Response to Comments from Adams Broadwell Joseph and Cardoza
Correspondence Dated June 7, 2006

2-1 The SCAQMD staff understands that Adams, Broadwell, Joseph and Cardozo is representing the Steamfitters & Pipefitters Local 250, IBEW Local 11 and Boilermakers Local 92.

As discussed in the following responses, the SCAQMD staff strongly disagrees with the commenter's opinion that the Draft EIR does not comply with the requirements of CEQA and that the SCAQMD is required to prepare and circulate a revised EIR. The Draft EIR was prepared in compliance with all relevant CEQA requirements. Further, no valid support has been provided for the opinion that the Draft EIR did not address all of the increased air pollutant emissions that will result from the proposed project. As a result, none of the conditions identified in CEQA Guidelines §15088.5 have occurred that would be grounds for recirculation.

2-2 As noted in the comment, the SCAQMD has primary approval authority over the proposed project and, therefore is the appropriate CEQA Lead Agency for the Chevron - El Segundo Refinery Heavy Crude Project.

The comment's characterization of the proposed project is not entirely accurate. The statement in the comment that the proposed modifications will "allow Chevron to process grades of crude oil much heavier than the light crude oil it has historically refined" implies that the refinery currently only processes light crude oil. As presented on page 1-1 of the Draft EIR, the refinery currently processes heavy crude oil, as well as light crude oil. One of the objectives of the proposed project is to enable the refinery to process more heavy crude oil than it currently processes while maintaining production or slightly increasing production levels of saleable petroleum products.

2-3 The analyses in Section 4.1 of the Draft EIR concluded that the only significant adverse air quality impacts that cannot be mitigated to a less-than-significant level will be from emissions during construction of the proposed project. Operation of the proposed project will not cause significant adverse impacts to air quality (see pages 4-12 through 4-31 of the Draft EIR).

2-4 As discussed in the following responses, the SCAQMD staff disagrees with the commenter's opinion that the Draft EIR underestimated air pollutant emissions that will result from operation of the proposed project. According to the CEQA Guidelines, mitigation is not required when impacts are not significant.

2-5 The SCAQMD is concerned with the public health of the communities that surround the refinery, including El Segundo and Manhattan Beach, whether or not the community member is a union member. Further, the SCAQMD is

concerned with air quality impacts locally and regionally. However, as shown in Chapter 3 of the Draft EIR, air quality in the vicinity of the refinery is generally good. Ambient concentrations for all pollutants except PM10 and PM2.5 do not exceed applicable ambient air quality standards. Further, the air quality issues alluded to in this comment do not result from the proposed project analyzed in the Draft EIR, but are part of the existing setting, which, as indicated in Chapter 3, is actually relatively good in the vicinity of the refinery.

2-6 If the comment regarding "sound land use" refers to land use decisions, the proposed project does not involve any land use decisions or changes. Further, the proposed project will occur entirely within the boundaries of an existing industrial facility, so no land use decisions, change of zoning, General Plan amendments, etc., are necessary. The proposed project will continue to allow refining of crude oil into useable petroleum products.

With regard to the jeopardy of future jobs and employment benefits, the proposed project is expected to provide employment for an estimated 694 local construction workers.

CEQA Guidelines §15131(A) states "economic or social effects of a project shall not be treated as significant effects on the environment." Nonetheless, the same section notes economic and social information may be included in an EIR and presented in whatever form the (Lead) Agency desires. With regard to the economic benefits to local workers and the community, the potential economic impacts that could occur if the proposed project were not implemented were discussed in the evaluation of the "No Project" Alternative, on page 5-7 of the Draft EIR. If the proposed project were not implemented, future refinery output would be reduced as available crude oils become heavier, because the production capacity of the equipment that currently processes light crude oil would be reduced when processing heavy crude oil. Alternatively, the costs to maintain current production levels would increase as the price of lighter crude oils increases and overall supply is reduced. Both of these situations would threaten the future economic viability of the refinery and supplies to the regional community, further increasing the cost of petroleum products to the consumer.

2-7 The comments regarding Dr. Fox are noted, and specific responses are provided below.

2-8 The SCAQMD is aware of the CEQA requirements for preparing EIRs, including the requirements of full and meaningful disclosure in an EIR. The SCAQMD disagrees with the commenter's opinion that the EIR "fail[s] to provide information essential to a meaningful analysis of the Project and its impacts to regional air quality." A full and comprehensive analysis of the project and its impacts on air quality can be found in Section 4.1 (pages 4-2 to 4-40) of the Draft EIR. Further,

no valid argument has been provided to support the opinion that the Draft EIR fails to provide essential project information.

2-9 The SCAQMD is aware of the fact that an adequate project description is essential to an EIR. The project description in the Draft EIR is not "inaccurate and misleading," as the commenter contends. All relevant information required by the CEQA Guidelines relative to the project description is included in the project description as described in the following paragraphs.

CEQA Guidelines § 15124 requires that the project description include the following: (a) a detailed map, preferably topographic, showing the precise location and boundaries of the proposed project, and a regional map showing the location of the project; (b) a statement of the objectives sought by the proposed project; (c) a general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities; and (d) a statement briefly describing the intended uses of the EIR, including (if known) a list of the agencies that are expected to use the EIR in their decision-making, a list of permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

The project is thoroughly described in Section 2.0 in accordance with the CEQA requirements. The project location is described in Section 2.3 (page 2-3), and the document includes detailed facility, project, and regional maps (pages 2-4, 2-5, and 2-8). The project objectives are presented in Section 2.2 (page 2-2). General descriptions of the project's technical, economic, and environmental characteristics are contained in Sections 2.3 to 2.8 (pages 2-3 to 2-20). The document includes statements describing the intended uses of the Draft EIR with a list of permits, approvals and other requirements required to implement the project (pages 2-20 to 2-25).

The CEQA Guidelines do not require that a project description include "all of the emissions increases that will occur facility-wide as a result of the Project," as the commenter contends. Rather, Guidelines § 15124 makes clear that the project description "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact." The Guidelines do not require that the project description include every detail needed to calculate emissions from the proposed project. This level of detail is provided elsewhere in the document. All of the emissions increases associated with the project are appropriately analyzed in Section 4.1 (pages 4-2 to 4-40) of the Draft EIR.

Because the project description contains all relevant information required by the CEQA Guidelines, it is not "inaccurate and misleading," as the commenter contends. Subsequent to release of the Draft EIR, Chevron provided additional

information resulting in minor changes to the project descriptions. These changes were evaluated and will further reduce overall emissions from the proposed project. As a result, no conditions requiring recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5 have occurred.

2-10 The SCAQMD is aware that an EIR must provide decision-makers and the public with the information required by CEQA. However, the SCAQMD strongly disagrees with the commenter's suggestion that the Draft EIR provides only cursory information regarding operational emissions. Operational emissions are discussed in detail in Section 4.1.3 (pages 4-12 through 4-19) of the Draft EIR. Pursuant to CEQA Guidelines §15147, technical details of emission calculation methodologies for operational emissions are appropriately provided in Appendix B and emission calculations are provided in Attachment B.2 to Appendix B. The document provides sufficient information to provide decision-makers and the public with the information to assess the Project.

The SCAQMD disagrees with the commenter's opinion that the SCAQMD failed to analyze, calculate, or disclose information and data regarding increases in operational emissions from the Coker, the No. 4 crude unit, the No. 6 H_2S plant, and the Coker feed heaters. Emissions increases from this equipment are discussed in Section 4.1.3.1 (pages 4-12 to 4-13) of the Draft EIR and are summarized in Table 4.1-7 (page 4-20), and in the responses to comments as summarized below. The SCAQMD also disagrees with the comment that it failed to properly calculate emissions from increased throughput of higher sulfur crude, coke drum depressurization, and decoking as explained below.

Coker, Coker Feed Heaters, Coke Drum Depressurization, and Decoking: The comment asserts that emissions from the Coker feed heaters and from coke drum depressurization were underestimated. As explained in more detail in Response 2-33, the Draft EIR correctly determined that peak daily emissions from the Coker feed heaters would not increase above the baseline levels achieved in the past, because the feed heaters are not being modified and their capacities will not increase beyond permitted levels. As explained in Response 2-45, the Draft EIR used the quantitative information that was available to calculate increased emissions from coke drum depressurization. Although the source test report concluded that the results were biased low, there was no basis to adjust the results for potential biases, and the data used are the best that were available at the time the Draft EIR was released. As discussed in Response 2-46, the calculation of the increase in PM10 emissions from coke drum depressurization has been modified from the Draft EIR to include the condensable portion of the source test results. The modified increase in peak daily PM10 emissions from coke drum depressurization of 16.5 pounds per day, when added to the increases in peak daily PM10 emissions from other modified sources, results in a total increase in peak daily PM10 emissions of 144.2

pounds per day, which is less than the significance threshold of 150 pounds per day, and, thus, does not change the conclusion determined and disclosed in the Draft EIR. Response 2-47 shows that peak daily PM10 emissions, including emissions from coke drum depressurization, will not cause significant adverse impacts to PM10 ambient air quality. Additionally, because the condensable portion from the source test was considered to be VOC in the Draft EIR, the modification to the calculation of the increase in emissions from coke drum depressurization has reduced the increase in VOC emissions, which was below the significance threshold. Responses 2-50 and 2-51 explain that decoking would not result in new significant impacts.

No. 4 Crude Unit: Comments 2-58 and 2-59 assert that the firing rates of the No. 4 Crude Unit heaters will increase. As explained in more detail in Response 2-58, Chevron has confirmed that additional increases in heating requirements from the No. 4 Crude Unit furnaces can be provided within the heaters' current permitted capacity, and Chevron is not proposing modifications to the furnaces or to their permit limits. Additionally, the heaters have operated at full permitted capacity in the past.

No. 6 H_2S Plant: As Responses 2-68, 2-69 and 2-78 explain, potential increases in utilities for the No. 6 H_2S plant are within the previously achieved baseline levels for the evaluation of the project. The previously achieved emissions have been reported and recorded daily onsite.

Higher Sulfur Crude: Comments 2-65 and 2-66 assert that the increased throughput of higher sulfur crude oil will increase emissions from the amine units that remove sulfur from gas streams and from the hydrotreaters that remove sulfur from liquid hydrocarbon streams. As explained in Response 2-65, the amine treatment units have sufficient permitted capacity to remove the increased amount of sulfur, and they are not being modified. Similarly, Response 2-66 indicates that the hydrotreaters have sufficient capacity to remove the increased amount of sulfur, and are not being modified. Furthermore, the increased sulfur to the hydrotreaters will be primarily in the products from the Coker, which produce more heat during hydrotreating than products from other units. Since the heat is recovered and used to heat feed to the hydrotreaters, the firing rates for the hydrotreater furnaces are anticipated to decrease.

The SCAQMD disagrees with the commenter's statement that the Draft EIR is inadequate because the SCAQMD failed to properly calculate emissions. Therefore, no conditions have occurred requiring recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5, as the commenter requests.

2-11 The SCAQMD disagrees with the opinion expressed by the commenter that the Draft EIR is not inadequate for "fail[ing] to analyze and mitigate significant increases in operations emissions at the refinery as a result of the proposed

project." The commenter correctly notes that the Draft EIR includes analyses of operational emissions, but the opinion that the Draft EIR omits critical analyses is not correct as explained in the following paragraphs.

As noted by the commenter, the Draft EIR "estimated emissions from coke drum depressurization and fugitive sources," the latter of which include "new pumps, valves, and flanges in modified processing equipment." Emissions from these sources were analyzed in Section 4.1.3.1 (pages 4-12 through 4-13) of the Draft EIR. Details of emission calculation methodologies are provided in Appendix B, and emission calculations are provided in Attachment B.2 to Appendix B. The commenter's opinion that the Draft EIR estimated emissions from coke drum depressurization and fugitive sources only is incorrect. Other air emissions are analyzed in Section 4.1 (pages 4-2 to 4-40) of the Draft EIR.

Coke Drum Depressurization: As summarized in Response 2-10, the commenter's contention that the Draft EIR "greatly underestimated" emissions from coke drum depressurization is in error.

Existing Units: As discussed in Response 2-12, the commenter's opinion is mistaken that the Draft EIR is inadequate because it "did not consider and analyze increased emissions from existing units that would, as a result of the project, operate at a higher rate or with greater frequency than during the baseline period." For further detailed discussion, see Responses 2-41, 2-61, 2-68 and 2-69. The units being modified for the project are the No. 4 Crude Unit, the Coker and the No. 6 H2S Plant. No other units require modification, and their peak daily operating rates will not increase above currently permitted levels. Furthermore, the facilities that provide utilities do not need to be modified for the project; no modifications or changes to permit limits are proposed. Therefore, emissions from these facilities will not increase above the baseline levels achieved in the past, reported and recorded daily onsite.

Finally, the commenter's opinion that the Draft EIR is inadequate because it fails to provide mitigation for significant increases in operational emissions is incorrect. As stated in the Draft EIR in Section 4.1.3.3 (page 4-19), the increases in operational emissions are below the thresholds of significance. There are no significant increases in operational emissions. Therefore, as the Draft EIR indicates in Section 4.1.9.2 (page 4-37), mitigation measures for operational emissions are not required because such emissions do not cause significant impacts.

Accordingly, the commenter's opinion that the Draft EIR omitted a full analysis of operational emissions is without merit.

2-12 The commenter is incorrect in stating that the Draft EIR is inadequate for "substantially underestimat[ing] overall Project emissions by excluding any analysis of emissions from increased operation of supporting utilities at the

refinery." As discussed in more detail in Response 2-41, the Draft EIR discusses increases in emissions from providing additional cooling water. Response 2-69 discusses additional electricity demands. The power plants in the South Coast Air Basin are subject to SCAQMD Regulation XX - RECLAIM, and cannot exceed established emission limitations, which were previously analyzed in a CEQA document prior to its adoption in 1993. Increased operation of supporting utilities will not require modifications to existing permit conditions and may occur without the proposed project. These supporting utilities do not require discretionary approvals to operate at higher levels, and may be operated within existing permit conditions. Because the project will not require construction of new electrical generation facilities, emissions from increased electrical power requirements are considered part of the baseline.

2-13 SCAQMD disagrees with the commenter's opinion that the Draft EIR adopted a misleading baseline for purposes of evaluating potentially significant air quality impacts. The comment suggests that SCAQMD should have adopted as the baseline the facility's actual emissions. As noted throughout these responses to comments, the appropriate baseline against which SCAQMD should measure the potentially significant environmental impacts the Project may cause is the air emissions which are currently allowed under the facility's permit, which has been SCAQMD policy since approximately 1999. *See, e.g., Fairview Neighbors v. County of Ventura* (1999) 70 Cal.App.4th 238, further discussed in detail in Responses 2-28 to 2-30. The emissions allowed under the existing permit conditions, which the facility is entitled to emit without further action by SCAQMD, is the appropriate baseline against which the Project should be judged. Although allowable emissions were appropriately utilized as the CEQA baseline, in the interest of providing additional information, the Draft EIR also analyzed past actual emissions. The maximum level achieved during the two prior years was equivalent to the maximum allowable under the permit terms. *See, e.g.,* Draft EIR at 4-13 (discussing the emissions under the Coker Feed Heaters – "the anticipated peak daily emissions from the furnaces will not increase beyond current peak levels that are allowed within the current permit *and* that have occurred in the past.") (emphasis added). Therefore, the baseline adopted for purpose of analysis in the Draft EIR does not underestimate the project's emissions. The established baseline meets SCAQMD's burden of investigating and evaluating the project's potentially significant environmental impacts.

The CEQA Guidelines provide the basis for determining what baseline should be set for purposes of assessing the project's potentially significant environmental impacts. In particular, CEQA Guidelines §15125(a) provides that the environmental setting described in an EIR, which normally constitutes the baseline physical conditions by which a Lead Agency determines whether an impact is significant, should include "a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of

preparation is published, ... at the time the environmental analysis is commenced." The physical environmental conditions include both the natural environment and the man-made or built environment. (*Guide to the California Environmental Quality Act*, Remy, Thomas, Moose and Manley, 1999, p. 163.). Just as there are cycles and fluctuations over time in the natural environment that must be reflected in the baseline (e.g., seasonal variations, drought cycles, 100-year floods, etc.), so too there are temporal variations and cycles in the man-made or built environment (e.g., seasonal cycles in agriculture and tourism, business cycles, etc.). With a refinery, there are variations over time in the operation of each discrete piece of equipment in response to a variety of factors, including changes in raw materials (the "crude slate"), changes in the products (e.g., relative production of gasoline versus diesel fuel or jet fuel), crude supply, and market demand for products. Recognizing these variations, in the case of a project that will modify an existing facility or activity, where the owner of the existing facility has permitted rights to continue operations pursuant to previously issued permits, the activity allowed by the permit is the appropriate basis for comparing post-project changes. Again, activity allowed by the permit may occur without the proposed project.

The current environmental conditions include the conditions which are allowed pursuant to an existing permit, such as air permits as are currently held by Chevron. Where the necessary permits have been issued, and the permit holder has legal rights pursuant to that permit, later environmental review for revisions to the facility are evaluated according to a baseline that includes completion and operation of the original project. *See Benton v. Board of Supervisors of Napa County* (1991) 226 Cal.App.3d 1467. This is so regardless whether the project has merely commenced construction and never achieved operational status (as in *Benton*); operated at below its permitted capacity (as in *Committee for a Progressive Gilroy v. State Water Resources Control Board* (1987) 192 Cal.App.3d 847, 864); or operated at full capacity, but later declined to a much-reduced rate (as in *Fairview Neighbors v. County of Ventura* (1999) 70 Cal.App.4th 238). The key in all these cases is that the project proponent has the right to fully utilize the permits and approvals which have been awarded previously. As stated by the court in *Benton*: "[T]he actual physical environment includes that which [the project proponent] has a legal right to build under permits which have already been issued and on which construction has already begun."

In *Benton*, neighbors sought to compel the County to prepare an EIR before approving the relocation of a proposed winery. Previously, the County had approved a use permit for the construction of the winery, and construction had begun. However, the project proponent, Whitbread, subsequently acquired an adjoining 120-acre parcel and sought to relocate the winery buildings to the new parcel. This also brought the winery closer to residents. The relocation was examined in a mitigated negative declaration that consisted of "a comparison

between what Whitbread could construct under its existing permit and what it requested in the new application." The neighbors challenged the approval of the relocation, arguing that the County must determine the environmental impacts of the second winery proposal as if the original plan had not already been approved. The neighbors cited a number of CEQA cases, which the court rejected. The court stressed that Whitbread had acquired the right to build under its initial use permit, in contrast to the circumstances involved in the cases cited by the neighbors.

The *Fairview Neighbors* case also is applicable to this situation, and is discussed in more detail in Responses 2-28 to 2-30. Briefly, that case concerned a proposed expansion of an existing mine. The conditional use permit (CUP) for the mine had expired and the company sought to renew the CUP and expand the mining operation. At the time of the EIR review for the expansion, mining activities had declined. Nonetheless, the traffic analysis in the EIR assumed a baseline average daily truck traffic that corresponded to the maximum rock production levels allowed in the CUP. The court accepted this baseline. Citing *Benton* as well as several cases concerning expired permits, the court stated: "The . . . EIR appropriately assumes the existing traffic impact level to be the traffic generated when the mine operates at full capacity pursuant to the entitlement previously permitted by the CUP . . ." Indeed, the court thought that any other baseline would be misleading because traffic flow for the operation "fluctuates considerably based on need, capacity and other factors."

If the appropriate baseline for a facility under construction includes impacts from full-scale operation under its permits (as in *Benton*), and the appropriate baseline for an underutilized facility is the impacts corresponding to the maximum production allowed under the permit (as in *Fairview Neighbors*), this baseline also must apply to a facility such as the Chevron refinery that has completed construction and operated under its permits for many years. In the case of the proposed project, SCAQMD staff has previously reviewed and approved construction and operation of the complex of equipment that currently exists at the refinery. At various times over the years, SCAQMD has approved and issued permits to construct and operate the individual pieces of equipment.

Case law also supports the idea that when an existing project which has already been approved after environmental review and later seeks approval for a modification, the baseline for the new project should be the prior-project as approved, regardless whether that level of activity has yet to be achieved. *See, e.g., Benton; see also Fund for Environmental Defense v. County of Orange* (1988) 204 Cal.App.3d 1538 (a CUP supported by a certified EIR lapsed; the CUP was renewed after an addendum to the EIR was prepared). Courts routinely accept a project's capacity as permitted as the appropriate baseline, not whether the permitted project's capacity has yet to be achieved. *See, e.g.,*

Bloom v. McGurk (1994) 26 Cal.App.4th 1307 (court did not assess whether the facility's permitted emission levels had historically been reached when analyzing the potential effects of a modification to the facility).

Consistent with the CEQA Guidelines and the cases described above, the environmental setting which provides the baseline for the assessment of the project includes the existing Chevron refinery, including the previously issued permits and approvals which entitle Chevron to operate the equipment at the refinery. Thus, the baseline includes operation of the equipment at the various levels of utilization and/or fluctuating emissions allowed by those permits. See Response 2-23 for specific discussion of the appropriate baseline for RECLAIM pollutants.

2-14 See Response 2-13.

The SCAQMD is aware of the process and procedures required by CEQA to determine impacts from a project, including establishing an appropriate baseline from which to calculate impacts. The commenter's opinion that the baseline should be based on actual emissions as opposed to permitted emissions is inconsistent with published CEQA case law as indicated in Responses 2-13 and 2-23. While the Draft EIR evaluated past actual emissions for informational purposes, the appropriately used CEQA baseline was allowable emissions. The SCAQMD is also aware of the steps subsequent to establishing the baseline, required by CEQA, including evaluating the increase in emissions, if any, relative to the baseline and comparing any impacts with the relevant significance thresholds to determine whether any increases are significant.

2-15 See Response 2-13.

SCAQMD disagrees with the comment that the baseline used in the Draft EIR was hypothetical. The emissions baseline used in the Draft EIR is the emission limits which Chevron has the legal right to emit currently without the project. The baseline, which was based on the emissions the Facility is currently permitted to emit irrespective of this project, is not a hypothetical baseline and indeed corresponds to the permitted conditions as allowed by law at the Chevron refinery.

SCAQMD also disagrees with the comment that the Draft EIR ignored the increased frequency of greater emissions as a result of the project. As described above, the baseline SCAQMD relied on in assessing the project's potential significant impacts was the facility's emission permit which sets hourly, daily and annual limits which the facility has the legal right to emit presently, even if the project at issue is not ultimately approved. Further, the establishment of the baseline does not contradict CEQA case law as explained in detail in Response 2-13.

2-16 As already noted in Responses 2-13 and 2-14, the SCAQMD is aware of CEQA requirements for establishing the baseline for a project. The SCAQMD also understands the purpose for significance thresholds. With respect to these specific issues, the SCAQMD has complied with all relevant CEQA requirements relative to preparation of the Draft EIR for the Chevron project. Further, the Draft EIR is consistent with relevant CEQA case law as indicated in Responses 2-13 and 2-23.

2-17 See Response 2-13 for a detailed discussion of baseline.

SCAQMD's CEQA Handbook tracks the CEQA Guidelines, and is intended to compliment and supplement, but not depart from, the CEQA Guidelines and case law. (It should be noted that Chapter 7 of SCAQMD's CEQA Handbook is currently being revised, and the quotation cited in the comment is from the 1993 version of the Handbook). The provision in SCAQMD's CEQA Handbook which the comment refers to tracks CEQA Guidelines §15125(a) as it existed prior to amendment in 1998. According to both the pre-1998 and post-1998 versions of CEQA Guidelines §15125(a), the physical environmental condition "as it exists before commencement of the project" includes all vested permits as potentially implemented to their capacity. *See, e.g., Benton, supra, see also* Response 2-13. As such, for all the reasons discussed above in Response 2-13, SCAQMD's CEQA Handbook direction on how to describe the project's environmental setting includes the emissions limits as they currently exist under existing Chevron's existing permit.

2-18 See Responses 2-13 and 2-17 for a detailed discussion of baseline.

SCAQMD disagrees with the comment. Under either the pre-1998 or post-1998 versions of CEQA Guidelines §15125(a), the environmental conditions "at the time the environmental analysis is commenced" or the environmental condition "as it exists before the commencement of the project" both consist of the environmental conditions as allowed by vested permits at either of those periods. Further, the comment ignores that the CEQA Guidelines reflect case law, and do not make case law. Therefore, the 1998 amendment both reflects pre-1998 cases, and should be interpreted according to post-1998 case law (such as *Fairview Neighbors*).

2-19 SCAQMD disagrees with the commenter to the extent the comment suggests that the five cases cited in the comment stand for the proposition that the baseline must be set at "actual" pre project levels, and not at permitted emission levels. (*Save Our Peninsula Committee v. Bd. Of Supervisors* (2001) 87 Cal. App. 4th 99, 122; *Fat v. Sacramento* (2002) 97 Cal. App. 4th 1270; *Riverwatch v. San Diego* (1999) 76 Cal. App. 4th 1428, 1451; *City of Carmel by the Sea v. Board of Supervisors* (1986) 183 Cal. App. 3d 229, 246; and *Bloom v. McGurk* (1994) 26 Cal. App. 1307). None of the cases stand for the proposition that the

environmental setting, which can be used to establish a baseline, should not include activities allowed by underutilized permits. In fact, the cases largely deal with issues where a project opponent claimed that the current environmental setting should be based on the historical environment because the current environment was impacted by illegal or unpermitted activities. Such fact patterns do not suggest that SCAQMD should use a baseline different from what it used in the Draft EIR. Each of the cases cited in a footnote to the comment is discussed below.

In *Save our Peninsula*, the project at issue was a proposed residential housing development project, which had no vested right to proceed. At issue was whether the baseline for the project's water supply was sufficiently identified. There were no definitive records to establish the property's historical water pumping use, and there was no substantial evidence to support the water use estimate used to establish the baseline of water historically used at the property. 87 Cal. App. 4th at 111, 121. In contrast, the baseline used in the Draft EIR for the Chevron facility is well documented in the facility's permits. There is no question as to what emissions are allowed under the facility's permit, and therefore *Save our Peninsula* is inapposite.

In *Fat*, the issue was whether the lead agency, in considering approval of certain upgrades to a small airport, should set the baseline against which the project's potential environmental impacts would be judged as the environmental conditions as they existed at the time of the application, or whether the baseline should be 1970 (the year CEQA was enacted) because no EIR had ever been prepared for the airport and given that some of the airport's expansion since 1970 had been done without obtaining necessary government approvals. 97 Cal. App. 4th at 1274. The Court found that the project's historical environmental setting did not provide the appropriate baseline, and the environmental conditions at the time of the application provided the appropriate baseline. *Id*. at 1281. The case did not address the situation applicable to the Chevron project, namely, where a project is fully and lawfully permitted. As the comment did not elaborate, it is difficult to ascertain why the commenter believes *Fat* requires a different baseline than SCAQMD has applied in the Draft EIR, especially since the project at issue in Fat concerned changes to the environment which were unpermitted, which stands in contrast with Chevron's baseline emissions, which are expressly permitted.

In *Riverwatch*, the matter involved the adequacy of a county's approval of a mining project. Prior to the project application, the site had been used for an illegal sand mine. 76 Cal. App. 4th at 1451. At issue in the case was whether the environment as changed by the admittedly illegal activity should form the baseline for the project's analysis. The Court found that the lead agency need not take into account the fact that the environment was changed in an illegal manner, and therefore the lead agency should use as its baseline the

environment as it existed at the time of the project application, even if the environment had been illegally degraded. *Id*. at 1452-1453. Again, this case does not provide any guidance for the Chevron project, nor support for the comment's position because Chevron is legally permitted and there is no question as to what emissions are allowed under the facility's permit. The case also addressed the finding of significant effects due to air pollution, but that finding was not based on an alleged inadequate baseline (the court found that the San Diego Air Pollution Control District had not set standards for fugitive and road hauling emissions, and so "compliance" with the district's "processing" emission standards was not relevant). *Id*. at 1453-55. The air pollution discussion in *Riverwatch* is therefore not relevant to the comment.

In *City of Carmel-by-the-Sea*, the issue was whether a residential development would be approved, and whether the baseline should be the existing environment prior to the project or the future environment as contemplated by the General Plan. 183 Cal. App. 3d at 246. The applicant did not have a permit or a vested right to develop the property. This case stands in contrast with the instant matter, in which the Draft EIR did not set a baseline based on a generic general plan (for which no entity had obtained vested rights), but is based on a specific permit which has granted permitted rights to Chevron. Case law has uniformly treated a development project's compliance with the general plan as a necessary but not sufficient element of a project's approval. Additionally, compliance with a General Plan's statement of allowable zoning does not by itself grant the right to develop in accordance with the General Plan's provisions. As such, *Carmel-by-the-Sea* does not provide any guidance in this instance.

Finally, *Bloom* was primarily concerned with whether an existing facility subject to a permit renewal was exempt from CEQA as an "existing facility." The court concluded that it was exempt. 26 Cal. App. at 1316. The Court also discussed whether the facility was expanding by more than 10% which therefore would have triggered CEQA under a special requirement applicable to existing hazardous waste facilities, and the Court concluded that the facility had never expanded during its lifetime, and therefore no CEQA action was required. *Id*. at 1316-17. Again, the facts of the case and the court's holding do not support the proposition in the comment and there is no relevant nexus to the Chevron project.

None of the cases referred to in the comment support the comment's assertion that the baseline must be set at "actual pre-project emission levels, not at hypothetical levels that might have been achieved under existing permits, but were not." As noted in Responses 2-13 and 2-23, the baseline established for the proposed Chevron project was established in a manner consistent with CEQA case law that is applicable to this project, namely *Fairview* and *Benton*.

2-20 The comment does not identify specifically which emissions or equipment are being referred to. Nonetheless, the Draft EIR adequately addresses the project's emissions relative to emissions as currently allowed under the facility's existing permit. As described in more detail in Response 2-13, SCAQMD established the baseline as the facility's permitted emissions, consistent with relevant CEQA case law (*Fairview* and *Benton*). The facility has a legal right to emit up to permitted levels each and every day and could do so even in the absence of the project. This is the appropriate baseline against which to evaluate emission increases associated with the project. For equipment that are not being modified, the project will not result in increased emissions over and above what the facility is currently entitled to emit. This is the appropriate baseline. For new or modified equipment, operational emission increases have been calculated and compared to the appropriate significance thresholds. The results indicate that operational emissions from the proposed project do not exceed any applicable significance thresholds and, therefore, are not significant. With regard to more days where the facility is firing at it peak firing rate is not relevant because the permit assures peak levels can and will be reached every day, so it is the appropriate baseline.

2-21 The comment does not identify why it suggests that short-term excursions to a higher level (presumably, the comment refers to peak emissions) "cannot be routinely sustained without modification to refinery equipment." Nonetheless, SCAQMD disagrees with the suggestion that the information disclosed and the analysis therein is insufficient. To the extent that the comment is referring to peak daily emissions, the Draft EIR discloses that post-project peak daily emissions would be within emission levels as allowed by the current permit, and, further, that such daily peak emissions are consistent with historical peak daily emissions. The emissions are based on actual daily on-site reporting and recordkeeping and were not generated from anomalous conditions or violations of the permit limit..

2-22 The SCAQMD is aware of the requirements in its Regulation XX - RECLAIM program. The summary of the program requirements in the comment is, generally, consistent with the program requirements.

2-23 SCAQMD has set the baseline for RECLAIM pollutants as a facility's initial 1994 allocation of RECLAIM credits plus nontradeables, and an emissions increase will be considered significant if the proposed project would cause the facility's emissions to exceed the baseline plus the adopted NO_x or SO_x significance threshold (the thresholds are stated in the Draft EIR Table 4.1-1). This protocol is consistent with how SCAQMD analyzes other projects subject to the RECLAIM program and with the case *Fairview Neighbors*, discussed in more detail in Responses 2-28 to 2-30 below.

Under the RECLAIM program, the SCAQMD issues facility-wide permits to sources. The facility permits specify an initial allocation and declining annual emission allocations for NO_x and SO_x. The initial allocations were based on historical reported emissions for the years immediately prior to implementation of the RECLAIM program. Annual allocations represent the number of RECLAIM Trading Credits (RTCs) the facilities begin with each year. The allocations generally declined each year from 1994 through 2003. In 2005 the RECLAIM program was amended to require further reductions in a facility's annual allocation commencing in the year 2007 through the year 2011. Operators of RECLAIM sources must not emit more than the total number of RECLAIM credits they possess, which include the annual allocation plus any credits bought and minus any credits sold. In this way, the RECLAIM program operates to reduce on an annual basis the overall emissions of NO_x and SO_x in the Basin, while providing flexibility at individual facilities to vary emissions up to the levels of the actual emissions as determined in 1994. Facilities reduce emissions through a variety of ways, including curtailing production, purchasing RTCs and installing pollution control equipment, to remain below annual allocations. Facilities in the program can generate RTCs to sell by reducing facility emissions beyond the annual allocation. Although the allocations for RECLAIM facilities have declined each year since 1994, the maximum annual emissions of NO_x and SO_x permitted from each facility remain at the 1994 limits - so long as that facility acquires additional allocations from another RECLAIM facility that has reduced its emissions below its current-year allocation.

Air quality impacts associated with a modification at a RECLAIM facility are considered significant if the incremental mass daily emissions for NO_x or SO_x from sources regulated under the RECLAIM permit, when added to the allocation for the year in which the project will commence operations, will be greater than the facility's 1994 allocation (including non-tradable credits) plus the increase established in the SCAQMD Air Quality Handbook for that pollutant (55 pounds per day [lb/day] for NO_x and 150 lb/day for SO_x). The reason for this is that the facility will not require a permit modification unless emissions exceed the original allocation plus nontradeables and, thus, this is the permitted baseline for a RECLAIM facility. In order to make this calculation, annual allocations as well as the project's incremental annual emissions are converted to a daily average by dividing by 365. Thus, the proposed project's impact is considered significant if:

$$(A_1/365) + I < (P + A_2)/365$$

Where:

P = the annual emissions increase associated with the proposed project.

A_1 = 1994 initial annual allocation (including non-tradable credits).

A_2 = Annual allocation in the year the proposed project will commence operations.

I = Incremental mass daily emissions established as significant in the SCAQMD Air Quality Handbook (55 lb/day NO_x or 150 lb/day SO_x).

The above analysis provides a way of applying the standard CEQA significance thresholds to the facilities that have CEQA baselines that are determined by the unique program of RECLAIM. The analysis ensures that the CEQA significance criteria are applied properly and fairly, taking into account the unique aspects of the RECLAIM program. For localized impacts associated with a physical modification, the RECLAIM regulations require modeling and establish thresholds that cannot be exceeded.

The determination of CEQA significance for RECLAIM facilities applies only to operational emissions of NO_x and/or SO_x that would be included in the RECLAIM allocation and subject to the RECLAIM regulations. The RECLAIM CEQA significance determination does not apply to sources that would not be regulated by the RECLAIM regulations, construction emission sources, or to non-RECLAIM pollutants (i.e., VOC, CO, and PM10) for which the SCAQMD has established significance thresholds. The level of emissions at which CEQA significance is triggered for RECLAIM pollutants NO_x and SO_x for the refinery ((A1/365) + I) is calculated in Draft EIR Table 4.1-2.

The use of the RECLAIM CEQA NO_x and SO_x significance criteria to determine the significance of air quality impacts from stationary sources subject to RECLAIM at the refinery is appropriate because the refinery is a RECLAIM facility.

The proposed modifications will be completed between February 2007, when the proposed modifications to the No. 6 H2S Plant are completed, and March 2008, when the proposed modifications to the Coker are completed. RECLAIM allocations generally apply to 12-month periods. For the refinery, this 12-month period is from July 1 through June 30. Therefore, NO_x and SO_x RECLAIM allocations for the period from July 2007 through June 2008 for the Chevron refinery were used in determining the significance of operational air quality impacts from RECLAIM sources for the proposed project. The 2007/2008 allocations for NO_x and SO_x are 1,509,772 lb/yr (4,136 lb/day) and 628,804 lb/yr (1,723 lb/day), respectively. Therefore, emission increases up to $[(A_1 / 365 + I)_{NOx} - A_{2,NOx} / 365]$ = (16,213 lb/day - 4,136 lb/day) = 12,077 lb/day of NO_x or $[(A_1 / 365 + I)_{SOx} - A_{2,SOx} / 365]$ = (5,181 lb/day - 1,723 lb/day) = 3,458 lb/day of SO_x for the proposed project would be less than significant.

Since the permitted limit on NO_x and SO_x emissions is based on the actual emissions when the permits were issued in 1994, and since Chevron has the right pursuant to that permit to return to that level of emissions without

amendment of its RECLAIM permit upon purchase of any needed tradable emissions credits, SCAQMD has concluded that the correct "baseline" applicable to this project reflects the facility's 1994 allocation plus non-tradeables. Thus, SCAQMD determined that it is appropriate under CEQA to evaluate a project's significance by determining whether the facility's emissions following implementation of the proposed project will be greater than the baseline plus the standard CEQA significance thresholds.

Putting aside the theoretical discussion of why SCAQMD's baseline is correct, the above analysis is moot because the project at issue will result in zero NO_x or SO_x emissions subject to RECLAIM. See Draft EIR at Table 4.1-7 (noting that Total RECLAIM SO_x and NO_x emissions are 0.0 lb/day; the Table also identifies NO_x and SO_x emissions from indirect emissions, but these indirect sources are not subject to the RECLAIM program). As the project will result in no NO_x or SO_x emissions subject to RECLAIM, it is a moot point to argue whether SCAQMD's RECLAIM baseline is adequate.

2-24 See Responses 2-13 and 2-23 with regard to baseline and analyzing impacts from RECLAIM sources.

SCAQMD disagrees with the comment that a "scheme" has been devised to "immunize the biggest polluters." As noted in Response 2-23, a RECLAIM significance threshold has been established to account for the unique aspects of the RECLAIM program. As also noted in Response 2-23, the proposed project does not result in any increases in RECLAIM pollutants. Non-RECLAIM pollutant emission increases have been calculated as have NO_x and SO_x emissions from non-RECLAIM sources. In neither case do emissions exceed applicable significance thresholds.

2-25 SCAQMD disagrees with the comment. As discussed previously, the baseline is properly based on emissions that are allowed under Chevron's refinery's permits. A baseline based on permitted emissions remains proper even though a facility's actual emissions are less than permitted emissions, or even if the facility has not yet actually begun to emit under the permit. *See Fairview Neighbors and Benton*. Consistent with the CEQA Guidelines and case law, the environmental setting which provides the baseline for the assessment of the project includes the existing Chevron refinery, including the previously issued permits and approvals which entitle Chevron to operate the equipment at the refinery. Thus, the baseline includes operation of the equipment at the various levels of utilization and/or fluctuating emissions allowed by those permits.

See Responses 2-13 and 2-23 with regard to baseline and analyzing impacts from RECLAIM sources.

SCAQMD disagrees with the comment that it is "illegal" to rely on 1994 allocations in the RECLAIM significance threshold calculation.

2-26 There are no RECLAIM emission increases from the proposed project, as noted in Response 2-23. See Responses 2-13 and 2-23 with regard to baseline and the establishment of the methodology used to analyze impacts from RECLAIM sources. Further, since the SCAQMD considers the Chevron project a project as defined by CEQA and is requiring the project to undergo a full EIR process, it is not clear how the commenter can state that the SCAQMD is "effectively exempting the Project from CEQA." This opinion is not consistent with the actual process the SCAQMD is requiring for this project.

SCAQMD disagrees with the comment that this procedure is "illegal" or creates "an absurd result."

2-27 SCAQMD disagrees with this comment. As noted elsewhere, SCAQMD relied on the proper baseline, consistent with *Fairview Neighbors*, and other cases discussed in Response 2-13.

The comment suggests that the Draft EIR should have assessed the project's impacts by measuring the project's emissions against SCAQMD's significance threshold, without also including the facility's 1994 allocation of NO_x and SO_x RECLAIM Trading Credits. As discussed above in Response 2-23, SCAQMD disagrees with the comment. Nonetheless, the comment does not identify why it believes that, even if this significance threshold were used, that the NO_x and SO_x emissions from the project would be significant.

First, the project will result in zero NO_x and SO_x emissions. See Draft EIR Table 4.1-7. Thus, under any standard, a project resulting in zero NO_x and SO_x emissions will not be significant regardless of the significance threshold applied.

Second, even if SCAQMD were to rely on the NO_x and SO_x emissions the commenter elsewhere suggests will be associated with the project, SCAQMD's significance thresholds (without including Chevron's 1994 allocation) would not be triggered. The comment letter in Table 1 on page 13 suggests that the project will result in SO_x emissions of 39.40 lb/day and NO_x emissions of 37.41 lb/day. SCAQMD strongly disagrees with the comment's suggestion that these will be the emissions associated with the project and cites these numbers only to make the following point. Nonetheless, even if the emission levels proposed by the comment were correct, these would not exceed SCAQMD's mass daily significance thresholds for SO_x (150 lb/day) or NO_x (55 lb/day). See Draft EIR at Table 4.1-1.

Therefore, even under the comment's proposed emissions scenario (which SCAQMD rejects as factually inaccurate), and using the comment's proposed significance threshold (which SCAQMD also rejects because they are not applicable to the unique characteristics of RECLAIM facilities), the NO_x and SO_x emissions from the project would not exceed any threshold of significance.

2-28 The comment asserts that the Draft EIR should have used historical emissions as the baseline for CEQA review. It is not clear whether the comment is suggesting a refinery-wide approach, or use of historical emission information for discrete pieces of equipment. In either event, however, the SCAQMD's approach is consistent with CEQA case law. As described in Responses 2-13 and 2-29, case law (*e.g. Benton* and *Fairview*) has held that the actual physical environment includes that which the operator has a legal right to build and operate under permits which have already been issued.

The commenter's allegation that SCAQMD's identification of the baseline "is used to avoid analyzing a number of emission increases" is based on the commenter's assertion that SCAQMD improperly established the baseline. As detailed in Responses 2-13 and 2 29, SCAQMD's identification of the baseline is proper and, as such, the commenter's allegation is without merit. The commenter's opinion regarding the CEQA Guidelines and ambient air quality standards, including those in the associated footnote no. 23, is also based on the commenter's assertion that SCAQMD improperly established the baseline and, as such, is similarly without merit. Further, the Draft EIR clearly discusses why the proposed project will not cause or contribute to a violation of an ambient air quality standard (see pages 4-30 and 4-31 of the Draft EIR).

2-29 Based on the CEQA Guidelines and the cases described in Responses 2-13 and 2-19, the appropriate baseline as of commencement of the environmental review for the proposed project includes the existing Chevron refinery, including the previously issued permits and approvals which entitle Chevron to operate the equipment at the refinery. Thus, the baseline includes operation of the equipment at the various levels of utilization and/or fluctuating emissions allowed by those permits. As discussed above in Responses 2-13, 2-19 and 2-23, SCAQMD utilized the appropriate baseline in analyzing the proposed project.

SCAQMD disagrees with the commenter's opinion that the baseline for the proposed Heavy Crude project is inappropriate. Based on the following discussion and the analysis contained in the Draft EIR, this baseline is an appropriate baseline for the proposed project. Additionally, it should be noted that contrary to the commenter's implication, SCAQMD did not "rely on" the *Fairview* case to establish the baseline. The Draft EIR states that the establishment of the baseline was "consistent with" the *Fairview* case. See Draft EIR, pp. 4-1, 4-2. Similarly, SCAQMD staff disagrees with the commenter's "five reasons" offered in support of commenter's opinion.

Regarding the first of the comment's "five reasons," it is unclear what the commenter is referring to as "a decade old emission level." If commenter means to refer to the RECLAIM program, then, as explained in the Draft EIR at pages 4-2 to 4-5, the refinery is permitted as a RECLAIM facility under the SCAQMD's Regulation XX. The refinery's RECLAIM permit outlines the maximum allowable

emissions of NO_x and SO_x that can be emitted by the facility on an annual basis. The NO_x and SO_x allocations were established in 1994, and the total amount of emissions allowed under the RECLAIM program basin-wide declines annually until the ending allocation is reached. If operators of a RECLAIM facility expect to exceed the maximum allowable emission levels in a given year for NO_x or SO_x, they would have to purchase offsets (referred to as RECLAIM Trading Credits or RTCs) to make up the difference. Alternatively, if a RECLAIM facility expects to be below the maximum allowable emission levels in a year, it may sell RTCs to others to use. The emissions produced by the refinery count towards its maximum allowable emission levels. The emissions from the proposed project combined with existing facility emissions will not exceed the facility's annual allocation for NO_x or SO_x for any given year. Although allocations for RECLAIM facilities have declined each year since 1994, the maximum annual emissions of NO_x and SO_x permitted from each facility remain at the 1994 limits – so long as that facility acquires additional allocations from another RECLAIM facility that has reduced its emissions below its current-year allocation. Thus, the 1994 allocation represents the maximum NO_x and SO_x emissions allowed at the facility.

The analysis presented in the Draft EIR provides a way to apply the standard CEQA mass daily significance thresholds to those facilities with RECLAIM sources that have CEQA baselines that are determined by the unique program of RECLAIM. Such analysis ensures that the CEQA significance criteria are applied properly and fairly taking into account the unique aspects of the RECLAIM program. Please see Response 2-23.

Regarding the second of the comment's "five reasons," the fact that the circumstances in *Fairview* and the circumstances here are not identical is in no way fatal to the Draft EIR's observation that SCAQMD's establishment of the baseline was "consistent with" the *Fairview* case. The fact that *Fairview* did not address violations of ambient air quality standards does not undermine the *Fairview* court's ruling that the scope of a previously authorized use should be determinative of baseline, even where the previously permitted use has not been fully utilized historically, as in *Benton*.

Regarding the third of the comment's "five reasons," SCAQMD disagrees with the commenter's characterization and application of the CEQA case law discussed in Comment 2-29. As described above, courts have approved environmental review using a developer's permitted capacity as the baseline, and also have approved environmental review using actual, historical activity levels as the baseline. The EIR at issue in *Save Our Peninsula v. Monterey County* did not conform to either of these approaches. The situation in *Save Our Peninsula* was very different from that of the Chevron refinery, and so the case is not an appropriate model to follow in describing the baseline for the proposed project as explained in the following paragraphs.

First, as described above, the refinery holds valid permits to operate the existing equipment up to the utilization rates and in accordance with the other limitations stated in the permits. The refinery will not exceed these previously established permit limits as a result of the proposed project. In contrast, the developer in *Save Our Peninsula* did not have a permit or approval authorizing water usage at the proposed rate. To the contrary, the State Water Resources Control Board (SWRCB) alerted the lead agency that the appropriation of groundwater required for the project would be subject to the permitting authority of the SWRCB. 87 Cal.App.4th at 112. The developer did not yet have the required permit for appropriation of water. When faced with this obstacle, the developer asserted that it had riparian water rights, however, "[t]he supplemental EIR noted that it could not confirm the property's riparian status and that the SWRCB had not yet made a determination as to the validity of any claimed riparian right." *Id*. Thus, the developer did not have a valid permit or approval that allowed the water withdrawals to be considered baseline by the lead agency, which is unlike Chevron, who possess legal permits with limits that can be considered baseline.

Second, there were evidentiary problems with the water usage rates presented as actual historical usage in *Save Our Peninsula*. The developer claimed that the land was irrigated pasture, a claim refuted by others and never substantiated by the developer. In addition, the information on historical water usage and well pumping rates changed dramatically over the several year period when the environmental review was conducted. Ultimately, the usage rate used as baseline reflected a level achieved during well testing subsequent to the initiation of the environmental review process. The court was concerned about the potential for manipulation of the baseline by a developer in the midst of environmental review -- a person with a great interest in the outcome who had become alerted to the baseline controversy and the importance of a favorable resolution in determining the outcome of the project. Use of the pumping data from the period encompassing well testing would create an incentive for the developer to pump not for irrigation of the land in its existing state, but for the sole purpose of inflating the baseline to ease environmental review. As summarized by the court: "[T]he only evidence that the . . . property was irrigated pasture was the representation of the applicants themselves, who clearly had a vested interest in establishing a water use baseline high enough to allow the project to go forward." 87 Cal.App.4th at 122.

In the case of the proposed project at the refinery, there is no suggestion that Chevron has improperly attempted to influence the baseline subsequent to initiation of environmental review. The baseline reflects existing equipment operating within utilization rates allowed by permits previously considered and issued by the SCAQMD. The baseline established for the Chevron project is also consistent with SCAQMD policy for establishing baseline that has been in effect since approximately 1999.

Fat v. Sacramento and *Riverwatch v. San Diego* did not involve a choice between actual and hypothetical emission levels, as stated in footnote 24 to the comment. In both these cases, the question was whether the baseline should reflect the environmental impacts of unlawful or unpermitted activity that had never undergone CEQA review, or whether the baseline should be the state of the environment as of 1970, the year when CEQA was adopted. The courts accepted a baseline that included impacts from the unlawful, unpermitted activity. As such, *Fat v. Sacramento* and *Riverwatch v. San Diego* stand for the proposition that the CEQA baseline may be even higher than the permitted level where the property owner or project applicant engaged in prior conduct that has already impacted the environment -- even if that activity was unlawful. The current project applicant, Chevron, has not requested the SCAQMD to follow these precedents. If these cases were followed, and the prior operation of the existing equipment at the refinery had exceeded levels allowed in the permits, then the CEQA baseline might be even higher. For this project, however, prior emissions that exceeded permit conditions, for example during equipment breakdown, if any, were not considered in establishing the baseline. These cases do not describe the baseline that should apply when an agency has previously reviewed and approved the activity, such as the case with the Chevron refinery.

Regarding *City of Carmel-by-the-Sea v. Board of Supervisors*, see the above discussion regarding the different treatment courts have given cases involving general plans and other planning documents. *City of Carmel-by-the-Sea* involved a small hotel complex that was an existing facility, but inconsistent with the existing zoning for the property. The land use plan for the area provided a procedure by which the owner could seek residential development if the existing uses were abandoned in the future, but the owner had not pursued this option and so had not obtained permits or the right to proceed with the residential development. The proposed project consisted of the rezoning of the property to allow 61 residential units. As described by the court, the re-zone was not for the purpose of continuing the existing non-conforming use; in fact, it was not necessary for this purpose. Rather the re-zoning was in anticipation of development, and was the first step in changing the property to a new use. Unlike the developer in *Carmel-by-the-Sea*, Chevron's proposed project does not require any new discretionary permits or approvals to fully utilize equipment within the limitations imposed by the existing permits.

Bloom v. McGurk involved an existing hazardous and medical waste incinerator. It had previously received air permits, a wastewater permit, and a hazardous waste facility permit, but new legislation required the facility to also obtain a medical waste permit. The permitting agency (Department of Health Services) considered the facility to be an existing facility exempt from CEQA review. The court agreed. Contrary to the description of the case provided in footnote 24 to

Comment 2-29, the court did not say that the baseline should be limited to actual emissions at the time that CEQA review was commenced. The opinion includes information about annual incinerator capacity, not historical processing rates or emissions. As described by the court, the processing limit ultimately included in the medical waste permit corresponded to the incinerator capacity. The court's last word on the subject was: "Hence, there has been no increase in the 'permitted capacity' of the incinerators that would require an EIR." There was no analysis in the opinion of the court of historical capacity utilization, which is what the commenter is suggesting should be used to establish the baseline. Applying this approach to the refinery project, utilization of the existing equipment within existing permitted capacities is part of the baseline. The increase in utilization within existing permitted capacities could occur currently at the refinery whether or not the proposed project is authorized.

Regarding the fourth of the comment's "five reasons," SCAQMD does not suggest in the Draft EIR that *Fairview* "authorizes it" to establish the baseline. Again, the Draft EIR states that the establishment of the baseline was "consistent with" the *Fairview* case. See Draft EIR, pp. 4-1, 4-2. The CEQA guidelines and the case*s* (emphasis on the plural) described above show that the appropriate baseline as of commencement of the environmental review for the proposed project includes the existing Chevron refinery, including the previously issued permits and approvals which entitle Chevron to operate the equipment at the refinery. Thus, the baseline includes operation of the equipment at the various levels of utilization and/or fluctuating emissions allowed by those permits.

Regarding the fifth of the comment's "five reasons," the commenter appears to be implying that lack of prior environmental review somehow changes calculation of baselines. On the contrary, lack of prior environmental review does not preclude using as the baseline the maximum permitted level. For example, consider *Bloom v. McGurk* (1994) 26 Cal.App.4th 1307. In that case, no environmental review had been conducted under CEQA for the construction of a hazardous waste facility in 1982 or the addition of medical waste in 1990. Nonetheless, the court upheld approval of a medical waste permit in 1992 without environmental review under CEQA, under the "existing facilities" exemption and evidence showing that there had been no increase in actual capacity or permitted capacity. There was no analysis in the court's opinion of historical capacity utilization, which is what the commenter is suggesting should be used to establish the baseline.

2-30 Contrary to the comment, the court in *Fairview Neighbors* did not restrict the baseline to a level lower than the level actually achieved in the past. There was no limit on truck traffic in the expired CUP. The analysis in an earlier EIR assumed 120 truck trips per day. According to Remy (1999), for purposes of setting baseline in the *Fairview* case, the "EIR appropriately assumes the existing

traffic impact level to be the traffic generated when the mine operates at full capacity pursuant to the entitlement previously permitted." Because the "flow of traffic for a mining operation fluctuates," ... "discussing the possible environmental effects of the project based on actual traffic counts would have misleading and illusory." *Fairview Neighbors* 70 Cal.App.4th at 242, 243 (emphasis added). The EIR for the proposed expansion considered the average daily traffic of 810 truck trips that had been achieved in the past but was not currently taking place. The reference in the EIR to 837 daily truck trips corresponded to the peak. A peak of 837 and an average of 810 are not mutually exclusive. In approving a baseline that corresponds to the maximum permitted level - a level that was not currently being achieved - the *Fairview Neighbors* court makes it clear that the existing environment includes an existing facility as permitted, rather than an existing facility as it is operating on the day that environmental review commences.

Moreover, the comment is internally inconsistent. On the one hand, the comment states that the lead agency in *Fairview* "found that traffic flow fluctuated between 810 and 837 trips per day." On the other hand, the comment states 810 trips per day was the "actual traffic that had been achieved at the facility" – i.e., that 810 was the maximum number of trips that historically occurred at the facility. Of course, both of these statements cannot be true. In fact, neither of them are true. In *Fairview*, the average number of truck trips per day was 810, with a peak of 837. Mathematically, there must have been a day where the number of truck trips dipped below 810; the first statement quoted does not acknowledge this fact. The second statement fails to acknowledge that the maximum/peak number of truck trips was 837. In either event, the case is not inconsistent with the notion that what is allowed under a vested permit should inform the environmental setting.

2-31 The description of the Coker operation from the Draft EIR is noted.

2-32 Subsequent to the release of the Draft EIR for public review and comment, Chevron clarified that the proposed project will increase the capacity of the Coker to 75 thousand barrels per operating day (MBPOD), rather than to as much as 80 MBPOD. The Project Description in the Final EIR has been revised to reflect this clarification. Thus, the capacity will increase by 25 percent [(75 MBPOD - 60 MBPOD) / 60 MBPOD x 100], rather than by 33 percent, as stated in the comment. As discussed in the following responses, impacts associated with the increase in petroleum coke production have been assessed in and disclosed the Draft EIR.

The project description has been modified in the Final EIR to clarify that the proposed modifications to the Coker will increase production of liquid coking products. The capacity of downstream refinery units that process these products can accommodate the increase in production within their permitted capacities,

and no modifications to these downstream units or their permits are required or have been proposed.

2-33 The SCAQMD staff disagrees that a proper discussion of potential increases in emissions from the Coker feed heaters was omitted from the Draft EIR. Potential increases in emissions from the Coker feed heaters were evaluated as presented on page 4-13 of the Draft EIR. Chevron is not proposing to modify the Coker feed heaters, so their capacities will not increase from the current permitted capacities. The proper baseline for evaluating potential increases in the firing rate of the Coker feed heaters is the maximum allowable daily firing rate (maximum quantity of fuel burned per day) under existing permits. As stated on page 4-13 of the Draft EIR, the maximum allowable total daily fuel use for the three Coker feed heaters under existing permits was 11.8 million standard cubic feet per day (MMscf/day). The anticipated peak daily firing rate during operation of the proposed project is 10.2 MMscf/day. Because emissions from the Coker feed heaters are proportional to the amount of fuel burned in the feed heaters, and because the peak daily amount of fuel burned in the feed heaters during operation of the proposed project will be less than the maximum allowable under existing permits, the anticipated peak daily emissions from the Coker feed heaters will be less than the baseline emissions.

2-34 As discussed in the response to comment 2-33, changes in the firing rates of the Coker feed heaters were analyzed in the Draft EIR. See the response to comment 2-41 regarding changes in firing rates in steam boilers and the response to comment 2-59 regarding changes in firing rates in the No. 4 Crude Unit feed heaters. Contrary to the comment, all emissions associated with increased firing rates were fully analyzed and disclosed in the Draft EIR. The commenter simply disagrees with the CEQA baseline applied to these units.

2-35 With regard to the analysis of increased heater firing rates, page 4-13 of the Draft EIR reads:

> "Although the increase in vacuum residuum feed rate to the Coker will lead to an increase in the annual average firing rate (quantity of fuel burned per year) of the furnaces, the peak daily firing rates (maximum quantity of fuel burned per day) for the three furnaces are not anticipated to increase beyond the maximum allowable daily firing rates achieved in the past (baseline)."

Thus, contrary to the suggestion in the comment that the SCAQMD failed to analyze the potential impacts associated with increased heater firing rates, the Draft EIR did analyze this potential emission source and concluded that the peak daily firing rates for the Coker feed heaters will not exceed the baseline firing rates. Further, when the air quality permit is issued, it is expected that equipment will operate at peak levels, every day if necessary.

The Administrative Draft EIR reflects the project and analysis in the early stages of development. Because the SCAQMD must exercise appropriate oversight authority over the project, it is likely and proper for the project and analysis to be revised from an early draft version of the document to the final version released for public review. Chevron initially anticipated that modifications to the Coker feed heaters might be required as part of the proposed project. However, subsequent to preparation of the internal memorandum referenced, it was determined that no modifications to the Coker feed heaters or to their permits will be needed. As a result, operation of the Coker feed heaters in connection with the proposed project does not result in an emissions increase. For the purposes of the CEQA analysis, emissions from the Coker feed heaters do not exceed the baseline emissions.

2-36 SCAQMD disagrees that the "Draft EIR did not analyze emission increases resulting from additional firing of the heaters." As discussed in the response to comment 2-33, the analysis in the Draft EIR determined that peak daily emissions from the Coker feed heaters will not increase relative to the baseline during operation of the proposed project.

2-37 A CEQA analysis was required and has been prepared for the proposed project. The required analysis is set forth in the Draft EIR. The analysis in the Draft EIR determined that peak daily emissions from the Coker feed heaters will not increase relative to the baseline during operation of the proposed project. The SCAQMD staff disagrees that the peak daily firing rate is irrelevant for purposes of the CEQA analysis, as it establishes the baseline against which project impacts are to be evaluated. In addition, any annual increase will not exceed SCAQMD Regulation XX limits. Further, as substantiated in the air quality analysis in Chapter 4, the proposed project will not cause "no-violation days to become violation days." The firing rate will not exceed maximum daily firing rates on any days, thus, there will be no "violation days" that result from the proposed project. Please refer to response to comment 2-13 for further discussion of the appropriate CEQA baseline.

2-38 The Draft EIR correctly analyzed the potential for an increase relative to the baseline in peak daily emissions from the Coker feed heaters during operation of the proposed project and concluded that peak daily emissions will not exceed the maximum allowable emissions under the facility's permit. Therefore, no further analysis of emissions from the Coker feed heaters is warranted or required.

Because Chevron is not proposing modifications to the Coker feed heaters or revisions to their permits, peak daily emissions will not increase above what is already allowed under the facility's existing permit, and the increases in emissions presented in Table 1 of the comment are not relevant to the evaluation of the significance of air quality impacts from the proposed project.

Additionally, the emission factors listed in footnote 37 to the comments that were used to calculate the emissions in Table 1 of the comment were derived from source tests conducted September 13 and 16, 1991. Results from more recent source tests and further evaluation of the results from the September 13 and 16 source tests indicate that the CO emission factor cited in the footnote of 0.414 lb/MMBtu is not representative of typical operation of the Coker feed heaters. For example, CO emission factors from source tests conducted during September 1993 and November 1994 were 0.116 lb/MMBtu and 0.197 lb/MMBtu, which are less than half of the emission factor from the September 1991 source tests.

The assertion in the comment that a federal permit from the EPA is required under PSD regulations is incorrect for two reasons. First, as stated in the preceding paragraph, Chevron is not proposing modifications to the Coker feed heaters or to operate the feed heaters outside of current permit limits. Therefore, the proposed project does not require any modifications to the permits for the feed heaters.

Second, even if the heaters were to be modified, a federal permit under PSD regulations would not be required, because the PSD regulations only apply to increases in emissions of a pollutant in an area that is classified as attainment or unclassifiable for the pollutant, not to emissions of a pollutant in an area that is classified as nonattainment. Although the SCAQMD has requested that EPA redesignate the South Coast Air Basin to attainment for CO, it is currently designated as nonattainment. Therefore, federal PSD regulations do not apply to a modification that would increase CO emissions in the South Coast Air Basin. As already noted, the proposed project will not increase CO emissions from the Coker feed heaters above existing maximum allowable permit conditions.

2-39 The comment incorrectly adds a calculated increase in average daily PM10 and VOC emissions from the Coker feed heaters to increases in peak daily emissions from Table 4.1-7 of the Draft EIR for comparison with the SCAQMD's CEQA significance threshold for peak daily emissions. As discussed in the response to comment 2-33, peak daily emissions from the Coker feed heaters will not increase above the baseline during operation of the proposed project and, therefore, will not contribute additional emissions to Table 4.1-7 in the Draft EIR. Therefore, the conclusion in the comment that increases in peak daily emissions exceed the CEQA significance thresholds is not correct. CEQA allows an increase in average daily emissions as long as that increase does not exceed the permitted baseline, as in this case.

As previously noted, the proposed project will not generate any NO_x or SO_x emissions from RECLAIM sources, so even if the SCAQMD agreed that emissions in Table 1 represented emission increases from the proposed project,

which it does not, NO_x and SO_x emissions in Table 1 would not exceed any applicable significance thresholds.

2-40 As discussed in the response to comment 2-33, operation of the proposed project will not increase peak daily emissions from the Coker feed heaters. Therefore, emissions from the Coker feed heaters do not contribute to significant adverse air quality impacts. All air quality impacts attributed to the proposed project were disclosed in the Draft EIR. As a result, the commenter has not presented any credible evidence that would require recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5.

2-41 As noted by the commenter, additional cooling water will be required for the Coker during operation of the proposed project. As described on page 2-12 of the Draft EIR, Chevron is proposing modifications to increase the cooling water flow rate through Cooling Tower No. 9 to provide the additional cooling water. Because Chevron is proposing to increase the current capacity of the cooling tower, the potential increase in peak daily emissions from the modified cooling tower were considered a potential impact from the proposed project and, thus, were analyzed in the Draft EIR, as discussed on page 4-14.

Impacts to water supply during operation of the proposed project were evaluated in Section 4.3.2.1 (page 4-59) of the Draft EIR. Operation of the proposed project is anticipated to increase water requirements by approximately 150,000 gallons per day, which will not exceed the SCAQMD's significance threshold of 5,000,000 gallons per day. Therefore, the Draft EIR determined that water supply impacts for the proposed project will not be significant.

See Response 2-69 regarding emissions from electricity demand.

2-42 This comment describes coke drum operations and does not require a response.

2-43 As noted by the commenter, increased emissions from increases in daily coke drum depressurizations were included in the Draft EIR and were based on an increase from 4.8 depressurizations per day to 6 depressurizations per day. Further, results of a source test conducted by the SCAQMD were used to calculate the emissions.

2-44 The SCAQMD staff disagrees that the Draft EIR did not disclose air quality impacts from increases in coke drum depressurization operations during operation of the proposed project. No impacts from the proposed project were omitted in the Draft EIR. Please see the responses to comments 2-45 through 2-48 for further discussion of emissions during coke drum depressurization.

2-45 The source test was conducted at the refinery on January 23, 2003 for rule development purposes, not to determine compliance with emission limitations. However, the results from this source test are the only results available to calculate the potential increase in emissions from the increase in the daily

number of coke drum depressurization operations during operation of the proposed project. The SCAQMD is aware of potential biases in the source test results but does not currently have adequate data or information to assess the extent of the bias. Without additional source test data, an accurate assessment of the source test bias and adjustment of the PM10 and VOC emissions for any bias is not possible. Thus, it would have been speculative to attempt to adjust the results from the source test to correct them for possible biases. Therefore, the source test results provide the only quantitative estimate of emissions that occur during a coke drum depressurization operation and would, therefore, remain the same with or without mentioning the disclaimer. Consequently, the commenter's opinion that the Draft EIR is flawed is without merit.

2-46 As indicated in the comment, a footnote to Table 2 in the source test report indicated that the condensable "organic portion of the SCAQMD Method 5.1 sample meets both the SCAQMD Rule 102 definitions for PM and VOC." Because the condensable organic portion met the definition for VOC, the analysis of emissions during coke drum depressurization in the Draft EIR included these emissions in the calculation of VOC emissions, rather than in the calculation of PM10 emissions. During the permitting process for the proposed modifications to the coke drums, subsequent to release of the Draft EIR, the SCAQMD concluded that the condensable portion of the SCAQMD Method 5.1 sample should be included in the calculation of PM10 emissions. The calculation of the increase in PM10 emissions from the increase in daily coke drum depressurization operations in the Draft EIR has been modified in the Final EIR to reflect this change. This modification does not change the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse PM10 air quality impacts.

Adding the 12.5 pounds per event of condensable emissions to the 1.25 pounds per event of solid PM10 emissions gives a total of 13.75 pounds per event of PM10 emissions. Thus, the peak daily increase in PM10 emissions associated with the increase of 1.2 coke drum depressurization operations per day during operation of the proposed project is 16.5 pounds per day (13.75 pounds per depressurization x 1.2 depressurizations per day).

The total increase in PM10 emissions of 168.6 pounds per day in the comment is not correct, because peak daily emissions from the Coker feed heaters will not increase above permitted levels. The correct value, including an increase of 16.5 pounds per day from coke drum depressurization, is 144.3 pounds per day, which is less than the SCAQMD CEQA significance threshold of 150 pounds per day. Therefore, the conclusion that PM10 emissions during operation of the proposed project in the Draft EIR are not significant does not change, and circulation of a revised EIR is not warranted or required.

Additionally, the analysis of VOC emissions from coke drum depressurization has been modified in the Final EIR from the Draft EIR, because the condensable organic portion of the Method 5.1 source test sample is no longer considered to contribute to VOC emissions. The VOC emissions during a coke drum depressurization operation were reduced from 23.66 pounds per depressurization, as provided on page 4-13 of the Draft EIR, to 11.16 pounds per depressurization, as listed in Table 2 of the January 2003 source test report for gaseous VOC. The increase in peak daily VOC emissions from the increase in coke drum depressurization operations decreased from 28.4 pounds per day, as listed in Table 4.1-7 of the Draft EIR, to 13.4 pounds per day (11.16 pounds per depressurization x 1.2 depressurizations per day).

2-47 Subsequent to release of the Draft EIR for public review and comment, the analyses of PM10 ambient air quality impacts were modified to include the increase in peak daily PM10 emissions from coke drum depressurizations. The modeling analysis was also refined to more accurately reflect the Cooling Tower No. 9 configuration. The modifications to the modeling analysis are contained in Appendix B to the Final EIR. These refinements reduced the impacts from emissions from Cooling Tower No. 9 on ambient PM10 concentrations. The revised maximum increase in 24-hour average PM10 concentration at the refinery boundary is 2.2 $\mu g/m^3$, which is below the CEQA significance threshold of 2.5 $\mu g/m^3$. Therefore, including PM10 emissions from the increased coke drum depressurization operations during operation of the proposed project does not alter the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse localized PM10 air quality impacts.

2-48 The statements in the comment regarding percentage increases are incorrect. First, the increase from 4.8 to 6.0 coke drum depressurization operations per day is a 25 percent increase [(6.0 - 4.8) / 4.8 x 100 = 1.2 / 4.8 x 100 = 25 percent], not a 20 percent increase, as stated in the comment. Second, as discussed in the response to comment 2-32, Chevron clarified subsequent to release of the Draft EIR that the Coker feed capacity will increase by 15 thousand barrels per operating day (MBPOD), from 60 to 75 MBPOD, rather than to 80 MBPOD, as stated in the comment. This increase of 15 MBPOD is an increase of 25 percent of the current capacity (15 / 60 x 100). Thus, the 25 percent increase in daily coke drum depressurization operations is equal to the 25 percent increase in Coker feed capacity. The assertion in the comment that emissions from the source test report should be multiplied by 1.33 is therefore incorrect.

2-49 The source test conducted at the refinery on January 23, 2003 was performed to obtain rule development information. The PM concentration limits in Rule 404(a) do not apply to the coke drum. Therefore, the assertion in the comment that the proposed project will contribute to an existing violation of Rule 404 is incorrect.

2-50 The visual observation of plumes cited in the comment does not provide a basis for determining pollutant concentrations in the released steam or for increasing the emission rates from the source test that were used to calculate emissions from coke drum depressurization. The SCAQMD is not aware of any available source test data or other quantitative information that can be utilized to estimate PM10 or VOC emissions for the period following removal of the tops of the coke drums. The visual observations noted in the District's source test report do not provide an adequate basis for estimating or determining whether the emissions during this period are "significant." As noted in Response 2-45, it would have been speculative to attempt to adjust the results from the source test.

2-51 This comment provides no basis for the opinion that emissions from cooling and decoking could be roughly comparable to emissions from depressurization. The source test itself does not provide any quantitative basis for this opinion. Thus, the assertion that VOC emissions from the coke drums would exceed the SCAQMD's CEQA significance threshold is not based on any quantitative information or data and, therefore, the assertion is based on pure speculation. Speculation provides no basis from which to make a conclusion regarding environmental impacts (see CEQA Guidelines §15145). Therefore, the commenter has provided no credible evidence to support the opinion that there will be a new significant impact that was not disclosed in the Draft EIR.

2-52 Hydrogen sulfide (H_2S) and other reduced sulfur compounds may be produced during the coking process. These compounds are sent from the coke drums to the Coker Main Fractionator column along with the light hydrocarbons that are produced during the coking process. Residual amounts that may remain in the coke drums after the coking process is completed are removed from the coke drums by the stripping stream that is used to remove remaining hydrocarbons from the drums. The stripping steam is directed to vapor recovery equipment and not vented to the atmosphere. Thus, most of the H_2S is removed from the coke drums prior to depressurization, and, therefore, will not generate a significant adverse toxic impact.

As presented in more detail in the response to comment 2-54, even if H_2S were emitted during coke drum depressurization, the emissions will not cause significant adverse non-cancer toxic health impacts and, therefore, will not alter the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse non-cancer toxic health impacts. Additionally, as presented in the response to comment 2-125, H_2S emissions during coke drum depressurization would not cause significant adverse odor impacts and, therefore, will not alter the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse odor impacts.

2-53 As indicated on page 13 of the source test report, a sample was collected to measure sulfur compounds downstream of the particulate matter sampling train.

The concentration of sulfur compounds in this sample was below the laboratory detection limit. The source test report concluded that soluble sulfur compounds, including H_2S, would have been removed in the condensable portion of the particulate matter sample train. As discussed in the response to comment 2-54, the amount of soluble sulfates in the condensable portion of the particulate matter sampling train can be used to estimate an upper limit for the amount of H2S emitted during coke drum depressurization. Although these data can be used to estimate an upper-limit for H_2S emissions, no data are available to adjust the PM10 or VOC emissions for potential biases. Thus, no new H_2S data can be measured and disclosed that would change the conclusion in the Draft EIR.

2-54 The statement in the comment that the increase in H_2S emissions from coke drum depressurization during operation of the proposed project would be greater than 0.25 pounds per day is not correct. First, the calculation of H_2S emission increases noted in footnote 64 is based on the assumption that all soluble sulfate collected in the Method 5 sample during the source test was from H_2S. If other sulfur compounds were present in the sample, the H_2S emissions would be lower than the amount calculated using this assumption. Thus, the use of this assumption leads to a theoretical upper limit on the potential H_2S emissions. Second, the calculation in the footnote multiplies the upper-limit value of 0.19 pound of H_2S per depressurization operation by an increase of 1.33 depressurization operations per day during operation of the proposed project. However, as discussed in the response to comment 2-48, operation of the proposed project will increase the peak daily number of coke drum depressurization operations by 1.2. Thus, the correct theoretical upper limit for the increase in H_2S emissions would be 0.23 pound per day (0.19 pound per depressurizations x 1.2 depressurizations per day).

The comment does not provide any justification for the theoretical assumption that the H_2S concentration would be five percent of the VOC concentration emitted during coke drum depressurization. As discussed in more detail in the response to comment 2-52, most of the H_2S present in the coke drum vapors during the coking process is removed during the steam stripping process, prior to depressurizing the coke drums. Therefore, the potential concentration of H_2S present during depressurization of the coke drums would not be expected to be the same as the concentration present during the coking process.

H_2S is a toxic air contaminant (TAC) than can cause acute and chronic non-cancer health effects. The potential acute and chronic non-cancer health risks from fugitive H_2S emissions from the proposed modifications to the No. 6 H_2S Plant during operation of the proposed project were analyzed in the health risk assessment (HRA) discussed on pages 4-23 through 4-28 of the Draft EIR.

Table 4.1-8 on page 4-22 of the Draft EIR shows that fugitive H_2S emissions from the proposed modifications to the No. 6 H_2S plant were calculated to be 319

pounds per year, which is equivalent to 0.87 pounds per day. Thus, the theoretical upper-limit increase in H_2S emissions from coke drum depressurization of 0.23 pounds per day is 26 percent of the fugitive H_2S emissions from the No. 6 H_2S plant modifications.

Table 4.1-14 on page 4-27 of the Draft EIR shows that the acute hazard index from the H_2S emissions from the No. 6 H_2S plant was calculated to be 0.0657, and that the H_2S emissions accounted for essentially all of the total acute hazard index. If the acute hazard index caused by H_2S emissions from the No. 6 H_2S plant is increased by 26 percent to account for the upper-limit H_2S emissions from coke drum depressurization, the acute hazard index would be 0.0828, which is well below the SCAQMD's acute hazard index significance threshold of 1.0. Additionally, the No. 6 H_2S plant is closer to the refinery boundary than the Coker, so emissions from the coke drum depressurization would disperse more than emissions from the No. 6 H_2S plant before reaching off-site locations. Therefore, H_2S emissions from coke drum depressurization will not cause significant adverse acute health impacts and will not change the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse acute non-cancer health impacts from reduced sulfur compounds.

Table 4.1-15 on page 4-27 of the Draft EIR shows that the chronic hazard index from the H_2S emissions from the No. 6 H_2S plant was calculated to be 0.0109, and that the H_2S emissions accounted for essentially all of the total chronic hazard index. If the chronic hazard index caused by H_2S emissions from the No. 6 H_2S plant is increased by 26 percent to account for the upper-limit H_2S emissions from coke drum depressurization, the chronic hazard index would be 0.0137, which is well below the SCAQMD's chronic hazard index significance threshold of 1.0. Therefore, H_2S emissions from coke drum depressurization will not cause significant adverse chronic non-cancer health impacts and will not change the conclusion in the Draft EIR that operation of the proposed project will not cause significant adverse chronic non-cancer health impacts.

2-55 Both the existing and proposed replacement Coker Wet Gas Compressor are electrically operated. Therefore, the proposed replacement of the compressor will not increase steam requirements.

See Response 2-69 regarding emissions from electricity generation.

See Responses 2-31 through 2-54 with regard to the commenter's opinion of underestimated emissions.

As a result, the comment has not provided any credible information requiring recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5. No new information or change of conclusions made in the Draft EIR have been introduced to require the need to recirculate the Draft EIR.

2-56 The increase in emissions from the proposed modifications to the No. 4 Crude Unit were analyzed in the Draft EIR. As discussed in the following responses, the SCAQMD staff disagrees that there will be additional emissions that were not assessed in the Draft EIR or that mitigation is required for operational emissions from the proposed project since emissions from operation of the proposed project do not exceed any applicable significance thresholds.

2-57 Vacuum residuum production rate and heating rate fluctuation of the crude oil are discussed and disclosed in the Draft EIR. The statements in the comment regarding the increase in the feed capacity of the No. 4 Crude Unit are essentially correct. However, it is important to clarify that the design basis for the proposed modifications to the No. 4 Crude Unit is an increase from 195 thousand barrels per operating day (MBPOD) of a typical current crude slate to 210 MBPOD of a heavier crude slate. The unit may be able to run 230 MBPOD on a crude slate tailored to the modified unit and simultaneously satisfy all product specifications, including sulfur content.

See Response 2-58 regarding increased crude oil heating rate.

2-58 Subsequent to release of the Draft EIR for public review, Chevron clarified that any additional increases in heating requirements from the No. 4 Crude Unit furnaces can be provided within the heaters' current capacity, and Chevron is not proposing modifications to the furnaces or to their permit limits. Therefore, the peak daily firing rates of the No. 4 Crude Unit during operation of the proposed project will not exceed baseline peak daily firing rates, which are the maximum allowable firing rates already allowed by the facility's permit. The Draft EIR has been modified to reflect this clarification. No changes in the Draft EIR analysis or conclusions are required due to this clarification.

2-59 The SCAQMD staff disagrees with the comment that potential increases in emissions from the No. 4 Crude Unit heaters were not analyzed and disclosed in the Draft EIR. The comment quotes notes from an early meeting that occurred in January 2005, more than one year before the release of the Draft EIR for public review in April 2006. The meeting notes correctly highlight potential impact areas that need to be analyzed when more detailed information is obtained. Chevron has conducted extensive detailed calculations and analyses since January 26, 2005, to develop the design for the proposed project. Based on these analyses, Chevron has determined that modifications to the No. 4 Crude Unit feed heaters or their permit limits will not be required.

Potential changes in firing rates of the No. 4 Crude Unit heaters, the Coker heaters, and fired steam boilers were analyzed during preparation of the Draft EIR. These analyses indicated, and the Draft EIR concluded, that peak daily firing rates would not increase above the baseline.

2-60 As discussed in the response to comment 2-58, peak daily fuel use to heat the feed to the No. 4 Crude Unit will not exceed the baseline during operation of the proposed project. Chevron has determined that steam required during operation of the proposed project can be provided within the existing capacity of steam-generating facilities at the refinery. Therefore, Chevron is not proposing modifications to steam-generating facilities or to current permit limits.

2-61 As discussed in the response to comment 2-60, Chevron is not proposing modifications to steam-generating facilities at the refinery or to their permit limits. Daily firing rates in the steam generating facilities that are as high as the peak daily firing rates achieved in the past that will occur during operation of the proposed project are below existing permitted levels. Therefore, peak daily firing rates of steam-generating facilities will not increase above the baseline, and peak daily emissions from steam generating facilities will also not increase above the baseline.

See Response 2-69 regarding emissions from increased electricity requirements.

2-62 The comment is correct that the increase in heavy crude oil processed by the No. 4 Crude Unit will not increase the production of refined products, as disclosed in the Draft EIR.

2-63 The statement in the comment that the proposed project would de-bottleneck the refinery if the current slate or a lighter slate of crude oil were to be processed is incorrect. The refinery's capability to produce finished products is not limited by the capacities of the No. 4 Crude Unit and the Coker. Instead, the capacity to produce finished products is limited by the capacities of the conversion and treating units downstream of the crude units and the Coker. The proposed project does not include modifications to increase the capacities of these downstream units. Because these downstream units have operated and will continue to operate within the permitted capacity, the proposed project will not increase the throughput of these downstream units above baseline levels. Therefore, the proposed project will not potentially increase emissions from every combustion source in the refinery, as stated in the comment. As a result, no conditions have been triggered that require recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5. Therefore, the Draft EIR does not need to be revised and recirculated.

2-64 The implication in the comment that the No. 4 Crude Unit would process 230 MBPOD of crude oil with a sulfur content of 2.59 percent is not correct. As stated in the response to comment 2-57, the No. 4 Crude Unit could potentially run 230 MBPOD on a crude slate tailored to the modified unit and simultaneously satisfy all product specifications, including sulfur content. The existing sulfur-removal capacity of the refinery's hydrotreaters and sulfur recovery units would not be sufficient for the refinery to produce products that meet sulfur content

specifications if 230 MBPOD of crude oil with a sulfur content of 2.59 percent were processed. Therefore, the refinery will not process 230 MBPOD of crude oil with a sulfur content as high as 2.59 percent.

The assertion in the comment that the proposed project will increase firing rates of heaters and boilers that support hydrotreaters and the hydrogen plant is not correct. Please see the response to comment 2-66 regarding increases in hydrotreating requirements. See the response to comment 2-33 regarding firing rates of the Coker heaters and the response to comment 2-58 regarding firing rates of the No. 4 Crude Unit heaters. This comment letter has not provided any information to support the statement that the proposed project directly modifies the No. 5 H_2S Plant. No modifications to the No. 5 H_2S plant are included as part of the proposed project.

2-65 The comment does not specify which information in the District's permitting file "acknowledges that increases will occur." The SCAQMD assumes that the commenter is referring to the statements in the comment regarding increased offgas production by the No. 4 Crude Unit and increased production of other products by the No. 4 Crude Unit and the Coker.

Chevron's response to the information request that is cited in footnote 79 to the comment (First Set of Responses to Additional Information Request for Chevron's Heavy Crude Project, January 2006) stated that:

> "With the design crude slate, the offgas generation in the vacuum column is estimated to increase from about 500 MSCFD to about 900 MSCFD. This is due to the higher cracking tendency of the Napo crude. This is a small increase compared to the capacity of the amine treating facilities downstream. They will not need to be modified to accommodate this increase."

This response to the information request does not suggest that emission increases will occur from processing the increased offgas from the No. 4 Crude Unit vacuum column. It states that processing the increase in offgas to remove H_2S is within the capacity of the amine treatment units, and modifications to the treatment units are not required.

Chevron's response also indicates that naptha and other products produced by the Coker will increase and that they will be processed by downstream hydrotreaters to remove sulfur. The current permitted capacity of the refinery units downstream of the No. 4 Crude Unit and the Coker, including hydrotreaters, is adequate to accommodate the increase in production of naptha and other products from the Coker, and modifications to downstream units or to their permit conditions are not required or proposed.

2-66 It is assumed that the reference to the No. 5 Crude Unit in this comment meant to refer to the No. 4 Crude Unit. The proposed project will increase the daily

average amount of sulfur removed from the Coker and No. 4 Crude Unit products, and this is reflected in the daily average increase of 19 tons per day of elemental sulfur produced by the refinery Sulfur Recovery Units, as indicated on page 4-15 of the Draft EIR. This increase in the amount of sulfur removed by the hydrotreaters can be accommodated within the current capacity and permit limits for the hydrotreaters. Therefore, Chevron is not proposing modifications to the hydrotreaters or changes to their permit limits.

Because the feed to the hydrotreaters from the Coker produces more heat during the hydrotreating process than the feed from the No. 4 Crude Unit, and the heat produced during the hydrotreating process is recovered by heat exchangers and used to heat the feed to the hydrotreaters, the amount of fuel required by the hydrotreater furnaces may decrease; however, no credit for this reduction was assumed in the analysis in the Draft EIR. As a result, the analysis in the Draft EIR identifies all air quality impacts from the proposed project, thus, providing the public and decision makers with more than enough information to evaluate the project.

2-67 The SCAQMD staff disagrees that increased hydrotreating during operation of the proposed project will cause increases in emissions above the baseline. As discussed in the response to comment 2-66, increases in the amount of sulfur to be removed by the hydrotreaters during operation of the proposed project will not require additional electrical power and will not require additional fuel combustion by the hydrotreater furnaces.

Additionally, increases in steam required during operation of the proposed project can be provided within the existing capacity of steam-generating facilities at the refinery. Therefore, Chevron is not proposing modifications to steam-generating facilities or to current permit limits. Daily firing rates in the steam-generating facilities that are as high as the peak daily firing rates that will occur during operation of the proposed project are within existing permit limits. Therefore, peak daily firing rates of steam-generating facilities will not increase above the baseline, and peak daily emissions from steam generating facilities will also not increase above the baseline.

Increases in hydrogen required during operation of the proposed project can be accommodated within the current capacity of the refinery's Hydrogen Plant. Therefore, Chevron is not proposing modifications to the Hydrogen Plant or to its permit limits. Daily hydrogen production that is as high as the peak daily production rates that will occur during operation of the proposed project are within existing permit limits. Therefore, peak daily hydrogen production will not increase above the baseline permitted conditions, and peak daily emissions from the Hydrogen Plant will not increase above the baseline.

Therefore, no significant environmental impact will be generated that needs to be disclosed in the Draft EIR.

2-68 Although additional electrical power may be required during operation of the proposed project, such as those items listed in the comment, the potential increases in electrical power are considered to be within the baseline for the evaluation of the proposed project, as discussed in detail in the response to comment 2-69.

2-69 Equipment used in the proposed project that will require electrical power will obtain electricity from local power generation facilities. All power generating utilities in the district are subject to SCAQMD Regulation XX - RECLAIM, which was originally adopted on October 15, 1993. The RECLAIM program is a cap-and-trade program in which NO_x and SO_x emissions from affected facilities and equipment are capped. Each affected facility received an initial allocation of NO_x and SO_x emissions (that includes non-tradeable credits) and then received declining annual allocations through the year 2003. Prior to adoption of the RECLAIM program, the SCAQMD prepared a CEQA document analyzing the effects of the program, including peak emissions from all affected facilities and equipment for each year of the program. Similarly, when the RECLAIM program was amended in January 2005 to require additional reductions in affected facilities' annual allocation through the year 2011, a CEQA document was prepared that analyzed the effects of the amended program, including peak emissions from affected facilities and equipment. Because the SCAQMD has prepared CEQA documents that analyze emissions from electric power generating facilities that are subject to the RECLAIM program, the SCAQMD has accounted for annual emissions that can occur at these facilities. As a result, peak emissions from electric generating facilities are considered to be the baseline for these facilities. Further, electric generating facilities cannot exceed their annual allocations, without providing offsetting RTCs. Therefore, because NO_x emissions are capped, which means other pollutants would also be capped, and because maximum emissions from electric utilities have been accounted for in previously prepared CEQA documents, the SCAQMD has not required other agencies to calculate indirect power generation emissions since approximately 1999. The SCAQMD has taken this same approach as well since that time. Consequently, the comment that utility emissions will increase is not relevant to the proposed Chevron project.

2-70 The SCAQMD staff disagrees that emissions from increased electrical power generation will cause significant adverse impacts. As discussed in the response to comment 2-69, increases in emissions from power plants caused by increased electrical power requirements during operation of the proposed project are included in the baseline for the proposed project because power generation facilities cannot exceed the emission limitations established by the SCAQMD at

the time the power generation facilities became subject to the RECLAIM program. Further, maximum power plant emissions were previously disclosed in the CEQA documents prepared for the RECLAIM program and the 2005 amendments to the RECLAIM program. Therefore, operation of the proposed project will not increase emissions from electrical power generation above the baseline because the proposed project will not require additional local power generation to be built.

2-71 See Responses 2-13 and 2-23 for a discussion of the appropriate baselines against which to evaluate project emissions. Air permits assume that the project may operate at peak permitted levels every day, so, this baseline assumed by the permit. The annual emissions, where applicable, are calculated in the Draft EIR, however, there are no established thresholds to determine if annual emissions will generate significant impacts. Established mass daily thresholds are the current standard by which peak daily emissions from a project are determined to generate significant adverse impacts.

2-72 The SCAQMD staff strongly disagrees that Draft EIR is legally inadequate. The analysis in the Draft EIR correctly concluded that the maximum daily number of truck trips to export sulfur from the refinery would not increase. Because daily emissions from these truck trips are proportional to the number of truck trips per day, and because operation of the proposed project will not increase the maximum daily number of truck trips, peak daily emissions from sulfur export truck trips will not increase. Therefore, the emissions from these truck trips were not included in Table 4.1-7 of the Draft EIR, because Table 4.1-7 summarizes the peak daily increase in Project operational criteria pollutants.

Although the increase in sulfur export during operation of the proposed project will not increase peak daily criteria pollutant emissions, PM10 emissions from diesel combustion were considered to be diesel exhaust particulate matter (DPM), which is classified as a cancer-causing toxic air contaminant (TAC). Because health risks from cancer-causing TACs occur during long-term exposures, risks from exposures to annual PM10 emissions from the sulfur export trucks were evaluated in the health risk assessment , as presented on pages 4-28 and 4-29 in the Draft EIR. Therefore, the assertion in the comment that the Draft EIR omitted “any analyses covering increased emissions from sulfur trucks” is incorrect.

The statement in the comment that market demand does not affect emission increases is incorrect. Contrary to the assertion that additional sulfur will be “exported contemporaneously,” sulfur is not exported from the refinery at the same rate that it is produced. The amount exported each day is, in fact, influenced by the market demand for the sulfur. This is reflected by the variability in daily sulfur exports. Sulfur is not exported from the refinery some days. On

days that sulfur was exported during 2004 and 2005, the quantity varied from a low of 25 tons per day to a high of 1,502 tons per day.

2-73 The proposed project will not de-bottleneck the Sulfur Recovery Units. As stated on page 4-15 of the Draft EIR, the Sulfur Recovery Units will not operate above their permitted capacity as a result of this project. The Draft EIR correctly evaluated the potential increase in peak daily emissions from sulfur export during operation of the proposed project and concluded that peak daily emissions from sulfur export would not increase above baseline.

Thus, no further new evaluation is warranted in the Draft EIR.

2-74 As discussed in the response to comment 2-73, peak daily sulfur production by the Sulfur Recovery Units will not increase during operation of the proposed project. Therefore, peak daily SO2 emissions from the Sulfur Recovery Units will not increase during operation of the proposed project.

The calculation of a daily average increase of two truck trips per day to export sulfur in the Draft EIR was based on an assumed truck capacity of 10 tons. As noted in the comment, the maximum truck capacity is up to 26 tons. The Draft EIR has been modified to clarify that operation of the proposed project will increase average daily sulfur export truck trips by one truck trip per day, instead of two. This modification does not change any conclusions regarding air quality impacts from operation of the proposed project.

The commenter is not correct in identifying the emissions from one additional truck. The emissions listed in the comment are for two truck trips, rather than for one additional truck, as stated in the comment.

As noted in the Draft EIR, and discussed in detail in Response 2-72, the daily market demand for elemental sulfur is not expected to increase, so no daily change to the maximum daily number of trips to export sulfur is expected. Based on that fact, the SCAQMD staff disagrees that the average daily emissions from the increase in truck trips to export sulfur should be considered in evaluating either individual or cumulative impacts from the proposed project, as discussed in the response to comment 2-72, and therefore disagrees that the Draft EIR is legally inadequate.

2-75 The comment is incorrect that emissions from additional ship calls were not incorporated or evaluated for significance in the Draft EIR. On pages 4-16 through 4-19 in the Draft EIR, the additional ship calls and corresponding emissions are discussed and evaluated. PM10 emissions from diesel combustion by the marine crude oil tanker engines were considered to be DPM, which is classified as a cancer-causing toxic air contaminant (TAC). Because health risks from cancer-causing TACs occur during long-term exposures, risks from exposures to annual PM10 emissions from the additional marine tankers

while berthed at the El Segundo Marine Terminal were evaluated in the health risk assessment, as presented on pages 4-29 and 4-30 in the Draft EIR.

The SCAQMD staff disagrees that faulty reasoning was used to reach the conclusion in the Draft EIR that peak daily emissions from marine crude tankers will not increase during operation of the proposed project, as explained in the following paragraphs.

As presented on page 4-19 of the Draft EIR, the ESMT has two berths and can only accommodate two marine tankers at one time. Currently there are, on some days, two ships hoteling at the ESMT. Because offloading crude oil from each of the additional marine tankers that are anticipated to call at the ESMT to deliver heavy crude oil after implementation of the proposed project will require more than 24 hours, peak daily emissions from marine tanker hoteling will not increase.

Chevron does not schedule more than two ships to arrive at the ESMT per day, because the ESMT only has two berths. As a result, no more than two ships are in transit to the ESMT at the same time. Additionally, Chevron currently schedules crude oil deliveries to avoid the need for ships to wait to moor at the ESMT (queue) for economic and technical reasons. Chevron's crude oil delivery scheduling procedures will not change during operation of the proposed project. As a result, peak daily emissions from crude oil marine tanker cruising and queuing will not increase.

Ship lightering associated with crude oil delivered to the ESMT currently occurs when crude oil is offloaded from Very Large Crude Carriers (VLCCs), which are too large to dock at the ESMT, to smaller vessels that subsequently deliver it to the ESMT. As discussed in Section 2.6.4 of the Draft EIR, Chevron anticipates that the vessels delivering additional heavy crude oil to the ESMT due to the proposed project will be smaller than VLCCs. These smaller tankers can moor at the ESMT, and, therefore, lightering of their crude oil cargoes will not be required. As a result, the proposed project will not increase ship lightering operations. Light crude oil will continue to be imported by VLCCs during operation of the proposed project, and lightering of the cargoes carried by the VLCCs will continue. Although the import of light crude oil by VLCCs is anticipated to decrease during operation of the proposed project as compared to current conditions, the decrease cannot be quantified, and the potential decrease in lightering activities cannot be estimated.

Therefore, based on the discussions in the preceding paragraphs, the Draft EIR correctly concluded that operation of the proposed project will not increase peak daily emissions from marine vessels.

Additionally, subsequent to release of the Draft EIR, Chevron has provided more detailed information on the overall effects of the proposed project, which allows a

more refined analysis of the information contained in the Draft EIR regarding marine vessel emissions. The Draft EIR was based on a worst-case analysis of increases in annual emissions from marine tankers which analyzed only increases in ship calls associated with the increase in imports of heavy crude oil. In fact, the additional ship calls associated with the increase in imports of heavy crude oil will be offset to some extent by a reduction in ship calls associated with the import and export of other materials. In addition to increasing marine crude oil tanker calls at the ESMT, operation of the proposed project will also reduce the quantities of some products that are imported into and exported from the ESMT as explained in the following paragraphs.

The analysis in the Draft EIR assumed that the crude oil marine tankers would have capacities between 350,000 and 500,000 barrels and that 15 additional annual heavy crude oil deliveries would occur during operation of the proposed project. Chevron currently anticipates that the capacities of the crude oil marine tankers will be approximately 700,000 barrels, and that nine additional crude oil marine tanker deliveries will occur during operation of the proposed project.

Currently, a portion of the vacuum residuum produced by the Crude Units is not processed by the Coker but is instead blended with other materials to produce high-sulfur fuel oil (HSFO) or Bunker Fuel. The proposed increase in the Coker capacity will allow Chevron to increase the amount of vacuum residuum that is processed by the Coker and reduce the amounts of HSFO and Bunker Fuel that are produced and exported. This reduction in exports is anticipated to reduce the number of ship calls and barge calls at the ESMT to export HSFO and Bunker Fuel by nine 150,000-barrel capacity ship calls per year and 13 barge calls per year.

Chevron currently imports vacuum gas oil into the refinery by marine tanker through the ESMT for processing in the Fluid Catalytic Cracking Unit. The proposed increase in Coker capacity will increase the amount of vacuum gas oil produced at the refinery, which will reduce the amount that needs to be imported. This reduction in vacuum gas oil imports is anticipated to reduce the number of marine tanker calls at the ESMT by seven 700,000-barrel capacity ship calls per year during operation of the proposed project. Chevron also anticipates that the proposed increase in Coker capacity will lead to excess light gas oil production, which will be exported from the refinery, leading to an increase of seven 150,000-barrel capacity ship calls per year to export light gas oil.

When considering the anticipated changes in ship and barge calls at the ESMT from the entire project, the proposed project is not anticipated to result in an increase in the annual number of ship calls at the ESMT and is anticipated to reduce the annual number of barge calls at the ESMT. As a result, annual marine vessel emissions during operation of the proposed project are expected to be substantially lower than the annual emissions that were presented in the

Draft EIR, which were based solely on a worst-case assumption of an increase of 15 crude oil marine tanker ship calls and did not take into consideration other aspects of the project that eliminated marine vessel trips. Because this revised analysis results in reduced ship calls and associated annual emissions, no conditions requiring recirculation pursuant to CEQA Guidelines §15088.5 have occurred.

2-76 The assertion that the limited number of berths at the El Segundo Marine Terminal (ESMT) only limits daily emissions is not correct.

Peak daily emissions from ships traveling along the California coast to the ESMT (cruising emissions) would only increase if the number of ships in transit along the coast on the same day increased. Chevron does not schedule more than two ships to arrive at the ESMT per day, because the ESMT only has two berths. Therefore, the additional annual ship calls for the proposed project will not increase the maximum number of ships in transit along the California coast to the ESMT on the same day, so peak daily ship cruising emissions will not increase.

Additionally, Chevron currently schedules crude oil deliveries to avoid the need for ships to wait to moor at the ESMT (queue) for economic and technical reasons. Chevron's crude oil delivery scheduling procedures will not change during operation of the proposed project. Therefore, crude oil marine tanker queuing will not increase. Further, Chevron will be requiring new ship trips to reduce their speed 40 miles, instead of 20 miles, from Point Fermin Light, which will reduce transit emissions disclosed in the Draft EIR. See also Response 2-75 regarding revised number of annual ship calls at the ESMT.

2-77 The SCAQMD staff disagrees that increases in annual emissions were not evaluated in the Draft EIR. Annual emissions from the 15 additional ship calls are provided on page 4-18 of the Draft EIR, and updated annual ship call emissions are included in the Final EIR. Furthermore, as discussed in the response to comment 2-75, potential health risks from exposures to annual PM10 emissions from the additional marine tankers while berthed at the El Segundo Marine Terminal were evaluated in the health risk assessment, as presented on pages 4-29 and 4-30 in the Draft EIR.

Thus, annual emissions were evaluated and disclosed, and, thus, the Draft EIR is legally adequate. See also Response 2-75 regarding baseline marine vessel emissions and the revised estimate of the annual number of new marine vessel visits to ESMT.

2-78 As noted in Response 2-33, the proposed project will not require an increase in the permitted capacity of the Coker feed heaters, and, as noted in Response 2-58, the proposed project will not require an increase in the No. 4 Crude Unit furnace capacities. Therefore, increased heat required during operation of the proposed project will not increase above baseline levels. As noted in responses

2-12 and 2-67, operation of the proposed project will not require an increase in the capacity of the refinery steam facilities, and, therefore, increased steam required for operation of the proposed project will not increase above the baseline. Although the proposed project may require additional electricity for some components, electricity usage will not increase above baseline levels. Refer to response 2-69 regarding electricity usage and emissions.

2-79 With regard to the baseline used for the proposed project, refer to Responses 2-13 and 2-23. The annual emissions, where applicable, are calculated in the Draft EIR, however, there are no established thresholds to determine if annual emissions will generate significant impacts. Established mass daily thresholds are the current standard by which peak daily emissions from a project are determined to generate significant adverse impacts.

2-80 The comment describes the process of recovering sulfur from crude oil and converting it to elemental sulfur. No further response is necessary.

2-81 The SCAQMD staff disagrees that the increase in sulfur production and associated emissions were underestimated in the Draft EIR. As stated in the response to comment 2-74, the calculation of a daily average increase of two truck trips per day to export the additional 19 tons per day of sulfur in the Draft EIR was based on an assumed truck capacity of 10 tons. The proper truck capacity is 26 tons. Therefore, the Draft EIR has been modified to clarify that operation of the proposed project will increase average daily sulfur export truck trips by one truck trip per day, instead of two.

2-82 The opinion expressed in the comment that the facility's sulfur production could increase by 116 tons per day is incorrect. First, as discussed in the response to comment 2-64, the existing sulfur-removal capacity of the refinery's hydrotreaters and Sulfur Recovery Units would not be sufficient for the refinery to produce products that meet sulfur content specifications if 230 MBPOD of crude oil with a sulfur content of 2.59 percent were processed, and the refinery will not process 230 MBPOD of crude oil with a sulfur content of 2.59 percent. Therefore, the calculation of an increase of 26 percent in sulfur produced is based on an incorrect assumption regarding the simultaneous increases in the amount crude oil processed by the refinery and in its sulfur content.

Second, the comment also assumes that the amount of elemental sulfur produced by the Sulfur Recovery Units is proportional to the amount of sulfur in the crude oil that is processed by the refinery. This assumption is also incorrect. For example, a portion of the sulfur present in the crude oil is removed in the petroleum coke produced during the coking process and is, therefore, not removed by the Sulfur Recovery Units. Because heavy crude oil produces more petroleum coke per barrel than light crude oil, the proportion of the sulfur in the crude oil that is present in the petroleum coke will increase when more heavy

crude oil is processed, which will decrease the proportion of the sulfur that is ultimately removed in the Sulfur Recovery Units.

As discussed on page 4-15 of the Draft EIR, Chevron has developed a detailed, proprietary mathematical model of the refinery that is used to predict the yields of various products and intermediate streams from the properties of the crude oil and the capabilities of the various process plants in the refinery. This model also predicts the amount of sulfur that will be produced from a given quantity of a particular crude oil. Using this model, Chevron estimated that the proposed project will increase average sulfur production by approximately 19 tons per day, based on the quantities of the various crude oils that are anticipated to be processed. The model is highly accurate and past predictions were within 10 to 20 percent of the past actual outcomes.

2-83 The Administrative Draft EIR reflects the project and analysis in the early stages of development. Because the SCAQMD must exercise appropriate oversight authority over the project, it is likely and proper for the project and analysis to be revised from an early draft version of the document to the final version released for public review. Therefore, subsequent to preparation of the internal memorandum referenced, it was determined that the SO_2 emissions would not exceed baseline emissions. From a permitting perspective, the proposed project does not require a permit modification because emissions from the Sulfur Recovery Units are within the current permitted capacity. As a result, operation of the Sulfur Recovery Units in connection with the proposed project does not result in an emissions increase. For the purposes of the CEQA analysis, emissions from the Sulfur Recovery Units do not exceed the baseline emissions.

2-84 The comment provides no support for the assertion that the Sulfur Recovery Units cannot operate routinely at the increased production levels. Chevron has determined that the Sulfur Recovery Units can operate at the production levels required for the proposed project without modification and has not proposed to modify them or their associated permit limits.

Consistent with current and past SCAQMD policy, air quality impacts from a project are compared to daily significance thresholds because attainment is based on daily exceedances of ambient air quality standards.

Annual impacts were not ignored, as the commenter suggests. The annual emissions during transit and hoteling were calculated and disclosed in the Draft EIR. The annual increase in PM10 emissions from sulfur export trucks was properly evaluated in the health risk assessment, as presented on pages 4-28 and 4-29 of the Draft EIR. Because health risks from cancer-causing TACs occur during long-term exposures, risks from exposures to annual PM10 emissions from the sulfur export trucks were evaluated in the health risk assessment.

Additionally, subsequent to release of the Draft EIR, Chevron has provided more detailed information on the overall effects of the proposed project, which allows a more refined analysis of the information contained in the Draft EIR regarding marine vessel emissions. The Draft EIR was based on a worst-case analysis of increases in annual emissions from marine tankers which analyzed only increases in ship calls associated with the increase in imports of heavy crude oil. In fact, the additional ship calls associated with the increase in imports of heavy crude oil will be offset to some extent by a reduction in ship calls associated with the import and export of other materials. In addition to increasing marine crude oil tanker calls at the ESMT, operation of the proposed project will also reduce the quantities of some products that are imported into and exported from the ESMT. For more details regarding this refined analysis, see Response 2-75.

2-85 SCAQMD staff disagrees that peak daily emissions from truck loading operations will increase. Regarding emissions from loading petroleum coke into trucks, proposed modifications to the petroleum coke truck loading system will reduce particulate matter emissions during truck loading operations, as presented on page 2-13 of the Draft EIR. Regarding emissions from loading sulfur into export trucks, the peak daily number of sulfur export truck trips will not increase during operation of the proposed project, as explained in the response to comments 2-72 and 2-74. Therefore, peak daily PM10 emissions from loading sulfur into export trucks will not increase.

2-86 The statement in the Draft EIR that Chevron will only operate one of the crushers at a time is correct, and the Draft EIR correctly concluded that the installation of a second crusher will not increase emissions from petroleum coke handling, because the petroleum coke throughput is limited by the production capacity of the coke drums, and the capacity of one crusher is adequate to handle the maximum coke drum petroleum coke production rate. The comment that the "District must make this a Project condition" presumably refers to a condition of the air quality permit for the modified coke handling system for enforcement purposes but would not have a bearing on the evaluation of potential air quality impacts in the Draft EIR. However, the second crusher will be listed as "spare" in the SCAQMD permit. Finally, contrary to the implication in the comment, the petroleum coke production capacity is provided on page 2-12 of the Draft EIR.

2-87 The existing flares operate during emergency or upset conditions as a safety device to prevent explosions. Because the frequency with which upsets will occur cannot be predicted, and the refinery process/safety mechanisms are designed to prevent upset conditions, it would be speculative to calculate potential increases in emissions during these activities. SCAQMD Rule 1118 requires flare operators to minimize flare events except in cases of emergency or essential operational needs, so the implication that increases in flaring will occur is incorrect.

SCAQMD staff disagrees with the opinion expressed in the comment that the Draft EIR is "legally inadequate." Further, SCAQMD staff disagrees that connecting relief valves to the flare and the scrubber are not described in the Draft EIR. Page 2-13 of the Draft EIR clearly indicates that the proposed modifications to the Coker include: "Connect new emergency relief pressure valves to the Coker emergency relief system (flare)." Furthermore, the proposed addition of the Relief Caustic Scrubber to the No. 6 H_2S Plant and its connection to the LSFO emergency relief system is described on page 2-15 of the Draft EIR. This description clearly indicates that the proposed Relief Caustic Scrubber would remove H_2S from acid gas before sending it to a relief flare system.

It should be noted that the edit referred to in footnote 112 was made and included in the Draft EIR circulated for public review.

2-88 As stated in the response to comment 2-87, flares operate during emergency or upset conditions. Because the frequency with which emergencies or upsets will occur cannot be predicted, and the refinery processes are continually improved to prevent upset conditions, it would be speculative to calculate potential increases in emissions during these activities. Further, as also noted in Response 2-87, SCAQMD Rule 1118 requires flare operators to minimize flare events except in cases of emergency or essential operational need. Further, Rule 1118 requires flare operators to further minimize flare events to meet declining performance targets that began in 2006.

The commenter found no data indicating the conditions under which the Emergency Caustic Scrubber would not operate, because the Emergency Caustic Scrubber is designed to operate whenever emergency conditions require releasing acid gas from the proposed No. 6 H_2S diethanolamine (DEA) regenerator to the emergency relief system. Additionally, the comment provides no facts to support the speculation that it is likely that the Emergency Caustic Scrubber would "have to be started up to respond to a release." In fact, the Emergency Caustic Scrubber operates whenever the No. 6 H_2S Plant operates. Vessel vent gases and pressure relief valve leakage gases are collected and sent to the Emergency Caustic Scrubber to remove H2S from them during normal operation. Under these normal operating conditions, the flow rate of caustic solution to the scrubber is lower than is required during emergency conditions. When an emergency condition that requires release of the acid gas from the DEA regenerator to the flare occurs, the caustic solution flow rate is increased by the same pressure sensor that is used to detect the emergency condition. Therefore, contrary to the speculation in the comment, the Emergency Caustic Scrubber will operate throughout an emergency and prevent the release of H_2S to the flare.

2-89 As described in the response to comment 2-76, operation of the proposed project will not increase daily emissions during ship queuing. Chevron currently

schedules crude oil deliveries to avoid the need for ships to wait to moor at the ESMT (queue) for economic and technical reasons. Chevron's crude oil delivery scheduling procedures will not change during operation of the proposed project. Therefore, crude oil marine tanker queuing will not increase. Further, the latest speed reduction requirement imposed by Chevron will change the rate at which ships will arrive.

As also discussed in the response to comment 2-76, operation of the proposed project will not increase peak daily emissions from marine tanker or cruising. Therefore, the Draft EIR does not require revision to include these emissions.

See also Response 2-75 updates to the marine vessel analysis that shows the number of marine vessel trips will be less than originally estimated.

2-90 Chevron sells the petroleum coke exported from the refinery to a third party at the Port of Los Angeles and has no direct or indirect control over the subsequent disposition or use of the petroleum coke after it delivered to the third party. Although the petroleum coke may be exported from the Port by marine vessels, it may also be exported by rail or other transportation modes. It is not possible to predict how long it will be stored, how it will be handled in the Port, how it will be exported, or when it will be exported. Thus, it would be speculative to attempt to evaluate what impacts, if any, would occur after the petroleum coke is delivered to the third party. Furthermore, such impacts would have been evaluated and accounted for during the permitting of the third party facility to which the petroleum coke is delivered. Therefore, the SCAQMD staff disagrees that potential impacts that occur after the petroleum coke is delivered to the third party at the Port of Los Angeles need to be evaluated in the Draft EIR for the Chevron project.

2-91 The SCAQMD staff disagrees with the opinion expressed in the comment that emission sources were underestimated or omitted from the analysis of the increase in peak daily operational emissions in the Draft EIR. As discussed below, the emissions in Table 4 in the comment are not correct.

First, the analysis of potential emissions from the Coker feed heaters in the Draft EIR correctly concluded that peak daily emissions from the feed heaters will not increase above the baseline during operation of the proposed project. See Response 2-33.

Second, as discussed in the response to comment 2-46, the increase in peak daily VOC and PM10 emissions from coke drum depressurization have been modified in the Final EIR to include the condensable portion of the sample collected during the SCAQMD's January 2003 source test in the PM10 emissions, instead of in the VOC emissions, during coke drum depressurization. This modification reduces the calculated increase in operational VOC emissions from coke drum depressurization and increases the PM10 emissions. The

commenter's estimation is similar to the value calculated by the SCAQMD. However, as shown below in Table 4.1-7, the revised total increase in operational PM10 emissions is below the SCAQMD's peak daily CEQA significance threshold and, therefore, would not be considered a significant impact. The change in PM10 emissions from the Draft EIR is 15 pounds per day, which is a less than significant change to warrant the need to recirculate the Draft EIR.

Third, as discussed in detail in the response to comment 2-69, the proposed project will not require additional generating capacity to be built. Therefore, the potential increases in electrical power are considered to be within the baseline for the evaluation of the proposed project.

Fourth, as discussed in the response to comment 2-72, the analysis in the Draft EIR correctly concluded that the maximum daily number of truck trips to export sulfur from the refinery would not increase. Because daily emissions from these truck trips are proportional to the number of truck trips per day, and because operation of the proposed project will not increase the maximum daily number of truck trips, peak daily emissions from sulfur export truck trips will not increase.

Fifth, as discussed in the response to comment 2-76, operation of the proposed project will not increase peak daily emissions from marine tanker cruising, because Chevron schedules crude oil shipments to the ESMT to avoid having more than two crude oil marine tankers in transit along the California coast at the same time. The commenter is attempting to average annual ship emissions, which is not a realistic approach and is misleading in determining peak daily emissions. Also, as indicated in Response 2-75, the annual increase in marine vessel trips resulting from the proposed project will be less than originally included in the Draft EIR.

Sixth, the Draft EIR correctly concluded that operation of the proposed project will not increase peak daily emissions from ships hoteling while moored at the ESMT, because the ESMT only has two berths and both berths have been occupied for more than 24 hours in the past. Thus, there are no new additional daily hoteling emissions that would exceed the peak daily hoteling emissions currently occurring at the berth. Furthermore comment 2-76 acknowledges that "the two-berth argument … applies to hoteling emissions…" Thus, listing of hoteling emissions in Table 4 of comment 2-91 is incorrect and misleading.

Additionally, subsequent to release of the Draft EIR for public review, Chevron determined that the net change in fugitive VOC emissions resulting from the proposed replacement of a Depropanizer as part of the proposed modifications to the Coker were not included in the calculations of fugitive VOC emissions in the Draft EIR. The proposed replacement of the Depropanizer is identified on page 2-12 of the Draft EIR. The decreases in fugitive VOC emissions that will result from the removal of existing components and the increases that will result from

the installation of new components for the proposed replacement of the Depropanizer have been calculated to result in a net decrease in peak daily VOC emissions of -5.3 pounds per day, which is included in the Final EIR.

Table 4.1-7 in the Final EIR, which is reproduced below, shows the revised increases and decreases in peak daily criteria pollutant emissions during operation of the proposed project. The table shows that increases in peak daily operational emissions will be less than the SCAQMD's CEQA significance levels. Therefore, the assertion in the comment that new significant impacts were not disclosed in the Draft EIR is not correct, and mitigation of operational emissions is not warranted or required.

Table 4.1-7
Peak Daily Project Operational Criteria Pollutant Emissions Summary

Source	CO (lb/day)	VOC (lb/day)	NO_X (lb/day)	SO_X (lb/day)	PM10 (lb/day)
Direct Emissions					
No. 4 Crude Unit Fugitive VOC	--	0.9	--	--	--
Coker Fugitive VOC	--	10.9	--	--	--
Depropanizer Fugitive VOC	--	-5.3	--	--	--
No. 6 H_2S Plant Fugitive VOC		4.4			
Coke Drum Depressurization	--	13.4			16.5
Cooling Tower No. 9 PM10	--	--	--	--	126.4
Total Direct Emissions	**0.0 NR**	**24.3 NR**	**0.0 R**	**0.0 R**	**142.9 NR**
Total Subject to RECLAIM			**0.0**	**0.0**	
Indirect Emissions					
Petroleum Coke Export Trucks	4.7	1.1	31.1	0.3	1.4
Total Indirect Emissions	**4.7 NR**	**1.1 NR**	**31.1 NR**	**0.3 NR**	**1.4 NR**
Significance Determination					
Non-RECLAIM Pollutants					
Total Not Subject to RECLAIM	**4.7**	**25.3**	**31.1**	**0.3**	**144.3**
CEQA Significance Level	*550*	*55*	*75*	*150*	*150*
Significant? (Yes/No)	No	No	No	No	No
RECLAIM Pollutants					
Total Subject to RECLAIM			**0.0**	**0.0**	
Maximum Allowable Increase[a]			*12,077*	*3,458*	
Significant? (Yes/No)			No	No	

Note: Totals may not match sums of individual values due to rounding
NR = Non-RECLAIM pollutant; R = RECLAIM Pollutant
[a] From Table 4.1-2 of Final EIR
Source: Table 4.1-7 of Final EIR

2-92 The significance threshold for the potential applicability of the federal Prevention of Significant Deterioration (PSD) regulations is not a CEQA significance

threshold. Therefore, an evaluation of whether or not a PSD significance threshold would be exceeded is not warranted or required in an EIR.

The significance threshold for a net increase in H_2S emissions under the federal PSD regulations is 10 tons per year (40 CFR § 51.166(b)(23)(i)). Table 4.1-8 on page 4-22 in the Draft EIR shows that the increase in operational H_2S emissions from the proposed project was calculated to be 319 pounds per year, which is equal to 0.16 ton per year. This annual emission rate is well below the PSD threshold for a significant net increase. This emission increase does not include H_2S emissions from coke drum depressurization, because H_2S emissions from coke drum depressurization were not quantified during the SCAQMD's January 2003 source test at the refinery. However, as discussed in the response to comment 2-54, an upper limit for the increase in H_2S emissions from coke drum depressurization is 0.23 pound per day, which is equal to 0.04 ton per year. If this additional 0.04 ton per year H2S emission increase were added to the 0.16 ton per year emissions increase from the Draft EIR, the result of 0.2 ton per year is also well below the PSD significance threshold of 10 tons per year. Therefore, the assertion in the comment that it is likely that the increase in H_2S emissions from the proposed project would exceed the PSD significance threshold is clearly incorrect.

2-93 Significant air quality construction emissions have been identified and summarized in Table 4.1-5 in the Draft EIR. The Draft EIR also contains several feasible mitigation measures to minimize the potentially significant adverse air quality impacts during construction of the proposed project. Table 4.1-17 describes the mitigation measures, the emission sources and pollutants they mitigate, along with the control efficiency. Table 4.1-18 provides the construction emissions after mitigation. Therefore, the commenter is incorrect in stating the District failed to mitigate construction impacts.

The portion of this comment relating to operational air quality impacts is also incorrect. The project will not result in significant adverse operational air quality impacts, as is discussed in the Draft EIR and in responses to previous comments. Table 4.1-7 in the Draft EIR and the revised emissions in the table in the response to comment 2-91 shows that peak daily criteria pollutant emissions during operation of the proposed project will be less than the SCAQMD CEQA significance thresholds.

Detailed responses to individual comments follow.

2-94 An EIR shall describe feasible measures which could minimize significant adverse impacts. It should be noted that mitigation measures that are feasible for one individual project are not necessarily feasible for all projects. There are several factors, including, but not limited to, time period, proportionality, legal ability, and economics that define the feasibility of mitigation measures.

2-95 Mitigation measure AQ-2 has been modified to require construction equipment engines, regardless of engine horsepower rating, to meet a minimum of Tier 2 California Emission Standards for Off-Road Compression Ignition Engines to the extent that construction equipment with engines that meet these emission standards are available within the southern California area for use for the needed construction equipment for the proposed project. Construction equipment engines will be required to meet Tier 1 California standards if equipment with engines that meet Tier 2 standards are not available or to be equipped with a certified catalyzed diesel particulate filter if engines that meet Tier 1 standards are not available (as currently required in mitigation measure AQ-3). This will make the mitigation measure more stringent. The commenter does not provide any information to support the assertion that the mitigation measure is unenforceable. The SCAQMD routinely enforces mitigation measures imposed on projects utilizing our existing compliance workforce.

2-96 See Response 2-95 regarding the requirement for construction equipment engines to meet Tier 2 emission standards.

2-97 Mitigation measures must be feasible. The measure(s) must be "…capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA Guidelines § 15364)

AQ-3 requires construction equipment that does not meet Tier 2 or Tier 1 emission standards will be required to install diesel particulate filters (DPF) unless the assignment is less than ten days. Therefore, unless the non-Tier 2, non-Tier 1 engine already has a DPF installed, the operator of the construction equipment would need to install the DPF. There is a cost and time associated with the purchase and installation of the DPF. Thus, the feasibility of complying with AQ-3 is determined based on the cost and time that specific construction equipment is needed and operated. By design, construction equipment that will be on-site for short periods of time will be required to be available during very specific construction phases. Delays and costs associated with requiring equipment that will be on-site for less than ten days to meet Tier 2 or Tier 1 emission standards are not proportional with the impacts. Therefore, requiring construction equipment that will be on-site for ten days or less to meet Tier 2 or Tier 1 emission standards is not feasible.

It is important to understand the effectiveness of mitigation measures to determine both feasibility and applicability. The reliance on the California Air Resources Board and U.S. Environmental Protection Agency for certification of soot filters is a justified method of determining feasibility. It is uncertain if non-certified devices would achieve the emission reductions claimed, and, for the EIR analysis, no actual mitigation (emission reduction) would be assumed. It is not appropriate for an EIR to speculate on or take credit for potential reductions.

Mitigation Measure AQ-3 in the Draft EIR has been modified in the Final EIR to remove the requirement that the DPF required by the mitigation measure be catalyzed. Therefore, a non-catalyzed diesel particulate filter, such as Lubrizol's Engine Control Systems Unikat Combifilter, which is the only active DPF verified by CARB, would meet the requirements of the mitigation measure.

It should be noted that the range of DPFs verified by CARB or EPA is relatively limited for off-road applications for the following reasons. Unlike on-road mobile sources, off-road equipment have variable duty cycles, which results in cooler exhaust temperatures. Cooler exhaust temperatures reduce the effectiveness of the DPFs. Further, also unlike on-road equipment, off-road equipment is generally comprised of two-stroke engines, which operate at cooler temperatures, again reducing the effectiveness of DPFs. As a result, verified passive DPFs are not widely available. However, to the extent they are available, they will be required.

Additionally, as stated on page 4-7 of the Draft EIR, diesel fuel used in construction equipment will contain no more than 15 parts-per-million (ppm) sulfur, as required by SCAQMD Rule 431.2 – Sulfur Content of Liquid Fuels. The PuriNOx diesel fuel to be used during construction of the proposed project will be produced using diesel fuel containing no more than 15 ppm sulfur. Therefore, soot filters that require the use of diesel fuel with no more than 15 ppm sulfur, such as the diesel filter manufactured by Caterpillar and verified by the United States Environmental Protection Agency, could be used during construction of the proposed project.

Therefore, the modification of Mitigation Measure AQ-3 eliminates the concern that no diesel particulate filters will be used.

2-98 Please see Response 2-97 with regard to diesel particulate filters.

2-99 Please see Response 2-97 with regard to diesel particulate filters.

2-100 Please see Response 2-97 with regard to diesel particulate filters.

2-101 The SCAQMD staff disagrees that use of diesel particulate filters that have not been certified should be required as discussed in the response to comment 2-97.

2-102 Contrary to the commenter's opinion, Mitigation Measure AQ-7 in the Draft EIR does require retrofit technologies to be applied if they are commercially available and can feasibly be retrofitted onto the construction equipment. The Mitigation Monitoring Plan (MMP) for the project requires Chevron to submit a report produced by a qualified professional describing the feasibility analyses to the SCAQMD for review and approval.

The examples of retrofit technologies to be evaluated in the mitigation measure were not intended to be the only technologies that are to be evaluated and applied if they are found to be feasible. It should be noted that the examples in

the mitigation measure include diesel oxidation catalysts, which are the subject of comments 2-103 and 2-104, and selective catalytic reduction, which is the subject of comment 2-105.

2-103 Please see Response 2-102 with regard to mitigation measures. It should be noted that Mitigation Measure AQ-7 identifies diesel oxidation catalysts as a technology that will be required if commercially feasible.

2-104 Please see Response 2-102 with regard to mitigation measures.

2-105 Please see Response 2-102 with regard to mitigation measures. It should be noted that Mitigation Measure AQ-7 identifies SCR as a technology that will be required if commercially feasible.

2-106 Please see Response 2-102 with regard to mitigation measures. Lean NO_x catalysts have not been verified for off-road applications in part because of the high oxygen content of diesel fuel, which reduces the combustion temperature in order to convert NO_x to nitrogen. Further, there is a small fuel penalty because small amounts of fuel are used in the catalytic reaction.

2-107 Please see Response 2-102 with regard to mitigation measures. Exhaust gas recirculation is generally more applicable to new equipment rather than as a retrofit package. Retrofit packages are generally not commercially available for off-road applications, and it is necessary to ensure that particulate matter and carbon particles are controlled because these can damage the cylinders.

2-108 As discussed above in response to comment 2-94, mitigation measures must meet the requirements of CEQA. While the items listed in this comment, individually or collectively, may have been applicable and appropriate to certain individual projects in California, that alone does not determine their feasibility for this specific project. The feasible mitigation measures to minimize adverse air quality impacts during construction of this project have been identified in the EIR and developed based on the specifics of the proposed project. Alternative fuels, for example, may not be feasible if the fuel is not available or the equipment powered by the alternative fuel is not available for the construction activity.

Regarding delivery and dump truck idling, the project will comply with state law that prohibits idling for more than five minutes (see Mitigation Measure AQ-5). Idling for less than five minutes could result in higher start-up emissions. The SCAQMD does not encourage the use of emission reduction credits as CEQA mitigation because they are not widely available for some pollutants, can be very costly, and are necessary for stationary source programs. The mitigation monitoring plan will require documentation demonstrating that engines are properly tuned (see Mitigation Measure AQ-4).

2-109 Availability and feasibility are realistic obstacles for a construction project to face. If not available or feasible, then the mitigation will not occur regardless.

Requiring alternative mitigation will be more effective than requiring mitigation that may not be available or feasible. While the comment does not identify specific mitigation measures, it is assumed to reference those measures identified to minimize air quality impacts during construction. The SCAQMD staff disagrees that these mitigation measures are unenforceable. Consistent with CEQA Guidelines §15097, a MMP to monitor project compliance with the mitigation measures adopted as conditions of approval for the proposed project has been prepared. Contrary to the commenter's opinion that the mitigation measures "fail to identify any supervision and/or independent control of the construction activities," the MMP requires Chevron to submit reports to the SCAQMD staff that document the activities undertaken to comply with the requirements in the mitigation measures. The SCAQMD staff will review these reports to ensure that Chevron complies with those requirements. Because the MMP specifies the activities that will be required to enforce implementation of the mitigation measures, the SCAQMD staff disagrees that the mitigation measures require revision to be enforceable.

2-110 Many of the items listed in this comment have already been included in the mitigation measures for air quality construction impacts in the Draft EIR. From this comment it is assumed the commenter believes the emission reduction approach from a 1999 California Energy Commission (CEC) decision to be a good example of construction-related mitigation measures. Of significance is the structure of the measure where the CEC recognizes the dynamics of heavy industrial construction and has based the measure on "suitability". This is consistent with the mitigation measures contained in the Draft EIR which incorporate "feasible", "available" and "practical" for very similar measures. The example provided in this comment supports the mitigation measures contained in the Draft EIR.

Contrary to the implication of the comment, the EIR does not leave the determination of "feasibility" solely to Chevron. Rather, the determination of feasibility will be made by the SCAQMD staff. Further, SCAQMD staff is qualified to judge the appropriateness of any determination regarding the feasibility of control equipment for off-road applications.

2-111 The SCAQMD staff disagrees that similar language must be included in the mitigation measures for the proposed project. The CEC's decision for the Three Mountain Power Plant Project was issued in May 2001. The language in CEC decisions for more recent power plant licensing cases is different than the language in the 2001 decision for the Three Mountain Power Plant Project. For example, more recent decisions no longer require evaluation of suitability of the use of DPFs by a California Licensed Mechanical Engineer. Specifically, the requirements in Mitigation Measures AQ-2 and AQ-3 regarding construction equipment engine certification standards and the use of DPFs in the Draft EIR

are almost identical to the requirements in the February 2005 CEC Decision for the El Segundo Power Redevelopment Project, which is located in the City of El Segundo, just west of the refinery.

This and other similar comments in this letter have been reviewed in detail and there is no basis to recirculate the Draft EIR for public comment.

Refer to Response 2-110 regarding determination of feasibility.

2-112 As noted in the comment, no significant impacts are anticipated for the operation of the proposed project (see Table 4.1-7 from the Final EIR in the response to comment 2-91 for criteria pollutant emissions and Table 4.1-10 for health risks). As also noted in the comment, the use of Best Available Control Technology (BACT) is required by SCAQMD Regulation XIII – New Source Review for modified sources (see Table 2-3 in the Draft EIR). However, the purpose of an EIR is to evaluate potential impacts to the environment and to identify measures to mitigate significant adverse impacts. However, impacts associated with control technologies are included in the analysis in the EIR. For additional specific information see Responses 2-113 through 2-121.

2-113 The SCAQMD disagrees with the opinion expressed in the document that the Draft EIR is deficient because it did not describe BACT from coke drum depressurization. As presented in the response to comment 2-91, emissions during increased coke drum depressurization operations will not cause significant adverse impacts individually or when added to emissions from other components of the proposed project. Therefore, mitigation of these emissions is neither warranted nor required. BACT for emissions from coke drum depressurization is currently being evaluated by the SCAQMD staff as part of the permitting process for the proposed project. It was not known at the time of the release of the Draft EIR whether BACT for coke drum depressurization would be required or what the BACT would be since no known BACT has been previously required for coke drum depressurization. Thus, evaluating potential impacts from an unknown BACT in the Draft EIR would have been speculative.

However, subsequent to release of the Draft EIR for public review and comment, SCAQMD staff and Chevron further evaluated controls that could potentially be used to comply with a determination that BACT is applicable to emissions from coke drum depressurization. The specific control device has not yet been determined. However, Chevron currently anticipates that the control device will reduce the pressure in the coke drums when they are vented to the atmosphere from the current pressure of approximately five pounds per square inch gauge (psig) to a lower pressure. Reducing the pressure when the coke drums are vented to the atmosphere will reduce the mass of air that is vented, which will reduce emissions. Potential impacts during construction and operation of the emission control device are evaluated in the Final EIR. For the purpose of

analyzing the potential impacts during construction and operation of the emission control device, Chevron anticipates that the worst-case impacts would result from constructing and operating a system consisting of two new steam ejectors, one new heat exchanger and one new vessel.

The construction and installation of the control technology for the coke drum depressurization will not take place during the peak construction period determined in the Draft EIR. The construction of the proposed coke drum depressurization control device will occur between December 2007 and March 2008, after the month with the peak daily construction emissions (October 2007) and, thus, the emissions from its construction do not contribute to the peak daily emissions. As shown in the updated Table 4.1-4b, the maximum daily construction emissions that will occur between December 2007 and March 2008 are determined to be not significant and will not create a new peak daily monthly construction emissions. Therefore, the potential impacts associated with peak daily construction emissions in the Draft EIR would not change or worsen as a result of the construction and installation of the control technology for the coke drum depressurization. Source tests to measure emissions after the control device is installed are needed to determine the reduction in emissions. Therefore, the reduction in emissions during operation of the proposed project has not been evaluated.

2-114 As noted in the comment, Chevron has stated that the use of filter type controls would not be viable to control emissions from coke drum depressurization, because the exhaust from the depressurization is more than 99 percent steam at a temperature above 250 degrees Fahrenheit (see page 15 of the SCAQMD's source test report). In contrast, temperatures in the petroleum coke truck loading system, which is the subject of the quotation regarding the use of a baghouse in a humid environment, are close to ambient, and substantial condensation of water vapor in the baghouse is not expected to occur. Therefore, the conclusion that a baghouse is feasible for controlling emissions from petroleum coke export truck loading does not mean that filter type controls would be feasible for controlling emissions from coke drum depressurization.

2-115 See Response 2-113 regarding BACT for emissions from coke drum depressurization and evaluation of potential impacts. The revised analysis in the Final EIR has included impacts from the BACT.

2-116 As stated in Response 2-112, operation of the proposed project will not cause significant adverse air quality impacts. Therefore, mitigation measures for increased emissions from coke drum depressurization are not warranted or required.

See Response 2-113 regarding BACT for emissions from coke drum depressurization and evaluation of potential impacts. The revised analysis in the

Final EIR has included impacts from the BACT.

Furthermore, the increase in VOC emissions from increased coke drum depressurization is unrelated to the Coker relief system and Coker pressure relief devices. However, the Coker pressure relief valves are for emergency use only. BACT for emergency pressure relief valves is connection to a closed system, and the Coker Emergency Relief System satisfies this requirement.

See also Responses 2-87 and 2-88 regarding operation of the flares.

2-117 As summarized in the response to comment 2-91, operation of the proposed project will not increase peak daily emissions from fired sources above currently permitted levels and will not cause significant adverse air quality impacts. Therefore, mitigation measures for emissions from fired sources are not warranted or required.

2-118 As noted in Response 2-117, operational emissions will not increase peak daily emissions, so installation of oxidation catalysts is not required and will not produce SO_x to SO_3 conversion as stated in the comment.

2-119 Many existing refinery units currently employ selective catalytic reduction (SCR) to reduce NO_x emissions. The proposed project will not require increased firing of heaters and boilers beyond the existing baseline levels, so installation of additional SCR systems is not necessary or required as part of the proposed project. Consequently, additional ammonia slip and other potential related impacts will not occur as part of the proposed project. See additional information in responses to comments 2-120 and 2-121.

2-120 As discussed in the response to comment 2-119, no additional ammonia slip will occur as a result of the proposed project. Therefore the Draft EIR does not need to be revised to evaluate impacts from secondary PM10 and PM2.5 from ammonia slip.

2-121 The proposed project will not result in additional ammonia demand. Transportation, storage, and transfer will remain within the baseline levels at the refinery; therefore these items do not require further assessment or mitigation in a revised Draft EIR. Furthermore, Chevron produces ammonia on-site, so transportation of ammonia on public roadways is not required.

2-122 As noted in the comment, the maximum off-site H_2S concentrations modeled in the Draft EIR are below the odor threshold of 0.0081 ppm. As discussed in more detail in the responses to comments 2-123 through 2-125, the SCAQMD staff disagrees with the opinion expressed in the comment that nuisance odor impacts were underestimated.

2-123 The proposed project would be considered to cause adverse odor impacts if it creates an odor nuisance pursuant to SCAQMD Rule 402 (see Draft EIR Table 4.1-1). Rule 402 states that: “A person shall not discharge from any source

whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." Thus, adverse odor impacts would occur if operation of the proposed project causes nuisance or annoyance to a considerable number of people. Since the proposed project is yet to be constructed and operated, an odor threshold needs to be used to estimate potential odor nuisance from the proposed project.

As presented on page 4-31 of the Draft EIR, the H_2S odor threshold used to evaluate the potential significance of odor impacts is the threshold provided by the California Office of Environmental Health Hazard Assessment (OEHHA). OEHHA based this odor threshold of 0.0081 ppm on the results from the study conducted by John Amoore for the California Air Resources Board that is cited in footnote 149 to this comment. Based on a review of 26 studies, Amoore reported that the average odor detection threshold ranged from 0.00007 to 1.4 ppm, with a geometric mean of these studies of 0.008 ppm. Additionally, as stated in this comment, the study by Amoore also concluded that "an unpleasant odor is at or above the threshold of annoyance for half the people, when its concentration reaches five times the average threshold of detection," and, therefore, the threshold of odor annoyance for H_2S is about 0.04 ppm. Thus, comparison of the maximum modeled one-hour average off-site H2S concentration with the average odor detection threshold, instead of with a value five times the average threshold, was a more conservative evaluation of the potential for operation of the proposed project to cause nuisance or annoyance.

The detectable thresholds cited in the comment from the studies in Japan and the Netherlands are reported in the paper cited in footnote 150 to this comment as "the barely perceptible concentration level." Thus, they do not represent average thresholds of detection. As described in the previous paragraph, Amoore concluded that the threshold of annoyance is about five times the average threshold of detection, rather than five times the barely perceptible concentration.

Additionally, the World Health Organization (WHO) findings cited in the comment that "a level of 0.008 mg/m3 (0.005 ppm) averaged over 30 min should not produce odor nuisance in most situations" does not mean that higher concentrations would necessarily cause a nuisance. Furthermore, the WHO report does not amplify on the meaning of nuisance. In particular, the report does not define nuisance in terms of the percentage of the population that would be annoyed or not annoyed. Therefore, there is no basis to conclude that the findings from the WHO should have been the basis for evaluating potential odor impacts from operation of the proposed project.

Based on these considerations, the SCAQMD staff disagrees that the threshold used to evaluate potential adverse odor impacts during operation of the proposed project was incorrect and that significant adverse odor impacts will occur.

2-124 The comment does not provide any information to support the speculation that the odor threshold would be exceeded if the potential off-site H_2S concentrations from the proposed project were added to background concentrations.

2-125 As discussed in Response 2-54, a theoretical upper limit for the increase in H_2S emissions from coke drum depressurization would be 0.23 pound per day. Table 4.1-8 of the Draft EIR shows that all of the H_2S emissions evaluated in the Draft EIR were from the proposed modifications to the No. 6 H_2S plant, which were calculated to be 319 pounds per year, or 0.87 pound per day. Thus, the upper-limit H_2S emissions from coke drum depressurization are approximately 26 percent of the emissions from the No. 6 H_2S Plant. If the maximum modeled one-hour average off-site H_2S concentration of 0.002 ppm were increased by 26 percent to account for the upper-limit H_2S emissions from coke drum depressurization, the resulting concentration would be 0.0025 ppm (0.002 ppm x 1.26), which is still well below the H_2S odor threshold of 0.0081 ppm. Additionally, the No. 6 H_2S plant is closer to the refinery boundary than the Coker, so emissions from the coke drum depressurization would disperse more than emissions from the No. 6 H_2S plant before reaching off-site locations. Therefore, H_2S emissions from increased coke drum depressurization operations will not cause or contribute to significant adverse odor impacts.

2-126 The SCAQMD staff disagrees that the H_2S impact from the proposed project is a significant impact and will cause a nuisance. As discussed in detail in the response to comment 2-123, operation of the proposed project will not create an odor nuisance pursuant to SCAQMD Rule 402. The requirements of SCAQMD Rule 402 are the same as the requirements of California Health and Safety Code § 41700. Therefore, the proposed project will comply with the requirements of California Health and Safety Code § 41700.

2-127 The SCAQMD has established the CEQA significance thresholds to evaluate and determine the potential significance of air quality impacts from proposed projects. Peak daily VOC and NO_x emissions that are below the respective significance thresholds are presumed not to contribute or worsen existing adverse ozone air quality impacts. Peak daily VOC and NO_x emissions during construction of the proposed project were properly quantified and are anticipated to exceed the respective significance thresholds. Further, all feasible mitigation measures have been imposed to reduce those emissions. As summarized in the response to comment 2-91, VOC and NO_x emissions associated with operation of the proposed project will not exceed the applicable SCAQMD CEQA significance thresholds. Furthermore, as stated on page 4-19 of the Draft EIR, Chevron will be required to provide offsets for the increases in direct VOC emissions in

accordance with SCAQMD rules. Pursuant to SCAQMD Rule 1303, the VOC offset ratio is 1.2:1, or 1.2 pounds of VOC emissions must be offset for every pound of VOC emission increase, which provides a net emission reduction benefit. Therefore, VOC and NO_x emissions during operation of the proposed project will not cause significant adverse air quality impacts to ozone.

2-128 The SCAQMD is aware of the atmospheric photochemical reactions that produce ozone and the health impacts of ozone, especially on sensitive receptors such as children, the elderly, and people with respiratory ailments. This comment does not raise any issues with the analysis of environmental impacts in the Draft EIR and only provides information on the health effects of ozone. The SCAQMD staff understands the health impacts of ozone exposure and has developed the 2003 AQMP and is working on developing a 2007 AQMP to reduce emissions of ozone precursor pollutants (i.e., NO_x and VOCs) and achieve state and federal ambient air quality standards.

2-129 Please see Response 2-128 with regard to public health.

2-130 Please see Response 2-128 with regard to public health.

2-131 The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations. In 2002, the district exceeded the federal and state standards for ozone at most monitoring locations on one or more days. However, the commentator is not correct that ozone standards were exceeded on 32 and 81 days at most stations. See response to comment 1-127 regarding why the proposed project will not hinder efforts to comply with state and federal ozone standards. Because operation of the proposed project will not cause significant adverse air quality impacts, the SCAQMD staff disagrees that the Draft EIR must be revised to mitigate operational impacts that were determined to be not significant. The Draft EIR already analyzes and discloses impacts to the public and public health. A revised Draft EIR is not warranted or required.

See Response 2-134 regarding cumulative impacts.

2-132 The commenter is incorrect that the Draft EIR failed to consider other sources of air pollution that will contribute to the cumulative emissions of the Project. Thus, a revised Draft EIR is not warranted or required. The following discussion of cumulative impacts can be found in the Draft EIR and is provided below for the reader's edification.

Chapter 6.0 of the Draft EIR is devoted entirely to a discussion of cumulative impacts. The Draft EIR evaluated two types of projects that have the potential to contribute to cumulative impacts with the proposed project: i) other projects occurring at the Chevron refinery during the same period as the proposed project (identified in Section 6.2.1); and ii) proposed projects near the Chevron refinery (listed in Table 6.2-1).

With respect to construction impacts, the cumulative impact analysis assumed that peak daily construction emissions from installation of a tank dome (one of the two identified projects occurring at the Chevron refinery), and peak daily construction emissions for the Plaza El Segundo project (the project listed in Table 6.2-1 which is closest to the Chevron refinery), would occur on the same day as peak daily construction emissions from the proposed project. The ESMT lease renewal project (the second of the two identified projects occurring at the Chevron refinery) was evaluated and determined not to result in construction emissions. Construction emissions from other projects listed in Table 6.2-1 were not considered either because construction will not overlap with the proposed project, the project is too distant from the proposed project to result in cumulative impacts, or emissions data are not available for the other projects and their emissions are speculative. The analysis concluded that there would be significant cumulative impacts related to emissions of CO, VOC, NO_x and PM10. It should be noted that inclusion of other projects listed in Table 6.2-1 in the analysis would not have affected the outcome of the analysis since significant cumulative impacts were identified for all pollutants except for SO_x based solely on the projects that were analyzed. Emissions of SO_x are well below the significance thresholds and this finding would not be expected to change based on inclusion of additional projects. Since the Draft EIR had previously identified significant construction impacts related to emissions CO, VOC, NO_x and PM10 from the project alone, and had identified all feasible mitigation measures for such impacts, the cumulative impacts analysis did not identify any additional feasible mitigation measures, and concludes that emissions of CO, VOC, NO_x and PM10 will result in significant unavoidable cumulative impacts.

With respect to operational impacts, the installation of tank domes at the Chevron refinery is not expected to result in increased operational emissions (to the contrary, emissions will be reduced). Of the other projects identified, operational emissions data were available only for the Plaza El Segundo project. Again, the cumulative impacts analysis indicated that significant cumulative impacts would result from emissions of CO, VOC, NO_x and PM10 and that cumulative emissions of SO_x were well below the significance threshold. Therefore, including emissions from other projects, had the data been available, would not have affected the outcome of the analysis.

Finally, with respect to emissions of toxic air contaminants ("TACs"), as described in Sections 4.1.4 and 4.1.5 of the Draft EIR, TAC emissions associated with the proposed project will not cause significant adverse impacts. Installation of domes on storage tanks at the refinery will reduce VOC emissions, including emissions of any TACs from the storage tanks and therefore, would not create significant cumulative impacts in combination with the proposed project. Further, although air contaminant emissions from operation of the other identified project listed in Table 6.2-1 are not available, those projects are not expected to

generate long-term toxic air contaminant emissions from operations, because they are primarily commercial development projects, are not warehouse or distribution center projects that would result in substantial diesel truck traffic, and are not expected to include significant sources of TAC emissions. Therefore, the proposed project will not create cumulatively significant toxic air pollutant impacts during operations.

The cumulative impacts analysis contained in the Draft EIR, and summarized above, is more than adequate to satisfy the requirements of CEQA.

2-133 As described in Section 6.3.1.2 of the Draft EIR, although operational emissions from the proposed project alone do not exceed any applicable project-specific significance criteria, considered together with other identified projects, cumulative peak daily operational emissions do exceed the significance thresholds for CO, VOC, NO_x and PM10. Thus, the Draft EIR properly concludes that the proposed project will contribute to cumulatively significant criteria pollutant impacts during operations. However, as further described in Section 6.3.1.2 of the Draft EIR, the cumulative significance determination is primarily based on the Plaza El Segundo project, which, by itself, exceeds the significance thresholds for CO, VOC, NO_x and PM10. Therefore, as further described below, although the proposed project's operational emissions may be cumulatively significant, they are not considered cumulatively considerable, and therefore do not require mitigation. In order to reduce cumulative impacts to less than significant, mitigation would have to be imposed upon the other project, which is not within the discretionary authority of the SCAQMD.

The CEQA guidelines provide guidance for the cumulative impact analysis. CEQA Guidelines §15064(h)(4) states "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Further, CEQA Guidelines §15064(h)(3) states the following:

> "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

A previously approved plan does exist that "will avoid or substantially lessen the cumulative problem."

As described in the Draft EIR, Appendix A - Initial Study, the proposed project will comply with the Air Quality Management Plan (AQMP). The AQMP identifies control measures necessary to reduce the cumulative air quality problem in the South Coast Air Basin and lead the Basin into compliance with the state and federal ambient air quality standards. The 2003 AQMP has been adopted by the SCAQMD and the California Air Resources Board. As further described in the Draft EIR under Appendix A, the proposed project will comply with all applicable air quality rules such as relevant source-specific rules for existing equipment (SCAQMD Regulation XI source specific rules); all relevant prohibitory rules (SCAQMD Regulation IV rules); and all rules governing installation of new, modified, or relocated equipment (SCAQMD Regulation XIII new source review and XX RECLAIM rules). Thus, the proposed project is not expected to diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutants. Therefore, because the proposed project complies with the AQMP, and contributes only relatively small operational air quality impacts, its incremental contribution to a cumulative operational impact is not considered cumulatively considerable.

Additionally, the commenter appears to imply that any emissions of nonattainment pollutants in a nonattainment area necessarily create a significant cumulative impact. The court's opinion in *Kings County Farm Bureau v. City of Hanford*, 221 Cal App. 3d 692 (1990) does not expressly announce such a rule. The court's decision states:

> "The point is not that, in terms of ozone levels, the proposed Hanford project will result in the ultimate collapse of the environment into which it will be placed. The significance of an activity depends upon the setting. (Guidelines, §15064. Subd.(b).) The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project when compared with pre-existing emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin." (*Id*. at p. 718, emphasis added.)

The court did not hold that, in all nonattaniment areas throughout California, the approval of a project with any emissions of ozone precursors will per se cause a significant cumulative impact. Rather, the court simply directed the respondent agency, in preparing a new EIR to address the question of whether any such emissions "should be considered significant." In some situations, an agency might reasonably conclude, without prejudicially abusing its discretion, that more than very tiny amounts of emissions in a nonattainment area are required before air quality impacts rises to the level of being "individually limited but cumulatively

considerable." (Remy et al., *Guide to the California Environmental Quality Act* (1999), p. 477). As such, CO, VOC, NO_x, and PM10 emissions resulting from the operation of the proposed project of 5, 46, 31, and 129 pounds per day, respectively, contribute only relatively small air quality impacts, and therefore, do not rise to the level of being "cumulatively considerable."

2-134 See Responses 2-132 and 2-133 with regard to the cumulative analysis.

2-135 See Responses 2-132 and 2-133 with regard to the cumulative analysis.

2-136 See Response 2-132 with regard to the cumulative analysis. As stated above, the Draft EIR analyzed the projects most likely to have the greatest potential to generate cumulative impacts in connection with the proposed project.

2-137 See Response 2-136 and Chapter 6.0 of the Draft EIR with regard to the cumulative analysis.

2-138 See Response 2-136 and Chapter 6.0 of the Draft EIR with regard to the cumulative analysis.

The SCAQMD strongly disagrees with the opinion expressed in the comment that the cumulative impacts analysis is "completely defective," that the SCAQMD failed to consider other regional projects, that the SCAQMD failed to consider mitigation of cumulative impacts and that the Draft EIR must be recirculated for public review.

2-139 This comment is a general summary of other comments which have been specifically responded to elsewhere. As specifically set forth in previous responses, the SCAQMD disagrees with the opinion expressed in the comment that the Draft EIR fails to meet the requirements of CEQA and must be revised and recirculated.

2-140 See Responses 2-2, 2-4 and 2-4.

2-141 See Response 2-11.

2-142 See Response 2-12.

2-143 See Response 2-31.

2-144 See Response 2-32.

2-145 See Response 2-33.

2-146 See Response 2-34.

2-147 See Response 2-35.

2-148 See Responses 2-13, 2-36 and 2-37.

2-149 See Response 2-38.

2-150 See Response 2-38.

2-151 See Response 2-39.

2-152 See Response 2-40.

2-153 See Response 2-41.

2-154 See Response 2-42.

2-155 See Response 2-43.

2-156 See Response 2-43.

2-157 See Response 2-44.

2-158 See Response 2-45.

2-159 See Response 2-46.

2-160 See Response 2-47.

2-161 See Response 2-48.

2-162 See Response 2-49.

2-163 See Response 2-50.

2-164 See Response 2-51.

2-165 See Response 2-52.

2-166 See Response 2-53.

2-167 See Response 2-54.

2-168 See Response 2-55.

2-169 See Response 2-56.

2-170 See Response 2-57.

2-171 See Response 2-58.

2-172 See Response 2-59.

2-173 See Response 2-60.

2-174 See Response 2-61.

2-175 See Response 2-62.

2-176 See Response 2-63.

2-177 See Response 2-64.

2-178 See Response 2-65.

2-179 See Response 2-66.

2-180 See Response 2-67.

2-181 See Response 2-68.

2-182 See Response 2-69.

2-183 See Responses 2-13, 2-20, 2-21 and 2-71.

2-184 See Response 2-71.

2-185 See Response 2-72.

2-186 See Response 2-73.

2-187 See Response 2-74.

2-188 Consideration of peak daily criteria pollutant emissions from sulfur export trucks is inconsistent with calculation of annual PM10 emissions required for the HRA.

2-189 See Response 2-75.

2-190 See Response 2-76.

2-191 See Response 2-77.

2-192 See Response 2-78.

2-193 See Response 2-79.

2-194 See Response 2-80.

2-195 See Response 2-81.

2-196 See Response 2-82.

2-197 See Response 2-83.

2-198 See Response 2-84.

2-199 See Response 2-85.

2-200 See Response 2-86.

2-201 See Response 2-87.

2-202 See Response 2-88.

2-203 See Response 2-89.

2-204 See Response 2-89.

2-205 See Response 2-90.

2-206 See Response 2-91.

2-207 See Response 2-92.

2-208 See Responses 2-132 and 2-133.

2-209 See Response 2-94.

2-210 See Response 2-95.

2-211 See Response 2-95.

2-212 See Response 2-96.

2-213 See Response 2-97.

2-214 See Response 2-98.

2-215 See Response 2-99.

2-216 See Response 2-100.

2-217 See Response 2-101.

2-218 See Response 2-102.

2-219 See Response 2-103.

2-220 See Response 2-104.

2-221 See Response 2-105.

2-222 See Response 2-106.

2-223 See Response 2-107.

2-224 See Response 2-108.

2-225 See Response 2-109.

2-226 See Response 2-110.

2-227 See Response 2-111.

2-228 See Response 2-112.

2-229 See Response 2-113.

2-230 See Response 2-114.

2-231 See Response 2-115.

2-232 See Response 2-116.

2-233 See Response 2-116.

2-234 See Response 2-117.

2-235 See Response 2-118.

2-236 See Response 2-119.

2-237 See Response 2-120.

2-238 See Response 2-121.

2-239 See Response 2-122.

2-240 See Response 2-123.

2-241 See Response 2-124.

2-242 See Response 2-125.

2-243 See Response 2-126.

2-244 See Response 2-127.

2-245 See Response 2-128.

2-246 See Response 2-129.

2-247 See Response 2-130.

2-248 See Response 2-131.