Office of the Executive Officer
Barry R. Wallerstein, D.Env.
909.396.2100, fax 909.396.3340

FAXED July 21, 2006

July 21, 2006

Dr. Ralph G. Appy
Director of Environmental Management
The Port of Los Angeles
425 South Palos Verdes Street
San Pedro, California 90741

Re: Draft Environmental Impact Report for the Chevron Products Company - El Segundo Refinery Heavy Crude Project

Dear Dr. Appy:

The South Coast Air Quality Management District (SCAQMD) received your comment letter regarding the above referenced project. Thank you for reviewing and providing comments on the Draft Environmental Impact Report for the Chevron Products Company - El Segundo Refinery Heavy Crude Project. A copy of your comment letter received on June 13, 2006, and responses to the comments are enclosed. The Final EIR for this project, which will include your comment letter and SCAQMD responses, will be provided separately at a later date. If you have any questions or need other information on the environmental analysis for this project, please call Dr. Steve Smith on my staff at (909) 396-3054.

Sincerely,

Barry R. Wallerstein, D.Env.
Executive Officer

EC:LT:SN:SS:MK

Attachment

June 13, 2006

Barry Wallerstein, D. Env.
Executive Director
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Chevron Products Company- El Segundo Refinery Heavy Crude Project EIR

Dear Dr. Wallerstein,

We have reviewed the Draft Environmental Impact Report (EIR) for the Chevron Products Company- El Segundo Refinery Heavy Crude Project. The project proposes to maintain or increase the current fuel products production levels. The project will allow the refinery to process more heavy-crude oil than currently processed. While we do not have any comments on the refinery operations analysis, we would like to comment primarily on what the document terms "indirect" emission sources: ocean going vessels and truck trips. The South Coast AQMD has been an active participant in the Port of Los Angeles's efforts to reduce emissions, especially from ocean-going vessels and trucks, and has lobbied for greater control of these emission sources. We are surprised that such oversight is not also being applied to this project. Please accept the following comments on the Draft EIR

3-1

Chapter 2. Project Description:

1. Ship Operations (Page 2.16): There is no mention of ship lightering in the ship operations description. Ship operations include the offloading of product from "mega-ships" that cannot enter the Santa Monica Bay to smaller ships that transport the product to the refinery. Will this process be eliminated when crude from South America becomes the dominant raw product at the refinery and how, if at all, will eliminating this process affect the environment? Will the ship size differ between the ships used to lighter product, and the ships used to transport South American crude product?

3-2

Chapter 3. Environmental Setting:

1. Current Data: Page 3.2: Table 3.1-1 presents 1939-1978 data; more current data should be presented. Likewise, table 3.1-3 should also be updated with more recent data

3-3

2. Baseline Emissions (Page 3.14-15): Table 3.1-6 presents the refinery emissions over the July 2004- June 2005 period. Do these emissions include ship and truck emissions? We

3-4

3-4 Cont. also assume that these emissions represent the baseline emissions used in the Air Quality section.

Chapter 4. Air Quality:

1. Construction Mitigation Measures (Page 4.31-32): In regards to the following mitigation measure:

3-5 *All construction equipment diesel engines that have a rating of 100 hp or more shall meet, at a minimum, the Tier 1 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations.*

This measure should be strengthened to, at minimum, Tier 2 standards to further reduce emissions.

2. Indirect Operational Criteria Pollutant Emissions: The analysis treats ship and truck trips as indirect operational emissions. Labeling these emissions as indirect implies that the emissions are not essential to the operation. Ship and truck trip emissions are direct emissions as they are directly tied to the refinery's operation and should be treated as direct emission sources. As the document describes, the project's goal is to maintain or increase production while switching from light to heavy crude oil. For the same amount of product output, the refinery will require greater volumes of heavy crude oil than 3-6 current levels of light crude oil. Those greater volumes will be transported to the refinery by ship. Additional by-products will be generated by using the heavy crude oil in the refinery process and therefore, additional truck trips will be necessary to transport the coke by-product to the Ports. These ship and truck trips are a direct result of the proposed project. If the Port were to take the same line of reasoning as presented in this EIR regarding ship and truck trips related to Port operations, the following emission source would also be treated as indirect sources in our terminal project EIRs: container, bulk, and cruise ships; truck trips; and on-dock, near-dock, and off-dock rail trips.

3. Baseline data/Indirect emissions: The analysis does not present any baseline emissions data for the "indirect emissions". For ship and truck trips, the document only presents emissions from new sources (i.e. there will be 20 additional truck calls a day so the analysis just presented the emissions from 20 truck trips) and then compared these new emissions to the thresholds. As stated above, these emissions are directly tied to the 3-7 refinery's operation and therefore should be analyzed in a more traditional Project-baseline scenario. The document should present any baseline (July 2004-June 2005) emissions from ship and truck trips (on an annual and daily basis) and add these emissions to the baseline refinery emissions. The analysis should then calculate all annual and daily project emissions during the project's life span, including all ship and truck trips not just new trips. These project emissions should then be compared to baseline emissions to determine significance.

3-8 4. Daily emissions. The analysis presents the annual ship emissions attributed to the 15 additional ship calls a year. However, these emissions are not included in the Project

emissions because, as the document describes, the thresholds are daily thresholds and although there will be an increase in annual ship calls, daily ship calls will stay the same for the following reasons:

- *The ESMT has two berths and can only accommodate two marine tankers at one time*
- *No more than two of these smaller marine tankers can call at the ESMT during a 24-hour period, and*
- *Both berths have been occupied at the same time in the past by vessels that are larger and that generate more emissions per ship call than these marine tankers.*

3-8 Cont.

Based on the reasons above, the daily emissions will stay the same. While daily emissions may stay the same, annual emissions will increase and these increased emissions are not fully disclosed. Without full disclosure on baseline ship emissions (discussed above) or information on how ship calls may increase in the future, the reader is not presented with enough information to determine the full impacts of the project. The analysis should, in the least, present total baseline (July 2004- June 2005) ship emissions (transit plus berthing), and projected annual ship emissions (all ship calls, transit plus berthing) over the life of the project. This type of analysis would present a much more clear synopsis of impacts. Again, if the Port were to use the same line of reasoning (i.e. daily thresholds), many of our terminal expansion projects would also not show significant emissions. Most terminal expansion projects do not result in greater amount of daily ship calls because the terminal's berth space does not expand. If we were only to present daily emissions, emissions would not be significant and mitigation would not be required even though annual ship calls (an emissions) may increase.

3-9

5. Due to the way ship and truck trips were analyzed, neither sources resulted in significant impacts and therefore, there are no mitigation measures applied to these sources. We disagree with the conclusion that these sources would not result in significant impacts. The document also does not find these emission sources to contribute to cumulative impacts. However, the document does discuss the MATES II analysis, a study that showed a substantial cumulative risk in the entire air basin. The following statement is taken from the MATES II report:

3-10

> "*The carcinogenic risk in the Basin is about 1,400 per million people*. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributor" (MATES II 2000*)

3-11

We are surprised that AQMD found no cumulatively significant impacts and further, did not use the cumulative section to apply mitigation measures to the Project's mobile sources, ships and trucks.

A number of recent local, state, and federal studies, including AQMD reports, have found ships to be one of the biggest contributors to background risk in the south coast air basin and one of the hardest sources to regulate due to legal authority issues (most

3-12

vessels are foreign flagged and therefore, not regulated under US laws). In fact, as part of its Clean Air Initiatives, AQMD has stated:

> *"Part of the reason for the ports' No. 1 air pollution ranking is the fact that some of its largest sources are virtually unregulated. Current regulations require only a 6 percent reduction of nitrogen oxide emissions from ocean-going ship engines, the largest source of port air pollution. That is in contrast to adopted regulations requiring 97 percent and 98 percent reductions respectively for off-road engines and on-road heavy-duty truck engines" (AQMD 2005)*

3-12 Cont.

In response to the above statement, Ports have worked to apply mitigation within their CEQA documents, which become enforceable lease provisions. These efforts will reduce ship emissions where federal and state efforts cannot. Again, in response to MATES II findings that show health risks from diesel particulates in the entire South Coast Air Basin and critical work being done on the Goods Movement Sector, by not imposing mitigation measures, AQMD is missing an opportunity to further reduce emissions from ships. AQMD, in a letter CARB on their Goods Movement Plan, urged CARB to include stronger mitigation measures in relation to ships including increasing the Vessel Speed Reduction Program (VSRP) distance from 20 miles to 40 mile, because "direct emissions to that distance and beyond are transported by the sea breeze onshore to impact coastal areas within the SCAQMD and residential areas of Ventura County" (AQMD 2006). The letter goes on to support emission control measures not just through regulation, but also through direct leases and permits. AQMD has an opportunity to apply mitigation and control strategies to, by AQMD's own account, one of the largest sources of unregulated emissions in the air basin, through this Project's permitting process. Ships traveling/hotelling in the Santa Monica Bay contribute to the basin wide emissions just as ships traveling/hotelling the San Pedro Bay.

Additionally, as reported previously by AQMD, the Ports have an existing air quality problem and any Project truck trips destined for the Ports should be by clean trucks. These trucks should, in the least, meet 2007 EPA engine standards.

3-13

The Port, in conjunction with AQMD and CARB, has developed a comprehensive list of potential mitigation measures to address ocean going vessel and truck emissions. A number of such measures, including the Vessel Speed Reduction Program (VSRP), low sulfur fuel for both auxiliary and main ship engines, and the use of trucks meeting the 2007 EPA standards, would be applicable to this project. Such measures have been found feasible and are being implemented at the Port of Los Angeles. AQMD should apply such measure to any project it permits.

HRA:

3-14

1. Indirect Emission: Because the HRA uses the emissions values from the air quality analysis for trucks and ships, the HRA is not representative. Additionally, the analysis only accounts for ship emissions while at berth. Transit emissions are not really discussed

3-14 Cont. and there is no explanation (i.e. sensitivity analysis) to show why the transit emissions would not contribute to health risk.

Traffic

3-15 1. Truck Trip: The analysis did not look at impacts to traffic on the 405 south of the Rosecrans Ave. ramp despite the fact that the truck trips would all be going to the Port.

3-16 2. Employee Trip Distribution: Pg. 4-75. The analysis does not discuss how the employee trip distribution was determined.

Conclusion:

3-17 This Draft EIR does not adequately describe all project impacts and therefore is not a full disclosure document in the true spirit of CEQA. For example, the analysis found that the increased ship traffic would not trip the daily thresholds and therefore, no mitigation was required. Ships were not dealt with from a cumulative perspective and no information was given on how the annual emissions might change. It seems like the actual refinery's operation was analyzed fully but that "indirect operations" (ships & trucks) were treated separately and not fully analyzed.

Thank you for considering these comments and the opportunity to review this project. If you have any questions, please feel free to contact me at (310) 732-3675.

Sincerely,

RALPH G. APPY, Ph.D.
Director of Environmental Management

3-1 SCAQMD staff believes that appropriate oversight and consistent agency policy are being applied to the Chevron - El Segundo Refinery Heavy Crude Project, as discussed in the following responses to these comments. With regard to what constitutes indirect emission sources, refer to response to comment 3-6.

3-2 Ship lightering was not discussed in the description of crude tanker operations in Section 4.1.3.2 of the Draft EIR because ship lightering operations are not expected to increase during operation of the proposed project. Ship lightering associated with crude oil delivered to the El Segundo Marine Terminal (ESMT) 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 and have capacities between 350,000 and 500,000 barrels. 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. The description of crude oil tanker operations will be revised in the Final EIR to include a discussion that ship lightering will not increase, but will decrease by some unquantifiable amount.

3-3 The data in Table 3.1-1 in the Draft EIR are long-term (40 year) means of monthly minimum and maximum temperatures and monthly precipitation at Los Angeles International Airport. The purpose of these data is to illustrate typical monthly variations in temperature and precipitation in the vicinity of the proposed project. The inclusion of more recent data in Table 3.1-1 would not change the general conclusions regarding these monthly variations. Furthermore, the data presented in Table 3.1-1 were not used in the analyses of potential impacts from the proposed project in the Draft EIR. Instead, the air quality modeling analyses to determine criteria pollutant health risks and impacts to ambient PM10 air quality that are described in Sections 4.1.5 and 4.1.6 in the Draft EIR used meteorological data sets which have been developed by the SCAQMD for air toxics health risk assessments and ambient air quality impacts modeling.

Therefore, revising Table 3.1-1 to include more recent data would not alter any of the conclusions in the Draft EIR regarding potential adverse air quality impacts.

The air quality data for 2001 through 2004 in Table 3.1-3 are the most current data that were available when the Notice of Preparation (NOP)/Initial Study (IS) for the proposed project was released, on September 29, 2005. The date of release of the NOP/IS established the date for the environmental baseline for the analysis of the proposed project. Additionally, quality assurance and review of air quality data for 2005 have not yet been completed. Therefore, the air quality data in Table 3.1-3 remain the most recent air quality data available.

3-4 The commentator's assumption that the emissions in Table 3.1-6 in the Draft EIR represent the baseline emissions used in the Air Quality section is not correct. The purpose and intent of Table 3.1-6 in the Draft EIR is to list the total stationary source emissions at the Refinery (during July 2004 - June 2005) to provide an "existing setting" at the Refinery, and does not include emissions from offsite mobile source associated with refinery activities, such as ship and truck emissions. The emissions listed in Table 3.1-6 are not classified as the project baseline because this table includes emissions from sources that are not affected by the proposed project. With regard to baseline and calculating impacts, please refer to Response 3-7.

3-5 Mitigation measure AQ-2 will be modified to require construction equipment engines ~~with a rating of 100 hp or more~~ 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).

3-6 Because ships and trucks are not directly involved in refining crude oil, the Draft EIR classifies emissions from ships and trucks during operation of the proposed project as indirect emissions. This classification is consistent with the approach the SCAQMD takes for CEQA evaluations of other permit projects where the SCAQMD is the lead agency. Because the SCAQMD's discretionary actions for these projects are approvals of permits for new or modified stationary sources, emissions from the new or modified stationary sources are considered direct emissions, and emissions from other sources, such as mobile sources, are considered indirect emissions. Further, the primary purpose of the activities at refineries is the refining and further processing of crude oil to produce motor fuels and other petroleum products. Therefore, the SCAQMD considers it appropriate to classify activities that are not directly related to the permitted sources of

emissions for production of petroleum products by refineries as indirect activities. However, this classification does not imply that indirect emissions are not essential to the proposed project and not fully evaluated in the EIR. Daily emission increases from all sources that are part of the proposed project, including indirect and direct emissions, are added together and then compared to CEQA significance thresholds, as shown in Table 4.1-7 of the Draft EIR.

SCAQMD staff recognizes that the Port as a CEQA lead agency considers emissions from ships, trucks and rail activities related to proposed projects at the Port as direct emissions, because the primary purpose of activities at the Port is the import, export and movement of goods. The Port as a CEQA lead agency has a certain amount of discretion to label emissions sources in a manner that is logical for port operations. The important point is that the CEQA lead agency is obligated to disclose all environmental impacts, including air quality, from projects that it is lead agency over. In the case of the Chevron project, the SCAQMD has fulfilled its role as a CEQA lead agency by disclosing impacts from all components of the proposed project, both direct and indirect.

3-7 Potential impacts from additional truck trips and marine vessel trips were analyzed properly and the analysis is consistent with all applicable CEQA requirements. The approach to analyzing these impacts suggested in the comment would provide the same results as the approach used in the Draft EIR. It is assumed that the comment suggests that the increase in peak daily emissions should be calculated as the difference between the peak daily emissions from these sources with the proposed project and the peak daily emissions from these sources without the proposed project. The approach used in the Draft EIR calculates the increase in emissions directly from the increase in truck trips and ship trips. Emission increases from the entire project are then compared to the applicable significance thresholds. To summarize, the emission increases from the proposed project (direct and indirect) were analyzed in the Draft EIR. Thus, using the approach suggested in the comment would not change the conclusions regarding potential impacts that are presented in the Draft EIR. As a result, the SCAQMD has fulfilled its role as a CEQA lead agency to disclose all air quality impacts resulting from the proposed project. With respect to annual emissions, refer to the response to comment 3-10.

3-8 The Draft EIR prepared for the proposed project is consistent with all applicable CEQA requirements and provides more than enough information for the reader to determine the full impacts of the project. As stated in the comment, although annual ship emissions would increase, the additional crude oil marine tanker calls to import heavy crude oil to the ESMT for the proposed project will not increase peak daily emissions. The commentator's suggestion that the annual emissions are not fully disclosed is not true because the calculated increase in annual hoteling emissions from the 15 additional heavy crude oil ship calls is

provided on page 4-18 of the Draft EIR, total annual transit and hoteling emissions from heavy crude oil tankers and tugboats are provided in Table 23-F of Attachment B.2 in Appendix B of the Draft EIR, and the calculations of these marine tanker emissions are discussed on pages 4-16 through 4-18 of the Draft EIR. The calculations are described in more detail on pages B-17 through B-21 of Appendix B to the Draft EIR. The assumption that the project would result in 15 additional ship calls results in a worst-case analysis based exclusively on the projected increase in throughput of heavy crude oil. Since the release of the Draft EIR, the project proponent has provided more information on the overall effects of the proposed project on existing marine vessel trips, which indicates that the additional ship calls associated with the increase in throughput of heavy crude oil will be offset by a reduction in ship calls associated with the import and export of other materials. To ensure that the Draft EIR presented a worst-case analysis, however, no attempt was made to "take credit" for any reductions in ship calls that will result as a consequence of the project. Taking into consideration elimination of marine vessels reduces marine vessel emissions by almost 98 percent compared to what was reported in the Draft EIR. The commentator is referred to Response 3-10 for additional information on revised marine vessel emissions from the proposed project.

3-9 Potential impacts from additional marine vessel trips were analyzed properly. SCAQMD policy for analyzing impacts relies on determining what the baseline for a project is. SCAQMD policy for establishing the project baseline is based on, and consistent with CEQA case law (*Fairview Neighbors v. County of Ventura* (2nd Dist. 1999) 70 Cal. App. 4th 238 [82 Cal. Rptr. 2d. 436]). Further, the SCAQMD has adopted CEQA significance thresholds for increases in mass emissions of criteria pollutants that are based on increases in peak daily emissions. As stated in comment 3-7, the additional crude tanker calls to import heavy crude oil to the ESMT for the proposed project will not increase peak daily emissions. Therefore, the increased marine tanker calls for the proposed project will not cause adverse air quality daily mass emission impacts.

The worst-case increase in annual emissions from the additional ship calls was calculated and presented properly in the Draft EIR. The approach of using the incremental number of annual ship calls during operation of the proposed project to calculate the increase in annual emissions as analyzed in the Draft EIR provides the same result as subtracting total annual emissions from all ship calls after implementation of the proposed project from total annual emissions before implementation of the proposed project. With regard to annual ship emissions, refer to response to comment 3-10.

3-10 The determination of the significance of potential impacts on air quality from increases in marine vessel and truck trips associated with the proposed project was based on the significance thresholds that have been adopted by the

SCAQMD through a public process. The evaluation concluded that increases in peak daily emissions from the increased marine vessel and truck trips during operation of the proposed project would not cause the established daily significance thresholds to be exceeded. Therefore, the Draft EIR concluded correctly that the new marine vessel and truck trips due to the proposed project would not cause significant adverse air quality impacts for criteria pollutants, and, therefore, that mitigation measures were not required.

In response to the comment from the Port, Chevron has ~~conducted~~ 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. As stated in the response to comment 3-8, the Draft EIR was based on a worst-case analysis 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.

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 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 ship calls per year during operation of the proposed project.

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 (see Table 1), 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.

Table 1

Cargo/Capacity (1000 barrels)	Change in Annual Ship Calls at the ESMT	Change in Annual NO_x Emissions (lb/yr)	Revised NO_x Emissions[a] (lb/yr)
Imported Heavy Crude Oil / 700	+9[b]	60,402	58,732
Exported HSFO and Bunker Fuel / 150	-9	-39,126	-39,126
Exported HSFO and Bunker Fuel (Barge)	-13	-399	-399
Imported Vacuum Gas Oil / 700	-7	-46,979	-46,979
Exported Light Gas Oil / 150	+7	30,431	29,727
Net Change	**-13**	**4,329**	**1,955**

a: Project description modification to reduce ship speed from 13 to 12 knots 40 miles out from the ESMT in the Santa Monica Bay

b: In conducting the more refined analysis, it was determined that the number of additional ship calls for imported heavy crude oil was overstated in the Draft EIR. The number has been reduced from 15 to 9.

With regard to additional truck trip emissions resulting from the proposed project, a maximum of 20 truck trips per day, the Draft EIR clearly presented the increased emissions from these additional truck trips in Table 4.1-7 on page 4-20. Truck trip emissions by themselves or added to emissions from the rest of the proposed project did not exceed any applicable daily significance threshold. However, in response to the Port's comment, it was noted that the truck emission impacts should have been calculated with the year 2008 on-road mobile source emission factor instead of the year 2006 factor because the proposed project is not expected to become operational until the year 2008. This revised analysis further reduces truck trip emissions. For example, daily NOx emissions are reduced from 31.1 pounds per day to 26 pounds per day or 4.75 tons per year.

Since the release of the Draft EIR, Chevron has modified the proposed project to require reducing the marine vessel speed from 13 to 12 knots an additional 20 miles out for a total of 40 miles from Point Fermin Light ~~the EMST~~ (marine vessels already implement this speed reduction 20 miles from Point Fermin Light ~~the EMST~~). Further, Chevron will include as part of its contractual agreement with the coke purchasers one of the following options: the new trips be made by trucks that meet the year 2007 heavy heavy-duty on-road diesel engine standards, or are retrofitted with particulate traps and lean NOx catalysts, or use

emulsified diesel fuel. Alternatively, the project proponent can apply for Carl Moyer funding to reduce NOx and particulate emissions. As a result of the revised analysis and modifications to the project made by Chevron, increased NOx emissions, the pollutant of most concern, would be less than two tons per year from both marine vessels and trucks. Although the SCAQMD has not adopted a formal annual significance threshold, the projected increase in annual NOx emissions is well below levels applied in other SCAQMD programs. For example, facilities that emit less than four tons of NOx per year are not subject to the requirements of Regulation XX – Regional Clean Air Incentives Market. Pursuant to Rule 1304(d)(1)(A) new or modified facilities that emit less than four tons per year are exempt from emission offset requirements. Additionally, pursuant to Rule 212, new or modified facilities that emit less than 40 pounds per day of NOx, or 14,600 pounds per year (7.3 tons per year) are not subject to public notification requirements. In the absence of an annual significance threshold, the levels applied by the District in other contexts, provide guidance in evaluating the ship and truck emissions in this case. Increased ship and truck emissions from the proposed project fall below all of the emissions levels identified above and, thus, consistent with current SCAQMD practice, would not be considered to represent a substantial emission increase.

3-11 SCAQMD staff interprets this comment to refer to cumulative impacts to cancer health risks and disagrees that the increased ship and truck trips from the proposed project will cause significant cumulative impacts to carcinogenic health risks that require mitigation. The possible existence of cumulative effects from other projects is not a cumulative impact of this project unless this project contributes to that cumulative effect and the contribution is cumulatively considerable. Further, the CEQA Guidelines, §15064(h)(3), state, "The 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." The SCAQMD has established a significance threshold for incremental cancer risk from a proposed project of 10 in one million, as listed in Table 4.1-1 on page 4-3 of the Draft EIR. The potential incremental cancer risk from the additional ship calls was calculated to be 1.6 in one million, as described on pages 4-29 and 4-30 of the Draft EIR. The primary impact of the marine vessel emissions occurs over open water and there are no other permanent air toxics emission sources that would contribute to this primary area of impact. As noted in Response 3-10, Chevron provided more detailed analysis of the overall effects of the proposed project resulting in a reduction in the number of marine vessel trips. As a result, the cancer risk calculated in the Draft EIR, 1.6 ~~0.00652~~ in one million, will now be substantially less due the reduction in diesel particular matter emissions from the reduction of marine vessel trips. Because the cancer risk identified in the Draft EIR is considered to

be “worst-case” and is substantially less than the cancer risk significance threshold of ten in one million, this analysis will not be revised.

The potential incremental cancer risk from the additional truck trips was estimated to be 0.55 in one million, as described on pages 4-28 and 4-29 of the Draft EIR. As presented on page 4-23 of the Draft EIR, the additional ship calls and the additional truck trips will occur in different geographical areas and will expose different receptors to toxic air contaminants. Therefore, the risks from these different sources are not added together. These incremental cancer risks are substantially below the significance threshold of 10 in one million. Therefore, SCAQMD staff concluded that air toxic health risks were not cumulatively considerable, and, therefore, not a significant adverse cumulative impact. Consequently, mitigation measures are not required.

3-12 As explained in Response 3-10, the analysis of marine vessel trips has been refined to reflect more accurate data and Chevron has decided to modify the proposed project to include reduction of marine vessel ship speed out to 40 miles from Point Fermin Light ~~the EMST~~. As a result, the SCAQMD has demonstrated that marine vessel emissions from the proposed project are not considered to be a substantial increase in annual emissions. Further, SCAQMD staff recognizes that emissions from existing ships and port activities are major contributors to background air quality and will continue to work with the Ports and the California Air Resources Board to develop programs to reduce emissions from these sources.

3-13 With regard to marine vessel speed reduction program as applicable to the proposed project, please refer to Responses 3-10 and 3-12. As explained in Response 3-10, the analysis of truck trips has been revised to reflect more accurate emission factors and Chevron has decided to modify the proposed project to include as part of its contractual agreement with the coke purchasers that the new trips be made by trucks that meet the year 2007 heavy heavy-duty on-road diesel engine standards, are retrofitted with particulate traps and NOx and oxidation catalysts, or use emulsified diesel fuels. As a result, the revised analysis shows that both ship and truck emissions from the proposed project would be less than two tons per year. As a result, the SCAQMD has demonstrated that total project emissions, including both marine vessel trips and truck trips, are not considered to be a substantial increase in annual emissions.

3-14 SCAQMD staff disagrees that the air toxics health risk assessment (HRA) is not representative. The HRA was conducted to calculate incremental air toxics health risks that could potentially be caused by the proposed project for comparison with the incremental cancer risk significance threshold of 10 in one million, listed in Table 4.1-1 on page 4-3 of the Draft EIR. Because the purpose of the HRA was to calculate the incremental cancer risk, it appropriately calculated the potential incremental cancer risks that could be caused by the

increase in annual diesel exhaust particulate matter (DPM) emissions from ships and trucks during operation of the proposed project. As noted in the response to comment 3-11, the potential incremental cancer risk from the additional ship calls was estimated to be 1.6 in one million, as described on pages 4-29 and 4-30 of the Draft EIR, and the potential incremental cancer risk from the additional truck trips was estimated to be 0.55 in one million, as described on pages 4-28 and 4-29 of the Draft EIR. As presented on page 4-23 of the Draft EIR, the additional ship calls and the additional truck trips will occur in different geographical areas and will expose different receptors to toxic air contaminants. Therefore, the risks from these different sources are not added together. These incremental cancer risks are below the significance threshold of 10 in one million. Therefore, increased annual ship and truck trips during operation of the proposed project will not cause significant adverse air toxics health risks.

The Draft EIR explained that DPM emissions from the tankers while in transit would be dispersed over a wide area, because the tankers travel more than 100 nautical miles in California Coastal Waters while in transit to and from the ESMT (see Draft EIR page 4-29). However, while hoteling at the ESMT, the tankers will emit DPM for approximately 30 hours during each ship call from a single location that is closer than while in transit to onshore receptors. Therefore, potential cancer health risks from DPM emissions during hoteling are expected to be greater than from DPM emissions during transit, as a ship would not be at a single location for a longer period of time at a greater distance, and therefore not able to impact a single receptor to a greater extent.

Furthermore, as discussed in the response to comment 3-10, the increase in annual marine vessel emissions is expected to be substantially lower than the increase that was analyzed in the Draft EIR. Therefore, the potential incremental cancer risk from marine vessel DPM emissions is also expected to be substantially less than the incremental cancer risk presented in the Draft EIR.

3-15 Potential impacts on the freeways in the vicinity of the refinery from construction worker commuting during construction of the proposed project were analyzed in the Draft EIR. Operation of the proposed project is anticipated to generate an average increase of 22 trucks per day to export petroleum coke and sulfur to the Port of Los Angeles. These 22 additional truck trips will be transporting throughout the day, and, thus, truck trips will be spread out throughout the day. Therefore, the Draft EIR concluded that impacts to the traffic system from these truck trips will be minimal, and impacts to traffic on surface streets and freeways, including the Interstate 405 freeway, from these truck trips were not analyzed (see Draft EIR page 4-79).

3-16 As discussed on pages 4-74 and 4-76 of the Draft EIR, construction workers will be required to travel north on Vista Del Mar and then east on Imperial Highway to the I-105 freeway after they exit the off-site parking facility. Austin-Faust

Associates, Inc., who conducted the traffic analyses for the proposed project, estimated the employee trip distribution after the construction workers enter the I-105 freeway from studies conducted for the Chevron facility in the past and from an examination of traffic patterns and volumes on the freeways in the vicinity of the facility. Further, the traffic analysis was reviewed by the City of El Segundo's traffic department.

3-17 SCAQMD staff believes that the Draft EIR adequately describes all project impacts and has fully disclosed them, for the reasons presented in the responses to the previous comments. In accordance with CEQA Guidelines, mitigation measures are not required if the impact is not significant. Annual ship emissions were presented and discussed in the Draft EIR, and the cumulative impacts were not significant since the project-specific impacts were not cumulatively considerable. Finally, daily indirect emissions were analyzed and not treated separately, but rather were included in the overall impacts from the project, which can be found in Table 4.1-7 of the Draft EIR, which includes both direct and indirect (non-permitted) emissions in the determination of significance.