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J. W. Hartwig
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April 14, 2004

Mr. Barry G. Young
Supervising Air Quality Engineer, and
Mr. Greg D. Solomon
Air Quality Engineer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Via e-mail and certified mail

Re: Chevron Comments on the March 1, 2004 Draft Revisions to Major Facility Permit for the Chevron Products Company, Richmond Refinery, Facility #A0010

Dear Messrs. Young and Solomon:

The purpose of this correspondence is to comment on the March 1, 2004 draft revisions to the Major Facility Review permit for the Chevron Products Company, Richmond Refinery, Facility #A0010 (the permit). This set of comments is directed at the specific topics addressed by the District's revisions and at a few other corrections that should be made at this time.

Chevron has commented on and is presently appealing many other problems with the permit as issued on December 1, 2003 that are not addressed by the District in this revision. Chevron incorporates those comments by reference with the understanding that the District intends to address them in a future revision of the permit.

Comment Format

Chevron's comments are presented in tabular format which includes: a unique **2004 Issue Number**; the **Permit Page Number** which refers to the page in the District's hard copy of the draft revisions permit dated February 24, 2004 (The pagination may be different in another printing of the permit.); the **Section/Table/Source or Condition** which indicates where the issue resides on the page; and the **Chevron Comment** which provides the recommendation and basis for each proposed change.

Messrs. Young and Solomon
BAAQMD
April 14, 2004
Page 2

Chevron also incorporates by reference any comments submitted by the five Bay Area refineries and the Western States Petroleum Association that bear on the permit.

Thank you for considering our comments. Please contact me at (510) 242-1400 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. Chamberlain".

Attachment

cc: Debbie Jordan - Director, Air Division, USEPA Region 9
(Attention Ed Pike)

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010
Revision 1, March 1, 2004 Draft
CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Title/Source or Condition	!	Chevron Comment
1	N/A	General Comment incorporating previous comments		Chevron submitted extensive comments on permit drafts preceding the initial permit issued on December 1, 2003. The vast majority of these comments were not addressed by either the December 1, 2003 permit or the March 1, 2004 draft of Revision 1. The District has restricted Revision 1 changes to a few key issues and, as Chevron understands, plans to address additional issues in future revisions of the permit. Chevron incorporates by reference all previously submitted comments on Title V permit drafts and the final permit. Chevron also incorporates by reference the any comments submitted by the five Bay Area refineries and the Western States Petroleum Association that bear on that bear on the permit.
2	82 thru 262	Section IV Page headers		The page headers incorrectly identify this section as "III Generally Applicable Requirements." It should read "IV Source-specific Applicable Requirements."
3	392 thru 480	Section VII Page headers		The page headers incorrectly identify this section as "VI Permit Conditions." It should read "VII Applicable Limits and Compliance Monitoring Requirements."
4	481	Section VIII First page header		The first page header of this section incorrectly identifies this section as "VII Test Methods." It should read "VIII Test Methods."
5	489	Section IX First page header		The first page header of this section incorrectly identifies this section as "VIII Permit Shield." It should read "IX Permit Shield."
6				Comment deleted.
7	490 thru 499	Section IX, X, XI Page headers		The pages headers of these sections (following the first page of Section IX) incorrectly identify this section as "VIII Test Methods." They should read "IX Permit Shield", "X Glossary", or "XI Applicable State Implementation Plan."
8	5	Table II A 1 Permitted Sources (NSR) S-3100 Tank		The March 31, 2004 draft updates the throughput limit for S-3100, based on application #8452. The basis would be more useful if it listed the permit condition (condition #2238) associated with application #8452 instead. This would be consistent with the other bases listed in Table II A. References to Application numbers are generally used to identify implied permit conditions.
9	34	Table II A 3 Permitted Sources Grandfathered S-1687 Tank	!	Delete the throughput reporting limit on Tank S-1687. The basis for removing this limit is the same as for tanks S-1514, S-3072, and S-3101 as described in the Draft Permit Evaluation and Statement of Basis.
10	34,35, 165, 196, 391, 450, 460	Table II A 3 Permitted Sources Grandfathered Table IV. F.1.9 Tanks Condition #21237 Table IV.	!	Condition #21237 was added by the District when removing throughput reporting limits for tanks S-1514, S-3072, S-3101. This condition should be deleted for the following reasons: <ol style="list-style-type: none"> 1. No other Bay Area refinery Title V permits includes throughput reporting limits for grandfather tanks and no other Bay Area refinery has a condition like #21237. There is no reason to single out Chevron in this way. 2. A condition like this is not needed for the same reasons that throughput reporting limits are not needed for grandfather tanks. Specifically, a tank is designed to pass any quantity of stock through it, except as constrained by limits on upstream and downstream process units, which limits are in place and fully constrain the operation of the refinery. 3. The condition requires 30-day advance notice to the District for ANY

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010

Revision 1, March 1, 2004 Draft

CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Title/Source or Condition	!	Chevron Comment
		F.1.13 Tanks Condition #21237 Section VI Condition #21237 Table IV. F.1.9 Tanks Condition #21237 Table IV. F.1.13 Tanks Condition #21237 S-1514, S-3072, S-3101 Tanks		<p>PROPOSED CHANGES in the piping or pumps associated with these tanks. It is nearly impossible to comply with such a broadly written requirement. The piping systems associated with these tanks are distributed over a large geographic area and are interconnected with several other piping systems. Field work on these systems are managed by 5 different operating crews and worked on by any of hundreds of Chevron and contractor mechanics. Even developing the ability to reliably identify which of the countless minor repairs and alterations that occur in the refinery every day would be subject to this requirement is an incredibly complex task. Handling an emergency situation would require Chevron to petition for variance relief.</p> <p>4. The piping and pumps referred to in this condition are not parts of the subject sources. Modification, replacement and additions of these piping and pump equipment are exempt from NSR review by Regulation 2-1-128.21 as long as the fugitive emission increase does not exceed 10 lbs/day in any 12-month period. Therefore, since changes to this equipment are not reliable indicators as to whether the tanks have been modified, the notification serves no regulatory purpose.</p> <p>5. There is no point in Chevron submitting notice for changes that are obviously not modifications, such as operating practices, routine maintenance, in-kind replacement, and other such work that restores or maintains equipment to its original capacity.</p>
11	36	Table II A 3 Permitted Sources Grandfathered S-9321 thru S-9326 Marine Loading Berths		Correct typo. The word, "throughput" in the basis column of each of these sources was replaced by the indecipherable entry, " ' lares' put ". This change should be corrected or explained.
12	494	Table IXB-6 Steam Generating Units 60.45	!	Revise description shown in Table IX B-6 for 60.45. 60.45 is properly listed under the column heading "applicable requirement:" to subsume the monitoring, recordkeeping, and reporting (MRR) requirements of NSPS Subpart D under the NOx rule, BAAQMD Regulation 9 Rule 10. The information shown for this citation in the Table IX B-6 column "Regulation Title or Description of Requirement" is correct and should remain. For clarity on the citation subsumed, however, please add the 60.45 title "Emission and Fuel Monitoring" preceding the existing text in that column.
13	494	Table IXB-6 Combustion Furnaces 60.48b	!	Revise description shown in Table IX B-6 for 60.48b. 60.48b is properly listed under the column heading "applicable requirement:" to subsume the monitoring requirements of NSPS Subpart Db under the NOx rule, BAAQMD Regulation 9 Rule 10. The information shown for this citation in the Table IX B-6 column "Regulation Title or Description of Requirement" is correct and should remain. For clarity on the citation subsumed, however, please add the 60.48b title "Emission Monitoring for Nitrogen Oxides" preceding the existing text in that column.

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010
Revision 1, March 1, 2004 Draft
CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Table/Source or Condition	!	Chevron Comment
14	494	Table IXB-6 Steam Generating Units 60.49b	!	Add a new citation and description in Table IX B-6 for 60.49b "Reporting and Recordkeeping Requirements:" This should be stated to subsume the NSPS recordkeeping and reporting requirements of NSPS Subpart Db under the NOx rule, BAAQMD Regulation 9 Rule 10. Basis: The bulk of the NSPS recordkeeping and reporting requirements are connected to the NSPS requirement for a NOx CEMS. Since the requirement for a NOx CEMS is subsumed already, the NSPS recordkeeping and reporting requirements dependent on the subsumed NOx CEMS should also be subsumed.
15	384	Section VI Permit Conditions P/C 21232.1		Modify listing of some sources to accurately reflect which sources have CEMS versus which do not. The CEMS listing is correct for most sources but there are a few that require revisions. The following sources have NOx and O2 CEMS and the listing should be revised to show a "Y" in the column with the heading "CEM (Y/N)": S-4129 Boiler #1, S-4131 Boiler #3, S-4132 Boiler #4, S-4133 Boiler #5, S-4135 Boiler #7, and S-4155 F-135.
16	384	Section VI Permit Conditions P/C 21232.1	!	Remove S-4069 (F-1660), S-4095 (F-210), and S-4156 (F-320) from the list of covered sources in part 1. These furnaces are generally out of service and used infrequently enough that they qualify for the limited exemption of 9-10-112 for low annual fuel usage. As these furnaces are generally out of service, they do not have CEMS or NOx boxes at this time as required by #21232.
17	385	Section VI Permit Conditions P/C 21232.4	!	Add a provision for the NOx boxes to include a 10% margin beyond stack-tested conditions for firing rate and O2. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition language to implement this comment.
18	386	Section VI Permit Conditions P/C 21232.5	!	Revise the table showing NOx box limits to have extra rows for two polygons with different emission factors. The BAAQMD policy allows for two polygons with different emission factors so the table should be structured to accommodate these for refineries that choose this approach. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition modification to implement this comment.
19	386	Section VI Permit Conditions P/C 21232.5	!	<p>The table in Section 5A envisions a NOx box shaped like a peak-roofed house (rectangle with a high point on top). The actual operating profiles for some of our furnaces may require differently-shaped NOx boxes. (E.g. the 5th point may be at a low fire/mid O2.)</p> <p>The plain language of the permit condition needs to be clear that the facility can define any shape box. Stating it is acceptable to permit different shape polygons is important because the statement of basis describes only one kind of polygon.</p> <p>Chevron recommends that the BAAQMD add a sentence to the last line of Section 5A: <i>"The table & headings listed above can be changed as needed to describe the actual location of the source test parameters."</i></p> <p>Alternatively, write in the staff report (i.e., in the permit evaluation) that we can amend the table headings as needed.</p>
20	386	Section VI Permit Conditions	!	The following text in 21232.5.B is missing two commas that the BAAQMD intended to include:

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010

Revision 1, March 1, 2004 Draft

CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Title/Source or Condition	!	Chevron Comment
		P/C 21232.5		<p><i>Part 5A does not apply to low firing rate conditions (i.e., firing rate less than or equal to 20% of the unit's rated capacity) [comma missing here] during startup or shutdown periods [comma missing here] or periods of curtailed operation (ex. During heater idling, refractory drying, etc) lasting 5 days or less.</i></p> <p>We request that the BAAQMD put these commas into this text. The resulting text would read as follows:</p> <p><i>Part 5A does not apply to low firing rate conditions (i.e., firing rate less than or equal to 20% of the unit's rated capacity), during startup or shutdown periods, or periods of curtailed operation (ex. During heater idling, refractory drying, etc) lasting 5 days or less.</i></p> <p>The addition of these two commas clarifies that the limit to 20% of the units firing rate applies only to the low firing rate conditions case but not to the case of startup or shutdown. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition modification to implement this comment.</p>
21	388	Section VI Permit Conditions P/C 21232.6	!	<p>After an out of NOx box event occurs, the currently proposed NOx box permit condition requires follow-up stack testing by the time of the next regularly scheduled stack test period or within 8 months, whichever is sooner (part 6.A.1). If the next regularly scheduled test is within a day or a few days after an out of box event, however, this may not allow adequate time to return the source to the out of box conditions. Also, sometimes we are unable to replicate previous out of box conditions so we propose new language below for conditions that reasonably represent the past operation outside of the box. For these reasons, we propose 6a be modified as shown below:</p> <p><i>6a. The owner/operator may deviate from the NOx Box (either the firing rate or oxygen limit) provided that the owner/operator conducts a District-approved source test which replicates <u>reasonably represents</u> the past operation outside of the established ranges. The source test representing the new conditions shall be conducted no later than the next regularly scheduled source test period, or within eight months of the event, whichever is sooner. The source test results will establish whether the source was operating outside of the emission factor utilized for the source. The source test results shall be submitted to the District Source Test manager within 45 days of the test. As necessary, a permit amendment <u>application</u> shall be submitted.</i></p> <p>See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for further on our basis and for proposed permit condition language to implement this comment.</p>
22	388-389	Section VI Permit Conditions P/C 21232.6	!	<p>It is recommended that 6.a i and ii be modified to provide a 5% margin for error in emission results due to measurement uncertainty. We also propose modifications in the retroactive emission assessment. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition language to implement this comment.</p>

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010
Revision 1, March 1, 2004 Draft
CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Table/Source or Condition	!	<u>Chevron Comment</u>
23	389	Section VI Permit Conditions P/C 21232.7	!	It is recommended that this provision be modified to provide a 5% margin for error in emission results due to measurement uncertainty. We also propose modifications in the retroactive emission assessment. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition language to implement this comment.
24	389	Section VI Permit Conditions P/C 21232.7	!	Add provision 7c to clarify when source testing is required for sources that have been out of service and are put back in service. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition language to implement this comment.
25	391	Section VI Permit Conditions P/C 21232.11	!	Add provision noting additional time can be granted to get a source test report submitted to the District at the discretion of the APCO. See comments submitted on this permit condition by the Western States Petroleum Association (WSPA) for our basis and for proposed permit condition language to implement this comment.
26	347 to 378	Section VI Permit Conditions	!	Please add sunset provision for the following sources permit conditions in Title V Rev 1 Section VI: 18166, 18172, 19586, 16679, 16698, 18400, 16650, and 17675. For consistency with permit conditions for other sources covered by Reg 9 Rule 10, add the sentence "This condition is effective until 6/1/04. After 6/1/04, this condition shall be replaced by condition # 21232." This change is needed to assure that two permit conditions with potentially conflicting parts do not create confusion over which requirement applies.
27	347 to 378	Section VI Permit Conditions P/C 21232	!	Chevron obtained permit conditions from the BAAQMD stating original (6/23/00) Nox box policy requirements for our sources with NOx boxes. In the Title V permit, some of these NOx permit conditions now contain a sentence they will sunset on 6/1/04 when #21232 takes effect. Our PTO, however, still contains some original NOx box permit conditions without any indication they will sunset. To avoid conflicting requirements between the PTO and T5, the BAAQMD should revise the PTO simultaneous with T5 revisions to sunset NOx box permit conditions and to replace them with #21232. The following conditions should be sunset by the BAAQMD in the PTO: #17628, #17631, #18003, #18350, #18387, #18391, #16698, # 16650, # 18172, # 18029, # 17675, # 18166, #18015, # 16731, #16679, #17973, and #18400.
28	398	Table VII.A.3.2 Combustion Furnaces 0.033 lbs NOx/MMBtu Refinery wide limit Monitoring		The parts of the new permit condition #21232 referenced under the column "monitoring requirement citation" only apply for furnaces with NOx boxes but the cited provisions do not apply for the other furnaces with CEMS included in the table heading. To make it clear the cited #21232 parts apply to only the furnaces in the table with NOx boxes, add a note after the citation of #21232 parts 4, 5, 6, 7 stating this "applies for NOx box furnaces incl. S4059, S4060, S4068, S4158)
29	400	Table VII.A.3.2 Combustion Furnaces		Part 4B of the new permit condition #21232 referenced under the column "monitoring requirement citation" only applies for furnaces with NOx boxes but the cited provisions do not apply for the other furnaces with CEMS included in the table heading. To make it clear the cited #21232.4.B parts apply to only

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010
Revision 1, March 1, 2004 Draft
CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Title/Source or Condition	!	<u>Chevron Comment</u>
		O2 Monitoring		the furnaces in the table with NOx boxes, add a note after the citation of #21232.4.B stating part 4B "applies for NOx box furnaces incl. S4059, S4060, S4068, S4158)
30	400	Table VII.A.3.2 Combustion Furnaces O2 Monitoring	!	In the row of the table referencing #21232, revise entry in column "Monitoring Type" from CEMS to O2 monitor. The parts of #21232 shown in the table are NOx box requirements. NOx boxes are not required to have O2 CEMS but to have O2 monitors. For this reason, reference to O2 CEMS in the row stating O2 monitoring requirements for #21232 should be replaced with O2 monitor.
31	410	Table VII.A.3.3 Combustion Furnaces 0.033 lbs NOx/MMBtu Refinery wide limit Monitoring		The parts of the new permit condition #21232 referenced under the column "monitoring requirement citation" only apply for furnaces with NOx boxes but the cited provisions do not apply for the other furnaces with CEMS included in the table heading. To make it clear the cited #21232 parts apply to only the furnaces in the table with NOx boxes, add a note after the citation of #21232 parts 4, 5, 6, 7 stating this "applies for NOx box furnaces incl. S4152, S4154, S-4159, S4160, S-4159, and S-4189)
32	412	Table VII.A.3.3 Combustion Furnaces O2 Monitoring		Part 4B of the new permit condition #21232 referenced under the column "monitoring requirement citation" only applies for furnaces with NOx boxes but the cited provisions do not apply for the other furnaces with CEMS included in the table heading. To make it clear the cited #21232.4.B parts apply to only the furnaces in the table with NOx boxes, add a note after the citation of #21232.4.B stating part 4B "applies for NOx box furnaces incl. S4152, S4154, S-4159, S4160, S-4159, and S-4189)
33	412	Table VII.A.3.3 Combustion Furnaces O2 Monitoring	!	In the row of the table referencing #21232, revise entry in column "Monitoring Type" from CEMS to O2 monitor. The parts of #21232 shown in the table are NOx box requirements. NOx boxes are not required to have O2 CEMS but to have O2 monitors. For this reason, reference to O2 CEMS in the row stating O2 monitoring requirements for #21232 should be replaced with O2 monitor.
34	418	Table VII.A.5.1 Combustion Furnaces 0.033 lbs NOx/MMBtu Refinery wide limit Monitoring		The parts of the new permit condition #21232 referenced under the column "monitoring requirement citation" only apply for sources with NOx boxes. All of our boilers are equipped with CEMS and no boilers have NOx boxes. For this reason, the NOx box requirements do not apply and the line in the table that the BAAQMD added in this latest revision (i.e., the line referencing #21232 parts describing NOx box requirements) should be removed completely from this table. As an alternative, the line can be left in but it should be revised so the parts of #21232 describing CEMS requirements are referenced instead.
35	418	Table VII.A.5.1 Combustion Boilers O2 Monitoring		Part 4B of the new permit condition #21232 referenced under the column "monitoring requirement citation" only applies for sources with NOx boxes. All of our boilers are equipped with CEMS and no boilers have NOx boxes. For this reason, NOx box requirements do not apply and the line in the table that the BAAQMD added in this latest revision should be modified. The line can be left in with reference to part 2 but reference to part 4B should be removed.

PROPOSED MAJOR FACILITY REVIEW PERMIT FOR FACILITY #A0010
Revision 1, March 1, 2004 Draft
CHEVRON COMMENTS

2004 Issue No.	Approx Permit Page No.	Section/Title/Source or Condition	!	Chevron Comment
36	130	Table IV.D.1.1 Refinery 40 CFR 63.52 & 63.53 MACT Hammer	!	<p>Delete provisions – there are no remaining/ongoing requirements. EPA promulgated the final MACT regulations for all MACTS listed in Table IV.D.1.1 except MACT for process heaters burning hazardous waste, which the Richmond Refinery does not have. Besides MACT for heaters and boilers burning hazardous waste, the only two in the table with deadlines shown are Combustion MACTS for heaters and boilers and for reciprocating internal combustion engines (RICE). IC Engines MACT was promulgated 2/26/04. Process Heaters & Boilers MACT was also promulgated 2/26/04. With these rules promulgated final by the deadlines, there is no further requirement to submit MACT Hammer applications.</p> <p>In the March 1, 2004 draft the BAAQMD attempted to show that certain MACT Hammer applications are not required by deleting the future effective dates of the applications. But leaving the requirement in the table may allow someone to claim that the MACT hammer applications are or were applicable requirements. For these reasons, the requirements should be deleted from the permit.</p>
37	372 thru 375	Section VI Permit Conditions P/C 18656		<p>Part 3 Flare inspection referred to in last line should be changed from, “....event, and within 30 minutes of the last inspection thereafter,....” to, “....event, and each subsequent clock half hour,....”. This change would simplify compliance and still provide the same level of inspection.</p> <p>The last line should refer to Part 4 instead of Part 2</p> <p>Part 4 Flare inspection should be changed from, “....inspection, and each 30 minute inspection....” to, “....inspection and each subsequent inspection on the clock half hour....” This change would simplify compliance and still provide the same level of inspection.</p> <p>Part 4.b.ii Distance limit should be changed from “15 feet to 0.25 miles.” to “15 feet to 0.5 miles.” The current distance limit would require some operators to leave their operating areas to make the inspection. The proposed distance encompasses views from within the operating areas of the plants associated with these flares and would lessen the impact of making visibility determinations on the operators’ efforts to manage a potentially unstable operating situation. EPA Reference Method 9 does not specify a distance limit.</p> <p>Part 7 Needs to include S6015 new D&R flare</p>