response to 11(c)(1), once the permit to construct is converted to permit to operate, Conditions C12.1 and D29.3 will be removed. Please note that the District has already modified all refinery Title V permit to add underlying rules for all periodic monitoring conditions.