PROPOSED CHEVRON – EL SEGUNDO REFINERY CALIFORNIA AIR RESOURCES BOARD (CARB) PHASE 3 CLEAN FUELS PROJECT

ATTACHMENT 1 - STATEMENT OF FINDINGS, STATEMENT OF OVERRIDING CONSIDERATIONS, AND MITIGATION MONITORING PLAN

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INTRODUCTION

The proposed modifications to the Chevron – El Segundo Refinery in El Segundo, California and associated distribution terminals (Van Nuys, Huntington Beach and Montebello) in Los Angeles, Huntington Beach and Montebello, respectively, to comply with California Governor's Executive Order D-5-99 and California Air Resources Board (CARB) Phase 3 Reformulated Fuels regulations constitute a "project" as defined by The California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] §21000 et seq.). Since the SCAQMD has primary approval authority over the proposed project, SCAQMD is the appropriate lead agency under CEQA.

Pursuant to CEQA Guidelines §15102, the SCAQMD distributed a Notice of Preparation and Initial Study (NOP/IS) to responsible public agencies and interested parties for review and comment. The 30-day review and comment period ended on September 20, 2000. The SCAQMD subsequently prepared a Draft Environmental Impact Report (EIR) based on the initial evaluation in the NOP/IS and comments received during the NOP/IS public review. The Draft EIR was distributed for a 45-day public review period beginning on July 25, 2001, and ending on September 7, 2001. After the close of the public comment period, a Final EIR was prepared for certification by the SCAQMD's decisionmaking body.

Pursuant to CEQA Guidelines §15091(a), as part of the lead agency's process of approving a project that has significant impacts, it must issue a Statement of Findings that states specifically how the lead agency has responded to each significant adverse effect identified in the EIR. When changes or alterations have been required in, or incorporated into, a project that mitigate or avoid the significant effects, the public agency is required to adopt a reporting or monitoring program for the changes made, in order to ensure compliance during project implementation, i.e., a Mitigation Monitoring Program.

CEQA requires the lead agency to balance the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. Under CEQA Guidelines §15093 (a), "If the specific economic, legal, social, technological, or other benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered 'acceptable'." Thus, after adopting the Statement of Findings, as discussed above, the agency must adopt a "Statement of Overriding Considerations" to approve a project with significant adverse environmental effects.

The following sections of this document describe the proposed project and identify the significant adverse impacts that can and cannot be mitigated to below a significant level. Based on the significant effects identified in the Final EIR, a Statement of Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring Plan are also included.

SUMMARY OF THE PROPOSED PROJECT

California Governor Davis signed Executive Order D-5-99 (Executive Order) on March 25, 1999, which directs that MTBE be phased-out of California's gasoline no later than

December 31, 2002. The Executive Order also directs CARB to adopt gasoline regulations to facilitate the removal of MTBE without reducing the emission benefits of the existing program (CARB Phase 3).

To comply with these new requirements, the Chevron El Segundo Refinery is proposing to make changes to the configuration of the refinery by modifying existing process units, installing new equipment, and providing additional ancillary facilities in order to manufacture gasoline that complies with the Governor's MTBE phase-out mandate and the California Air Resources Board's Reformulated Gasoline Phase 3 specifications.

The primary objectives of the refinery improvements will be to eliminate ether blending, reduce vapor pressure of the gasoline, reduce sulfur content of the gasoline and modify the Fluid Catalytic Cracking (FCC) Unit to make up part of the gasoline shortfall that will result from MTBE, TAME and pentane removal. To those ends, the proposed project at the El Segundo Refinery consists of the construction of replacements and modifications to several existing processing units. There is also some new equipment associated with modifications to the existing units, which include adding new equipment or replacing existing equipment with new equipment (such as a debutanizer column, heat exchangers, pumps, piping and control system).

Under existing requirements, MTBE would be phased out and ethanol would be added to the gasoline to meet oxygenate content criteria. Ethanol would not be blended at the refinery, as is currently done with MTBE and TAME, but at the distribution terminals. Therefore, modifications to three distribution terminals in southern California would be required. The distribution terminals are located in the cities of Van Nuys, Montebello and Huntington Beach. The primary improvement at the Montebello distribution terminal includes a new rail spur for ethanol unloading. The primary improvements at the Van Nuys and Huntington Beach distribution terminals are the conversion of existing storage tanks to ethanol service, the construction of new ethanol storage tanks, and new piping and other infrastructure to support receiving and blending the ethanol.

SIGNIFICANT ADVERSE IMPACTS WHICH CAN BE REDUCED BELOW A SIGNIFICANT LEVEL

The Final EIR identified four potentially significant adverse environmental impacts that can be reduced to a level of insignificance: 1) potential to encounter cultural resources during excavation at each project location, 2) potential for earthquake-induced liquefaction at the Van Nuys Terminal, 3) increased noise from operations at the El Segundo Refinery, and 4) increased noise during construction at the Montebello Terminal.

Cultural Resources

The potential significant adverse impacts associated with cultural resources include possibly encountering and distributing cultural resources during excavation at specific areas at the Chevron facilities. To mitigate these impacts to a level of insignificance, the project proponent will employ the following mitigation measures:

- CR-1 conduct a limited Phase II evaluation of the archaeological site, if project implementation will result in ground disturbance within CA-ORA-372's recorded boundaries (Huntington Beach Terminal);
- CR-2 temporarily halt or redirect earth-disturbing work if cultural deposits are exposed during construction until the find is evaluated and appropriately mitigated; and
- CR-3 notify the County Coroner and, if appropriate, the Native American Heritage Commission, if any human remains are unearthed.

Geology and Soils

The potential significant adverse geology and soils impacts are associated with the potential for erosion from wind or water during construction activities and the potential for earthquake-induced liquefaction at the Van Nuys Terminal. To mitigate these impacts to a level of insignificance, the project proponent will employ the following mitigation measures:

- GS-1 use erosion control measures such as, limiting the size of soil stockpiles, minimizing disturbed soil surface area, compacting soils as soon as practicable after surface preparation, covering or watering exposed soil areas and using approved soil stabilizers/binders;
- GS-2 cover and maintain adequate freeboard for trucks hauling gravel, sand or soil to prevent the release of wind-entrained particles; and
- GS-3 implement project design and construction practices to adhere to appropriate earthquake safety codes and the current UBC.

Noise

The potential significant adverse impacts associated with noise are generated by the construction activities at the Montebello terminal and operation at the El Segundo Refinery. To mitigate these impacts to a level of insignificance, Chevron will employ the following mitigation measures:

- N-1 specify that quiet construction equipment, including functioning muffler devices, be used;
- N-2 shield noise sources from receptor(s) by inserting temporary noise barriers or locating construction equipment behind existing structures and equipment when feasible;
- N-3 specify that all mufflers be properly maintained throughout the construction period;
- N-4 use rubber-tired equipment rather than track equipment where feasible;
- N-5 keep loading and staging areas away from noise-sensitive land uses to the extent feasible:

- N-6 minimize truck traffic on streets adjacent to residential uses, to the extent possible;
- N-7 prohibit routing of truck traffic through residential areas to the extent feasible; and
- N-8 limit rail spur construction at the Montebello Terminal to daytime hours (7:00 AM to 6:00 PM) during the weekdays (Monday through Friday).
- N-9 specify that all pumps and compressors meet Chevron specification of 85 dBA at three feet limit at the El Segundo Refinery.
- N-10 minimize rail traffic at the El Segundo Refinery through proper routine maintenance

SIGNIFICANT ADVERSE IMPACTS WHICH CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

There are eight potentially significant adverse environmental impacts that cannot be reduced to a level of insignificance: 1) emissions associated with construction, 2) operational emissions of oxides of nitrogen (NO_X), sulfur oxides (SO_X), volatile organic compounds (VOC) and particulate matter less than 10 microns (PM₁₀), 3) increased risk from catastrophic failure of new storage tanks and modifications to process units at the El Segundo Refinery, 4) increased risk from catastrophic failure of new storage tank at the Montebello Terminal, 5) increased risk from catastrophic failure of truck and rail car deliveries of ethanol at terminals, 6) increased risk from new and modified units at the El Segundo Refinery and terminals, 7) increased noise during rail spur operations at the Montebello Terminal, and 8) increased traffic during construction at the El Segundo Refinery.

Air Quality

The potential significant adverse air quality impacts from construction include emissions of carbon monoxide (CO), NO_X , SO_X , PM_{10} , and VOC from construction equipment exhaust, on- and off-site motor vehicles, on- and off-site fugitive dust, and architectural coatings and paving. Table 1 presents the proposed project's overall peak daily emissions during construction, including the expected effectiveness of the mitigation measures. To mitigate these impacts to the greatest extent feasible, the project proponent will employ the following measures:

- AQ-1 increase watering of active site by one time per day;
- AQ-2 wash wheels of vehicles leaving facility;
- AQ-3 remove all visible roadway dust tracked out onto paved surfaces from unimproved areas by sweeping at the end of the workday;
- AQ-4 prior to use in construction, the project proponent will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for significant periods. Retrofit technologies such as selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc. will be evaluated. These technologies will be required it they are commercially available and can feasibly be retrofitted onto construction equipment;

Table 1 **Overall Peak Daily Construction Emissions (Mitigated)**

	Т	1	1	ı			
Source	CO (lb/day)	VOC (lb/day)	NO _x (lb/day)	SO _X (lb/day)	Exhaust PM ₁₀ (lb/day)	Fugitive PM ₁₀ (lb/day)	Total PM ₁₀ (lb/day)
Onsite Construction Equipment Exhaust	1,049.5	200.0	1,726.9	172.7	102.4	NA	102.4
Mitigation Reduction (%)	0%	5%	5%	5%	5%		
Mitigation Reduction (lb/day)	0.0	-10.0	-86.3	-8.6	-5.1		-5.1
Remaining Emissions	1,049.5	190.0	1,640.6	164.1	97.3		97.3
Onsite Motor Vehicles	27.8	5.2	39.2	0.0	1.6	56.1	57.7
Mitigation Reduction (%)	0%	0%	0%	0%	0%	0%	
Mitigation Reduction (lb/day)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Remaining Emissions	27.8	5.2	39.2	0.0	1.6	56.1	57.7
Onsite Fugitive PM ₁₀	NA	NA	NA	NA	NA	202.7	202.7
Mitigation Reduction (%)						16%	
Mitigation Reduction (lb/day)						-32.4	-32.4
Remaining Emissions						170.3	170.3
Asphaltic Paving	NA	1.8	NA	NA	NA	NA	NA
Mitigation Reduction (%)		0%					
Mitigation Reduction (lb/day)		0.0					
Remaining Emissions		1.8					
Architectural Coating	NA	140.0	NA	NA	NA	NA	NA
Mitigation Reduction (%)		0%					
Mitigation Reduction (lb/day)		0.0				1	
Remaining Emissions		140.0				-	
Total Onsite	1,077.3	336.9	1,679.8	164.1	98.9	226.4	325.3
Offsite Haul Truck Soil Loss ^a	NA	NA	NA	NA	NA	64.1	64.1
Mitigation Reduction (%)						90%	
Mitigation Reduction (lb/day)						-57.7	-57.7
Remaining Emissions						6.4	6.4
Offsite Motor Vehicles	627.0	92.1	231.4	0.0	7.5	276.7	284.2
Mitigation Reduction (%)	0%	0%	0%	0%	0%	0%	
Mitigation Reduction (lb/day)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Remaining Emissions	627.0	92.1	231.4	0.0	7.5	276.7	284.2
Total Offsite	627.0	92.1	231.4	0.0	7.5	283.1	290.6
TOTAL	1,704.4	429.0	1,911.2	164.1	106.4	509.5	615.9
Significance Threshold	550	75	100	150			150
Significant? (Yes/No)	Yes	Yes	Yes	Yes			Yes
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Note: Sums of individual values may not equal totals because of rounding.

^a Does not include 50% control from freeboard, since tarp is being used instead to achieve 90% control.

- AO-5 use low sulfur diesel where feasible;
- AQ-6 conduct proper equipment maintenance; and
- AQ-7 cover haul trucks with full tarp.

VOC, NO_X , SO_X , and PM_{10} mass daily operation emissions from sources that are not subject to RECLAIM would exceed each relevant significance criteria. Several mitigation measures were considered to reduce the impacts to insignificant. However, none of the mitigation measures were deemed feasible.

Hazards

Due to the inherent hazard risks associated with the materials transported, stored and used in refinery operations, and the refining processes in general, the risk of large-scale upset conditions is always present to some degree. The project will result in an increased risk from the potential for catastrophic failure of new storage tanks and modifications to process units at the El Segundo Refinery, increased risk from catastrophic failure of the new storage tank at the Montebello Terminal, increased risk from catastrophic failure of truck and rail car deliveries of ethanol at the terminals, and increased risk from new and modified units at the El Segundo Refinery and terminals. The primary area that creates the largest increase of risk from the project is related to the new pentane storage tank at the El Segundo Refinery. To mitigate potential risk of upset impacts to the greatest extent feasible, the project proponent will employ the following mitigation measures:

- H-1 a pre-start up safety review will be performed for those additions and modifications proposed under the project where the change is significant enough to require a change in the process safety information and/or where an acutely hazardous and/or flammable material would be used. Appropriate measures will be evaluated if it is determined during the pre-startup safety review that design and construction techniques alone cannot reduce the risk of upset;
- H-2 provide 24 hours per day, seven days per week emergency staffing, fire detectors, manual shutdown of liquid into or out of the pentane tank in case of fires, and high-pressure fire-deluge systems and protective coatings for the pentane storage tank and support structures at the El Segundo Refinery; and
- H-3 continue adherence to selected transportation safety practices including:
 - hiring and training practices to ensure driver compliance with safe driving practices for transporting fuel ethanol as well as other flammable materials; and
 - emphasis on vehicle inspection and maintenance programs to ensure their effective implementation for the transport of fuel ethanol as well as other flammable materials.

Noise

The potential significant adverse impact is associated with the increased noise during rail spur operations at the Montebello Terminal. Several mitigation measures were considered to reduce the impacts to insignificant. However, none of the mitigation measures were deemed feasible. The project construction period is limited in duration

and the project-related impact to the intersection will end at the conclusion of the construction period.

Transportation/Traffic

The potential significant adverse impact is associated with the increased traffic during construction at one (Sepulveda/SR1 and El Segundo Boulevard) of the 12 intersections in the vicinity of the El Segundo Refinery. Several mitigation measures were evaluated and not deemed feasible. However, the project construction period is limited in duration and the project-related impact to the intersection will end at the conclusion of the construction period.

STATEMENT OF FINDINGS

Public Resources Code §21081 and CEQA Guidelines §15091(a) state that "No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant adverse environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding." Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines §15091(b)). As identified in the EIR, the proposed Chevron – El Segundo Refinery CARB Phase 3 Clean Fuels Project has the potential to create significant adverse air quality impacts from construction and operation activities, hazard impacts from activities related to project operation, noise impacts from rail operations in the Montebello Terminal, and increased traffic during construction at the El Segundo Refinery. The SCAQMD, therefore, makes the following findings regarding the proposed project. The findings are supported by substantial evidence in the record as explained in each finding. This Statement of Findings will be included in the record of project approval and will also be noted in the Notice of Determination.

A. POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO A LEVEL OF INSIGNIFICANCE

1. Construction emissions of CO, VOC, NO_X, SO_X, and PM₁₀ would exceed SCAQMD significance thresholds during maximum activity periods. VOC, NO_X, SO_X, and PM₁₀ mass daily operation emissions from sources that are not subject to RECLAIM would exceed each relevant significance criteria.

<u>Finding:</u> The SCAQMD makes the following findings with respect to this impact: (1) mitigation measures were incorporated into the project that would reduce the significant construction emissions, but not to insignificance; (2) such mitigation measures are within the jurisdiction of the SCAQMD; and (3) no other feasible mitigation measures are available to lessen the significant impact to air quality during construction and operation.

Explanation: The construction emissions of CO, VOCs, NO_X , SO_X , and PM_{10} exceed the SCAQMD significance thresholds during peak construction activities. Seven mitigation measures to minimize these impacts were imposed on the project and are set forth in the Mitigation Monitoring Plan below. Though these measures would not reduce

construction emissions below the SCAQMD significance thresholds, no other feasible mitigation measures were determined to be available. Further, the emission reduction calculations were based on conservative data and assumptions. In addition, the construction emissions will not have a long-term adverse air quality impact because these emissions will cease following the completion of the construction phase. VOC, NO_X, SO_X, and PM₁₀ mass daily operation emissions from sources that are not subject to RECLAIM would exceed each relevant significance criteria. Several mitigation measures were considered to reduce significant adverse air quality impacts to insignificant. However, none of the mitigation measures were deemed feasible.

2. Hazard impacts relative to the transport, storage, and use of hazardous materials would exceed SCAQMD significance thresholds; risk from catastrophic failure of the new pentane storage sphere; and potential risk from additional truck and train trips of ethanol are considered significant.

<u>Finding:</u> The SCAQMD makes the following findings with respect to this impact: (1) mitigation measures were incorporated into the project that would reduce the significant hazard impacts, but not to insignificance; (2) such mitigation measures are within the jurisdiction of the SCAQMD, City of Los Angeles Fire Department, El Segundo Fire Department, Los Angeles County Fire Department/Health Hazardous Materials Division and the Orange County Certified Unified Program Agency; and (3) no other feasible mitigation measures or project alternatives are available to reduce significant adverse hazard impacts to insignificance.

<u>Explanation</u>: Due to the inherent hazard risks associated with the materials transported, stored and used for refinery operations, and the refining processes in general, the risk of large-scale upset conditions is always present to some degree. Nineteen accident scenarios were evaluated in the EIR. The scenario that creates the largest increase of risk from the proposed project is related to the new pentane storage tank at the El Segundo Refinery.

Three mitigation measures to minimize potential adverse hazard impacts were imposed on the project and are set forth in the Mitigation Monitoring Plan below. Though these measures would not reduce potential hazard impacts below the SCAQMD significance thresholds, no other feasible mitigation measures were determined to be available. Further, the upset scenarios were based on "worst-case" assumptions.

3. Increased noise during rail spur operations at the Montebello Terminal

<u>Finding:</u> The SCAQMD makes the following finding with respect to this impact: no other feasible mitigation measures or project alternatives are available to reduce significant adverse noise impacts to insignificance.

<u>Explanation</u>: The operation of the rail spur at the Montebello Terminal is predicted to have significant adverse noise impacts on the residences to the north of the terminal. However, the rail spur operation at the Montebello Terminal will occur for less than 30

minutes each day between 10:00 AM and 1:00 PM when residential exposure is expected to be less sensitive. Several mitigation measures were evaluated and not deemed feasible.

4. Increased traffic during construction at the El Segundo Refinery.

<u>Finding:</u> The SCAQMD makes the following finding with respect to this impact: no other feasible mitigation measures or project alternatives are available to reduce significant adverse traffic impacts to insignificance.

<u>Explanation</u>: One (Sepulveda/SR1 and El Segundo Boulevard) of the 12 intersections assessed in the vicinity of the El Segundo Refinery will be significantly adversely affected as a result of project-related construction. However, the project construction period is limited in duration and the project-related impact to the intersection will end at the conclusion of the construction period. Several mitigation measures were evaluated and deemed infeasible.

B. IMPACTS ASSOCIATED WITH PROJECT ALTERNATIVES

1. Project alternatives are not available to reduce the potentially significant impacts to insignificance.

<u>Finding:</u> The SCAQMD finds that the identified project alternatives would not achieve the goals of the project with fewer or less severe adverse environmental impacts.

Explanation: The comparative merits of three project alternatives were evaluated and it was determined that no feasible project alternatives were identified that would achieve the goals of the project with fewer or less severe environmental impacts than the proposed project. The three project alternatives include the following: Alternative 1 – New Alkylate Depentanizer, this alternative consists of building a new depentanizer in the Alkylation Plant rather than reusing an existing column in the TAME Plant; Alternative 2 – Construction of a Refrigerated Pentane Storage Tank, which consists of constructing a refrigerated pentane storage tank instead of a pentane-gasoline mix storage tank; and Alternative 3 - Feeding All of the Incremental Butanes Produced at the FCC to the Alkylation Unit. It was concluded from the analysis that all project alternatives would generate adverse environmental impacts in the same environmental areas as the proposed project, i.e., air quality, hazards, noise, and transportation/traffic. For all environmental impacts evaluated, no feasible project alternatives were identified that would reduce the significant adverse environmental impacts to a level of insignificance.

C. STATEMENT OF FINDINGS CONCLUSION

Changes or alterations have been incorporated into the project to mitigate the potentially significant adverse environmental effects associated with certain project impacts, i.e., air quality impacts during construction and operation, transportation/circulation, noise and hazards. No additional feasible mitigation measures or project alternatives other than those already included in the Final EIR have been identified that can further mitigate the

potentially significant project impacts on air quality, hazards, noise or transportation/traffic and still meet the proposed project's objectives.

All feasible mitigation measures identified in the Final EIR have been adopted as set forth in the Mitigation Monitoring Program. The SCAQMD further finds that the Final EIR considered those alternatives or process modifications that meet the requirements of Public Resources Code §21178(g). The analysis indicated that the alternatives would not reduce to insignificant levels the significant impacts identified for the proposed project.

The project is intended to improve air quality in California and more specifically within the South Coast Air Basin. The need for cleaner burning fuels was identified in the 1990 federal Clean Air Act Amendments and the California Clean Air Act. Both the U.S. Environmental Protection Agency and California Air Resources Board have developed and mandated use of reformulated fuels with detailed specifications in severe non-attainment areas, such as the Basin, to reduce mobile source emissions. Based on these requirements, the SCAQMD finds that the proposed project achieves the best balance between minimizing potential adverse environmental impacts and achieving the project objectives. Removal of MTBE from the gasoline stream will also prevent potential future contamination of soil or groundwater with MTBE, thereby removing potential human health risks and other environmental impacts associated with MTBE contamination of soil or water. The SCAQMD finds that all of the findings presented here are supported by substantial evidence in the record.

The record of approval for this project may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD Headquarters in Diamond Bar, California.

STATEMENT OF OVERRIDING CONSIDERATIONS

If significant impacts of a proposed project remain after incorporating mitigation measures, or no measures to mitigate the adverse impacts are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects if it is to approve the project. CEQA requires the decisionmaking agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (CEQA Guidelines §15093 [a]). If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines §15093 [a]). Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse air quality, hazards, noise and transportation/circulation impacts resulting from the proposed modifications of the Chevron El Segundo Refinery and associated terminals has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed Chevron project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Determination for the proposed project.

Despite the inability to incorporate changes into the project that will mitigate potentially significant adverse air quality, hazards, noise and transportation/circulation impacts to a

level of insignificance, the SCAQMD finds that the following legal requirements and air and water quality benefits of the project outweigh the significant unavoidable adverse environmental impacts:

- 1. California Governor's Executive Order D-5-99 directs that MTBE be phased-out of California's gasoline no later than December 31, 2002. The Executive Order also directs CARB to adopt gasoline regulations to facilitate the removal of MTBE without reducing the emission reduction benefits of the existing program (CARB Phase 3). The proposed project fulfills the requirements of the Executive Order by allowing MTBE to be phased-out of Chevron's gasoline products while meeting the specifications of CARB Phase 3.
- 2. Removal of MTBE from the gasoline stream will prevent potential future contamination of soil or groundwater with MTBE, thereby removing potential human health risks and other environmental impacts associated with MTBE contamination of soil or water.
- 3. CARB Phase 3 reformulated gasoline will reduce benzene and sulfur content in gasoline, thereby decreasing the human health impacts associated with exposure to these air contaminants.

MITIGATION MONITORING PLAN

When making findings as required by PRC §21081 and CEQA Guidelines §15091 (a), lead agencies are required to adopt mitigation monitoring or reporting programs. The purpose of these programs is to ensure compliance with mitigation measures adopted to mitigate or avoid significant adverse environmental effects identified in EIRs and Negative Declarations, prepared in accordance with the CEQA Guidelines. PRC §21081.6 states in part:

When making the findings required by subdivision (a) of Section 21081 or when adopting a negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the public agency shall adopt a reporting or monitoring program for the changes to the project that it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by this project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.

Pursuant to the requirement of PRC §21081.6, the SCAQMD must establish a plan to monitor project compliance with those mitigation measures adopted as conditions of approval for Chevron's CARB Phase 3 Clean Fuels project. The following subsections identify the specific mitigation measures identified in the EIR and the public agency responsible for monitoring implementation of each mitigation measure.

AIR QUALITY

The following mitigation measures are required to minimize the potential short-term and long-term significant adverse air quality impacts during project construction-related and operation-related activities, respectively.

CONSTRUCTION IMPACTS

IMPACT #1 SUMMARY: Construction activities may have significant unmitigated air quality impacts for CO, VOC, NO_X, SO_X, and PM₁₀. The emissions from construction are primarily from three main sources: 1) onsite fugitive dust from grading and excavation, 2) onsite exhaust emissions (CO, VOC, NO_X, SO_X, and PM₁₀) from construction equipment, 3) onsite VOC emissions from asphaltic paving and painting, 4) offsite exhaust emissions from truck traffic and worker commute trips, 5) offsite road dust associated with traffic to and from the construction site, and 6) offsite fugitive dust (PM₁₀) from trucks hauling materials, construction debris, or excavated soils from the The mitigation measures listed below are intended to minimize the emissions associated with these sources. No feasible mitigation has been identified to reduce emissions from architectural coating or on-road vehicle trips. Additionally, no other feasible mitigation measures have been identified to reduce emissions to insignificance. CEQA Guidelines §15364 defines feasible as ".. capable of being accomplished in a successful manner within a reasonable period if time, taking into account economic, environmental, legal, social, and technological factors." VOC, NO_X, SO_X, and PM₁₀ mass daily operation emissions from sources that are not subject to RECLAIM would exceed each relevant significance criteria. Several mitigation measures were considered to lessen the impacts to insignificant. However, none of the mitigation measures were deemed feasible.

MITIGATION MEASURE AQ-1 (Fugitive Dust): In addition to complying with the requirements of Rule 403 – Fugitive Dust (e.g., twice daily watering and preventing all visible fugitive dust from leaving the facility boundary), each facility where construction activities are being conducted will be responsible for an additional daily watering.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-1 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-1: Chevron shall keep records onsite of applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-1.

MITIGATION MEASURE AQ-2 (Fugitive Dust): During the project construction period, vehicles must have wheels washed when leaving the facility.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-2 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-2: Chevron shall keep records onsite of applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-2.

MITIGATION MEASURE AQ-3 (Fugitive Dust): During the project construction period, construction personnel will remove all visible roadway dust tracked out onto paved surfaces from unimproved areas by sweeping at the end of the workday.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-3 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-3: Chevron shall keep records onsite of applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-3.

MITIGATION MEASURE AQ-4 (Exhaust Emissions): Prior to use in construction, the project proponent will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for significant periods. Retrofit technologies such as selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc. will be evaluated. These technologies will be required if they are commercially available and can feasibly be retrofitted onto construction equipment.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-4 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-4: To demonstrate the steps taken to assure compliance with Mitigation Measure AQ-4, Chevron will supply the SCAQMD with a report prior to commencement of construction activities that documents Chevron's evaluation of retrofit technologies for large construction equipment. A copy of this report shall be maintained on-site along with other recordkeeping required by this Mitigation Monitoring Plan.

MITIGATION MEASURE AQ-5 (Exhaust Equipment): During the project construction period, low sulfur fuel will be used for construction equipment, where feasible.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-5 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-5: Chevron shall keep records onsite of its applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-5.

MITIGATION MEASURE AQ-6 (Exhaust Emissions): During the project construction period, each affected facility shall be responsible for maintaining all construction equipment in proper operating condition.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-6 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-6: Chevron shall keep records onsite of its applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-6.

MITIGATION MEASURE AQ-7 (Fugitive Dust Emissions): During the project construction period, haul trucks will be covered with full tarps.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure AQ-7 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM AQ-7: Chevron shall keep records onsite of its applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-7.

NOISE RESOURCES

The following mitigation measures are required to reduce potentially significant adverse noise impacts from activities associated with the construction and operation of the proposed project at the El Segundo Refinery and Montebello Terminal.

IMPACT #2 SUMMARY: Potential significant temporary adverse noise impacts from project construction and operation activities may occur at the El Segundo Refinery and the Montebello Terminal. At the refinery and Montebello terminal, construction and operation noise impacts are potentially significant due to the close proximity of residential receptors to construction sites.

MITIGATION MEASURE N-1 (Equipment): Specify that quiet equipment, including functioning muffler devices, be used throughout construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-1 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-1: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-1.

MITIGATION MEASURE N-2 (Equipment): Shield noise sources from receptor(s) by inserting temporary noise barriers or locating construction equipment behind existing structures and equipment when feasible.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-2 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-2: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-2.

MITIGATION MEASURE N-3 (Muffler Maintenance): Specify that all mufflers be properly maintained throughout the construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-3 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-3: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-3.

MITIGATION MEASURE N-4 (Equipment Use): Use rubber-tired equipment rather than track equipment where feasible throughout the construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-4 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-4: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-4.

MITIGATION MEASURE N-5 (Loading and Staging Areas): Keep loading and staging areas away from noise-sensitive land uses to the extent feasible throughout the construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-5 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-5: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-5.

MITIGATION MEASURE N-6 (Traffic): Minimize truck traffic on streets adjacent to residential uses to the extent possible throughout the construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-6 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-6: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-6.

MITIGATION MEASURE N-7 (Truck Routing): Prohibit truck routing through residential areas throughout the construction period.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-7 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-7: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-7.

MITIGATION MEASURE N-8 (Montebello Terminal): Limit rail spur construction at the Montebello Terminal to daytime hours (7:00 AM to 6:00 PM) during the weekdays (Monday through Friday).

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-8 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-8: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-8.

MITIGATION MEASURE N-9 (El Segundo Refinery): Specify that pumps and compressors meet Chevron specification of 85 dBA at three feet limit.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-9 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-9: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-9.

MITIGATION MEASURE N-10 (El Segundo Refinery): Minimize rail traffic noise through routine maintenance.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure N-10 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM N-10: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure N-10.

HAZARDS

The following mitigation measures are required to reduce potentially significant adverse hazard impacts from activities associated with operations of the proposed project.

IMPACT #3 SUMMARY: The proposed project is expected to result in an incremental increase in hazard risks at the Refinery and the three distribution terminals. Hazard risks are considered significant for the proposed project even though there is a low probability of the occurrence of a catastrophic event; the analysis is based on conservative assumptions used to estimate the worst cases; and the implementation of Chevron inspection programs, safety systems and mitigation measures to reduce risk. Due to the inherent hazard risks associated with the materials transported, stored and used for refinery operations, and the refining processes in general, the risk of large-scale upset conditions is always present to some degree. The primary area that creates the largest increase of risk from the project is related to the new pentane storage tank at El Segundo Refinery.

MITIGATION MEASURE H-1 (Safety review): A pre-startup safety review will be performed for those additions and modifications proposed under the proposed project where the change is significant enough to require a change in the process safety information and/or where an acutely hazardous and/or flammable material would be used. Personnel will perform the review with expertise in process operations and engineering. The review will verify the following:

- construction and modifications are in accordance with design specifications and applicable codes;
- safety, operating, maintenance, and emergency procedures are in place and are adequate;
- process hazard analysis recommendations have been addressed and actions necessary for start-up have been completed;
- training of each operating employee and maintenance worker has been completed; and
- if it is determined during the pre-startup safety review that design and construction techniques alone cannot reduce the risk, further measures will be evaluated.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure H-1 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM H-1: Chevron shall keep records onsite of its compliance efforts (e.g., revision of its Process Safety Management Program, Risk Management Program, other Chevron safety programs, internal and external inspections, Notices to Comply, Notices of Violations, and corrective actions taken in response) to demonstrate steps taken to assure compliance with Mitigation Measure H-2.

MITIGATION MEASURE H-2: The following equipment and processes practices and procedures will be implemented at the Chevron facilities:

- 24 hours per day, seven days per week staffing;
- fire detectors;
- manual shutdown of liquid into or out of the pentane tank in case of fire, which will minimize the quantity of release; and
- high-pressure fire deluge systems and protective coatings for the pentane storage tank and support structures to reduce the possibility of boiling liquid expanding vapor explosions (BLEVE) caused by fires in the vicinity of the facilities.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure H-2 is the responsibility of Chevron.

MONITORING AGENCY: The City of Los Angeles Fire Department, El Segundo Fire Department, Los Angeles County Fire Department/Health Hazardous Materials Division and the Orange County Certified Unified Program Agency will be responsible for ensuring compliance with this mitigation measure.

MM H-2: Chevron shall keep records onsite of its applicable compliance efforts to demonstrate the steps taken to assure compliance with Mitigation Measure H-2.

MITIGATION MEASURE H-3: Chevron will expand its existing transportation safety practices to the proposed project. These practices include:

- driver hiring and training practices to ensure driver compliance with safe driving practices for transporting fuel ethanol as well as other flammable materials;
- continued emphasis on vehicle inspection and maintenance programs to ensure their effective implementation for the transport of fuel ethanol as well as other flammable materials.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure H-3 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM H-3: Chevron shall keep records onsite of its efforts to demonstrate steps taken to assure compliance with Mitigation Measure H-3.

CULTURAL RESOURCES

The following mitigation measures are required to reduce potentially significant impacts to cultural resources from activities associated with construction of the proposed project.

IMPACT #4 SUMMARY: Resources of cultural significance may be unearthed at the Huntington Beach distribution terminal during project construction.

MITIGATION MEASURE CR-1: If project implementation will result in ground disturbance within CA-ORA-372's recorded boundaries (Huntington Beach Terminal), a limited Phase II evaluation of the archaeological site will be conducted and a Gabrielino/Tongva consultant will be retained to monitor any such archaeological excavation.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure CR-1 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM CR-1: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure CR-1.

MITIGATION MEASURE CR-2: If cultural resources are discovered during construction, earth-disturbing work within the vicinity of the find will be temporarily suspended or redirected until an archaeologist has evaluated the nature and if necessary catalogued and/or removed the cultural resource. After the find has been appropriately mitigated work in the area may resume. A Native American representative will be retained to monitor mitigation work associated with prehistoric cultural material.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure CR-2 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM CR-2: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure CR-2.

MITIGATION MEASURE CR-3: If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure CR-3 is the responsibility of Chevron.

MONITORING AGENCY: The SCAQMD through its discretionary authority to issue and enforce permits for this project will ensure compliance with this mitigation measure.

MM CR-3: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure CR-3.

GEOLOGY AND SOILS

The following mitigation measures are required to reduce potentially significant adverse geology and soils impacts due to construction and operation of the facilities.

IMPACT #5 SUMMARY: The proposed project has the potential for erosion from wind or water during construction activities; the potential for significant earthquake-induced ground motion from earthquakes; and the potential for liquefaction/subsidence at the Van Nuys Terminal.

MITIGATION MEASURE GS-1: Erosion control measures will be used during property construction. These measures will include limiting the size of soil stockpiles, minimizing disturbed soil surface area, and compacting soils as soon as practicable after surface preparation. Approved soil stabilizers/binders will be applied in accordance with manufacturer's instruction.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure GS-1 is the responsibility of Chevron.

MONITORING AGENCY: The Cities of El Segundo, Montebello, Los Angeles and Huntington Beach will be responsible for ensuring compliance with this mitigation measure.

MM GS-1: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure GS-1.

MITIGATION MEASURE GS-2: Trucks hauling gravel, sand or soil will be covered and will maintain adequate freeboard (i.e., vertical distance between the top of the load and the top of the trailer) to prevent the release of wind-entrained particles.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure GS-2 is the responsibility of Chevron.

MONITORING AGENCY: The Cities of El Segundo, Montebello, Los Angeles and Huntington Beach will be responsible for ensuring compliance with this mitigation measure.

MM GS-2: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure GS-2.

MITIGATION MEASURE GS-3: Project design and construction practices will adhere to appropriate earthquake safety codes and the current Uniform Building Code (UBC). Some UBC suggested mitigation methods for liquefaction include ground stabilization, selection of appropriate foundation types and depths, selection of appropriate structural elements to accommodate anticipated displacements or any combination of these methods.

IMPLEMENTING PARTY: The SCAQMD finds that mitigation measure GS-3 is the responsibility of Chevron.

MONITORING AGENCY: The Cities of El Segundo, Montebello, Los Angeles and Huntington Beach will be responsible for ensuring compliance with this mitigation measure.

MM GS-3: Chevron shall keep records onsite of applicable efforts to demonstrate steps taken to assure compliance with Mitigation Measure GS-3.

CONCLUSION

Chevron will be required to submit quarterly reports to the SCAQMD during the construction phase that identifies the construction progress, includes all required logs, inspection reports, and monitoring reports, identifies any problems, and provides solutions to problems, as necessary. The SCAQMD and Chevron will evaluate the effectiveness of this monitoring program during both the construction period and operation. If either the monitoring program or the mitigation measures as set forth above are deemed inadequate, the SCAQMD or another responsible agency, may require Chevron to employ additional or modified monitoring measures and/or measures to effectively mitigate identified significant adverse impacts to the levels identified in the EIR.