

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **INITIAL STUDY FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR:**

### **MOBIL CALIFORNIA AIR RESOURCES BOARD (CARB) PHASE 3 – REFORMULATED GASOLINE PROJECT**

**August 29, 2000**

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## **CHAPTER 1**

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### **INTRODUCTION**

**Project Overview**

**Agency Authority**

**Project Location**

## **1.1 PROJECT OVERVIEW**

Governor Davis signed Executive Order D-5-99 (Executive Order) on March 25, 1999, which directs that the use of methyl tertiary butyl ether (MTBE) as an additive to California's gasoline be phased out no later than December 31, 2002. The Executive Order also directs the California Air Resources Board (CARB) to adopt regulations to facilitate discontinuing the use of MTBE without reducing the emission benefits of the existing program. This requirement and new gasoline specifications are collectively known as CARB Phase 3 or CARB 3 Regulations. To comply with these new requirements, the Mobil Oil Corporation (Mobil) is proposing to make changes at the Torrance refinery, the Torrance loading rack, the Vernon and Atwood (Anaheim) distribution terminals and the Southwestern marine terminal (Port of Los Angeles [POLA]).

To meet the oxygenate requirements of the CARB 3 specifications for gasoline without MTBE, some oxygenate will need to be blended into the gasoline. Although the Federal Government is reviewing California's oxygenate waiver request, the proposed project is being developed with the assumption that the oxygenate mandate will remain in place and that ethanol will be the only permissible oxygenate.

Two physical properties of ethanol, Reid Vapor Pressure (RVP) and solubility, will require changes in both the refinery and terminal infrastructure and equipment to allow ethanol to be blended into gasoline while still meeting the specifications of CARB 3 gasoline. Because the ethanol RVP effect is higher than MTBE, more of the lighter constituents such as butanes and pentanes (with high vapor pressures) will need to be removed from the gasoline that is blended with ethanol. To allow for the use of fuel ethanol as well as to meet other CARB 3 fuel specifications, the refinery will modify existing process operating units, construct and install new equipment, and provide additional ancillary facilities. In addition, because butanes and pentanes will be removed from gasoline and MTBE will not be added to gasoline, less gasoline will be produced. To compensate for the potential reduction in the amount of gasoline produced, various project elements designed to return gasoline production to pre-CARB 3 levels have been included in the proposed project. However, it should be noted there will be no change in the rated crude throughput capacity of the refinery as a result of the project.

Currently, MTBE is blended into gasoline at the Torrance Refinery and is transported, via pipeline, to the distribution terminals. Because of the affinity of ethanol for water, fuel ethanol cannot be blended into gasoline at the refinery because of its potential to absorb water in the pipelines leading to the terminals. As such, ethanol blending activities will be conducted at the terminals as the gasoline enters the distribution trucks. This change in blending location will minimize the potential for water to come into contact with the ethanol in the blended fuel. Changes at the

distribution terminals will include new loading racks, new or modified vapor recovery and/or destruction systems, new or modified storage tanks, and new piping and other ancillary equipment.

## **1.2 AGENCY AUTHORITY**

The California Environmental Quality Act (CEQA) requires that potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid, or eliminate identified significant adverse impacts of these projects be included as part of the project. To fulfill the purpose and intent of CEQA, this Initial Study (IS) has been prepared. Based on the results of this IS and preliminary meetings between Mobil, the Cities of Torrance, Vernon, and Anaheim, the POLA, and the South Coast Air Quality Management District (SCAQMD), it has been determined that an Environmental Impact Report (EIR) must be prepared for this project.

Under CEQA, the lead agency is defined as “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment” (Public Resources Code § 21067). Because SCAQMD has primary approval authority over the proposed project and must provide air quality permits for several aspects of the project, the Cities, POLA, and SCAQMD have determined that the SCAQMD is the appropriate lead agency pursuant to the CEQA guidelines. Letters from the Cities of Torrance and Vernon and the POLA discussing the lead agency determination are provided in Appendix A.

## **1.3 PROJECT LOCATION**

The locations of the refinery and marine and distribution terminals are shown in Figure 1-1. The Torrance Refinery is located at 3700 West 190<sup>th</sup> Street in the City of Torrance, California (Figure 1-2). The Torrance Refinery occupies an irregularly shaped parcel of land, between 190<sup>th</sup> Street on the north, Van Ness Avenue on the east, railroad tracks and Del Amo Boulevard to the south, and Prairie Avenue to the west. A small portion of the refinery property is located to the west of Prairie Avenue. The refinery property comprises approximately 660 acres of land.

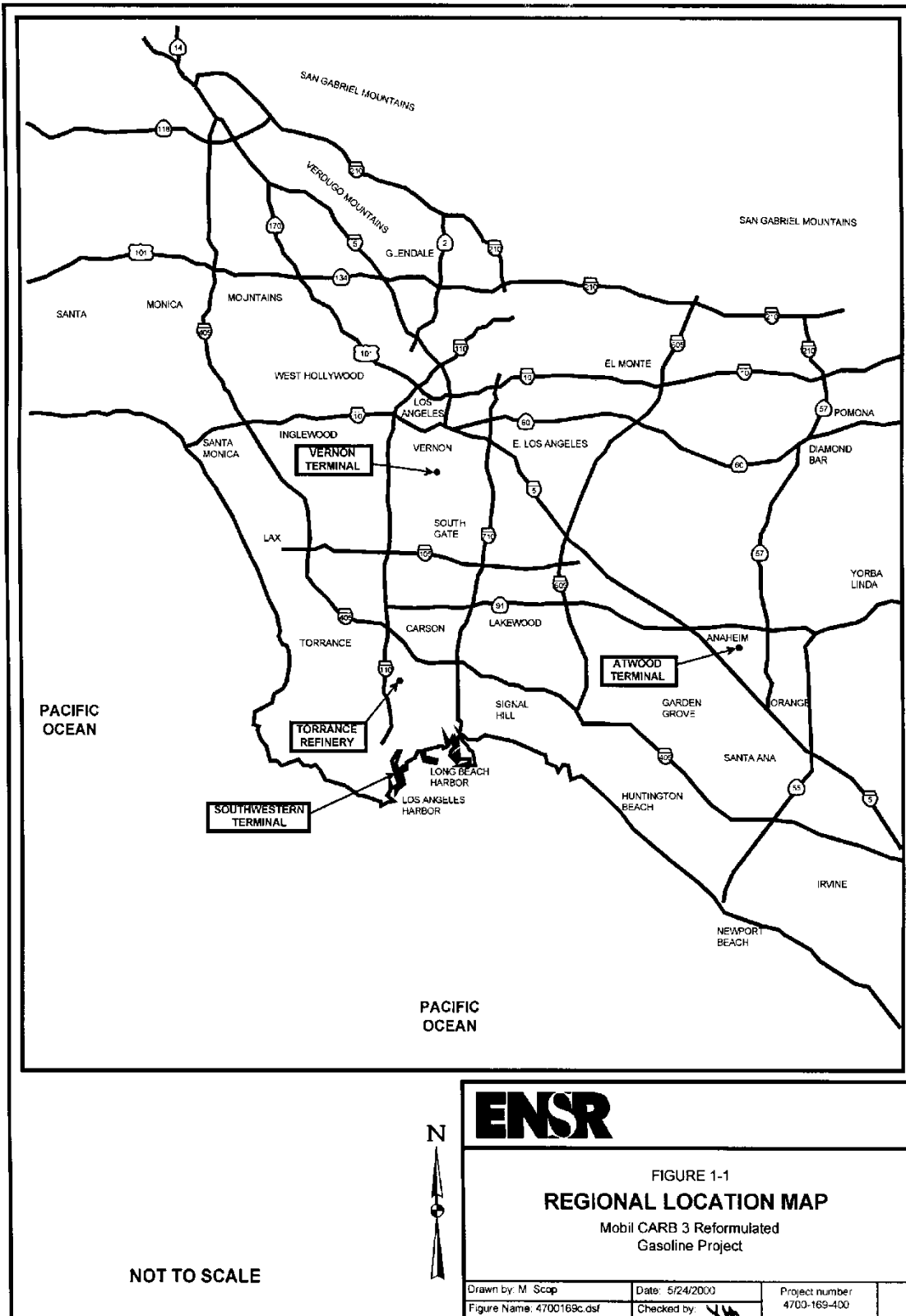
The Torrance loading rack is located in the central western portion of the Torrance refinery property and is operated by Mobil’s Distribution Organization.

The Vernon terminal is located at 2709 East 37<sup>th</sup> Street in the City of Vernon (Figure 1-3). The Vernon facility, a distribution terminal, is located in an area zoned “General Industry”. The Vernon facility comprises approximately 32 acres of land.

The Atwood terminal is located at 1477 Jefferson Street in the City of Anaheim (Figure 1-4). The Atwood facility is located in an area zoned “Development Area 1 –

Northeast Area Specific Plan – Industrial Area”. The Atwood facility is situated on approximately 8 acres of land.

The Southwestern marine terminal is located at 799 South Seaside Avenue on Terminal Island in the POLA (Figure 1-5). The Southwestern marine terminal consists of approximately 14 acres and is located in an area zoned “Qualified, Manufacturing”. The Southwestern marine terminal has four berths (238, 239, 240B and 240C).

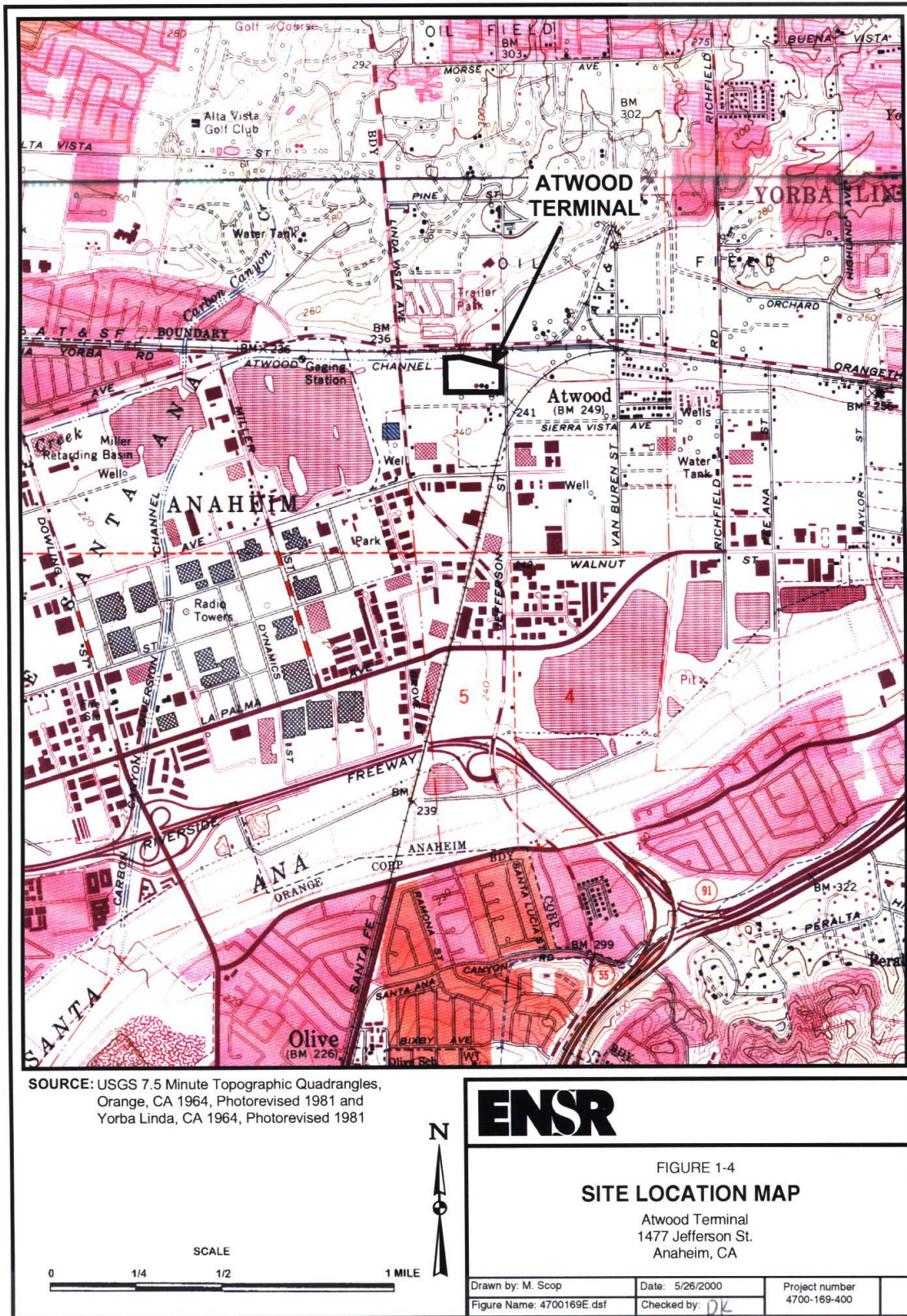




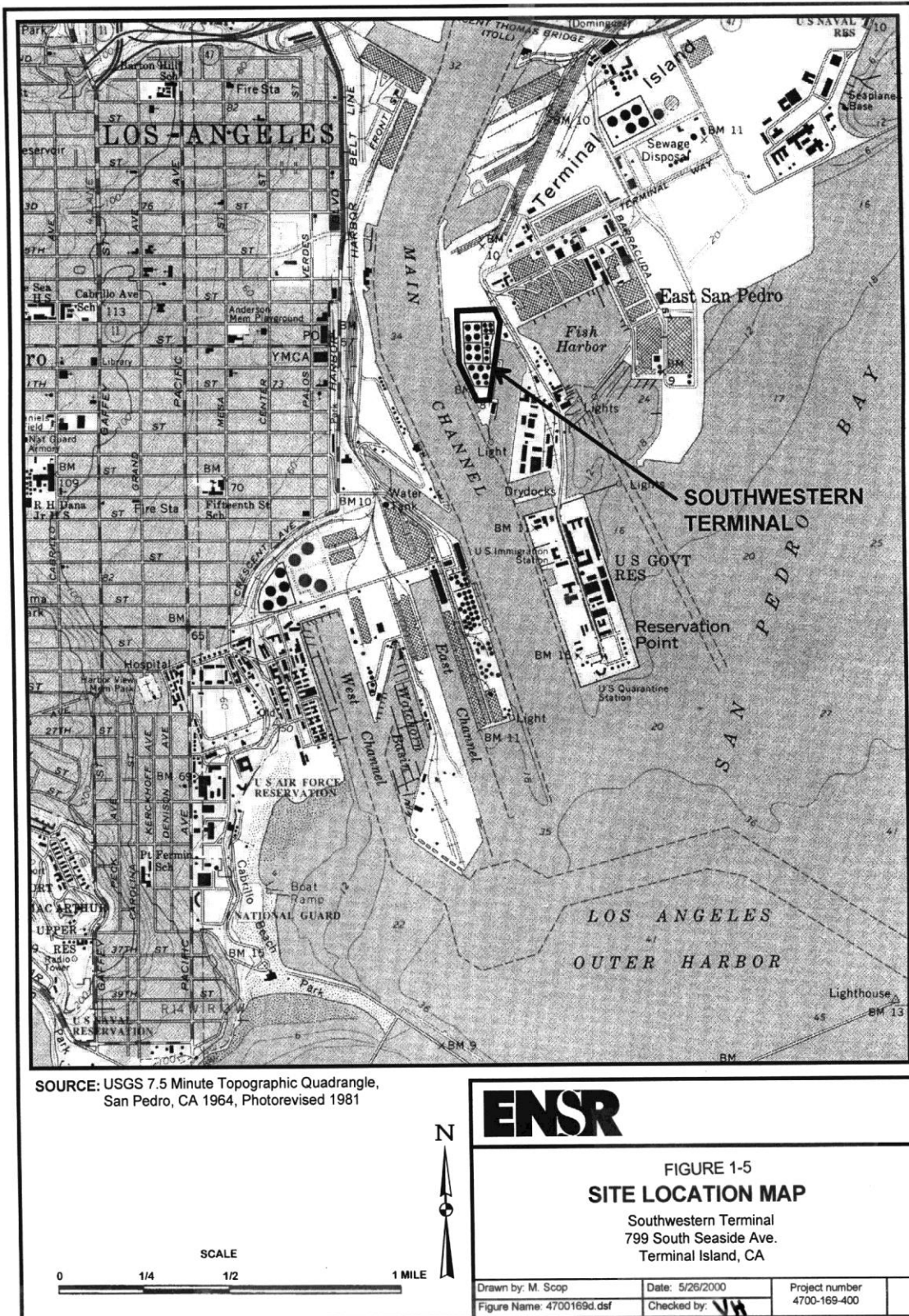
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4700-169-200

Project number  
4700-169-400









## **CHAPTER 2**

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### **PROJECT DESCRIPTION**

**Proposed Project**

**Permits and Approvals**

**Construction Schedule**

**Operation**

**Project Termination and Decommissioning**

## 2.1 PROPOSED PROJECT

The proposed project includes replacing MTBE with fuel ethanol in reformulated gasoline to comply with the Governor's Executive Order. Fuel ethanol, which is denatured, typically contains 95 percent ethanol and up to 5 percent gasoline. To phase out MTBE and meet the CARB 3 fuel specifications, processing changes and equipment modifications will be required at the Mobil Torrance refinery and at the marine and distribution terminals.

Table 2-1 presents a summary of the key elements of the CARB 3 specifications that are driving the proposed project, the relevance of these specifications to the proposed project, and Mobil's proposed processing changes to achieve these elements at the refinery and marine and distribution terminals. A discussion of each of the listed items in the table below is included in this section.

It should be noted that other CARB 3 fuel specifications, specifically the reduction of benzene, do not require process changes. Therefore, these specifications will not be discussed in this document.

**Table 2-1**  
**Key CARB 3 Specifications and Proposed Processing Changes**

<b>Elements of CARB 3 Specification</b>	<b>Relevance to Project</b>	<b>Proposed Processing Changes</b>
1. Prohibition of MTBE	<ul style="list-style-type: none"> <li>• Mobil plans to use fuel ethanol as a replacement</li> <li>• The use of fuel ethanol will require the removal of butanes and pentanes from gasoline to meet the Reid Vapor Pressure (RVP) specifications</li> </ul>	<p><u>Refinery</u></p> <ul style="list-style-type: none"> <li>• Light FCCU gasoline RVP reduction</li> <li>• Light HDC gasoline RVP reduction</li> <li>• Deisobutanizer Tower modifications with depentanizing capability</li> <li>• Alky feed hydrotreating</li> <li>• LPG on-loading (rail), storage and transportation</li> <li>• Fuel ethanol storage, off-loading and transportation</li> </ul> <p><u>Terminals</u></p> <ul style="list-style-type: none"> <li>• Fuel ethanol storage</li> <li>• In-line blending</li> <li>• Railcar, truck and marine on- and off-loading facilities</li> </ul>

**Table 2-1**  
**Key CARB 3 Specifications and Proposed Processing Changes**

<b>Elements of CARB 3 Specification</b>	<b>Relevance to Project</b>	<b>Proposed Processing Changes</b>
2. Reduced Sulfur Limits in Gasoline	<ul style="list-style-type: none"> <li>Mobil plans to reduce the sulfur content of refinery streams that make up the gasoline pool</li> </ul>	<ul style="list-style-type: none"> <li>FCC gasoline sulfur reduction</li> <li>Alkylate sulfur reduction</li> <li>Sulfur contamination elimination</li> </ul>
3. Increased Limitations for T50 and T90 Distillation Points and Aromatic Hydrocarbon Cap	<ul style="list-style-type: none"> <li>Mobil may need to import additional refinery streams and export other refinery streams to meet the CARB 3 specifications for the gasoline pool</li> </ul>	<ul style="list-style-type: none"> <li>Light HDC gasoline component isolation</li> <li>Light FCC gasoline stream splitter</li> <li>Component purchase/sales logistics*</li> <li>FCC Mid-Cut gasoline component</li> </ul>
* Component may also be purchased to help meet CARB 3 specifications.		

Each of the modifications identified in Table 2-1 is discussed in more detail in the following subsections.

### **2.1.1 Refinery Modifications**

The proposed project at the refinery consists primarily of modifications to existing refinery equipment along with the addition of some new equipment. Table 2-2 presents the proposed refining processing changes and affected equipment.

**Table 2-2**  
**Proposed Torrance Refinery Processing Changes and Affected Equipment**

<b>CARB 3 Element</b>	<b>Processing Changes</b>	<b>Affected Equipment</b>
1. MTBE Removal	Light FCCU gasoline RVP reduction	Existing Unsaturated Gas Plant Debutanizer
	Light HDC gasoline RVP reduction	Existing Stabilizer
	Butane/pentane Handling	Existing Deisobutanizer Tower and New De-pentanizer
	Alky Feed Hydrotreating	Existing Alky Feed
	LPG rail facilities	New Pentane Storage Vessels, Loading Rack and Track

**Table 2-2 (Continued)**  
**Proposed Torrance Refinery Processing Changes and Affected Equipment**

<b>CARB 3 Element</b>	<b>Processing Changes</b>	<b>Affected Equipment</b>
1. MTBE Removal (continued)	Fuel ethanol storage	New tanks, Rail and Off-loading Facilities
	Gasoline storage	Existing Tanks in the Tank Farm
2. Sulfur Reduction	FCC gasoline sulfur reduction	Existing HDT Reactors Existing Heater
	Alkylate sulfur reduction	Existing Merox System
	Sulfur contamination elimination	Existing Crude Overhead Compressor
3. Other Elements	Light HDC gasoline component isolation	New Piping
	Light FCCU gasoline	New Splitter
	Component purchase/sales logistics	Existing/New Piping Associated with Tank Alignments in the Tank Farm
	FCC Mid-Cut gasoline component	<u>Option 1</u> New stripping tower Existing UNSPG re-run tower  <u>Option 2</u> Existing FCC main column

### 2.1.1.1 MTBE Removal

With the discontinued use of MTBE, the oxygen requirement for gasoline will be met by the use of ethanol. However, because the ethanol RVP effect is higher than MTBE, more of the other light components of the gasoline blend need to be removed. The following paragraphs discuss each process and piece of equipment affected by the RVP reduction requirement.

#### Light FCCU– Unsaturated Gas Plant Debutanizer

The Fluid Catalytic Cracking Unit (FCCU) is used to convert heavy oils into lighter and more valuable gasoline components. One of these components is the Light FCCU gasoline stream. The additional removal of butanes/pentanes will reduce the RVP of the Light FCCU stream. The existing Unsaturated Gas Plant (USGP) Debutanizer Tower would be modified to improve butane/pentane removal efficiency. These modifications would consist of tray and control system upgrades. In addition, there may be overhead cooling upgrades or a new condenser, which would improve tower efficiency. The butanes and pentanes would be transported offsite via train to New Mexico for storage for additional fuel stock in the winter. In



addition, the butanes and pentanes may be transported, stored, and/or sold commercially. The butanes may also be used to meet existing fuel gas requirements.

### **Light HDC – Stabilizer**

The refinery's hydrocracker (HDC) unit is used to convert heavier feedstocks into lighter and more valuable products. One of these components is the Light HDC gasoline stream. The existing Stabilizer in the HDC unit would be modified to improve tower efficiency. The modifications would include providing additional tower trays and control system upgrades. In addition, there may be overhead cooling upgrades or installation of a new condenser. The existing reboiler would be operated up to its permitted capacity, which would not require equipment modifications. These changes would result in the removal of additional butanes and pentanes, further reducing the RVP of the Light HDC gasoline stream.

### **Deisobutanizer Tower – Butane Handling**

An increased volume of butanes would be available to export for storage in New Mexico and to sell on the commercial market. Consequently, a portion of the butane stream may require additional processing, which would consist of modifications to the refinery's existing Deisobutanizer Tower. The modifications would consist of the addition of a pump and additional piping. Additional steam may be required to produce the necessary separation within the modified tower. As part of these modifications, the potential exists for the addition of a second steam reboiler and overhead condenser upgrades. In addition, a de-pentanizer to the alky C4 butane and saturated gas plant (SGP) stream would be added.

The refinery would use a caustic extraction system for a pentane stream (C5) on the SGP de-butanizer with sulfur processing capability. The analysis in the EIR will assume these alternatives.

### **Alky Feed – Hydrotreating**

To accommodate the various market demands for gasoline, fungibility (e.g., the ability to interchange products throughout the distribution system) concerns may dictate the use of 5.7 volume percent ethanol versus 7.7 percent ethanol. Use of the lower volume percent of ethanol would reduce the octane content of the gasoline. To compensate for this, hydrotreating of the Alky Feed would recover octane lost due to ethanol blending especially with respect to the 5.7 volume percent case. Hydrotreating would involve the installation of a reactor and associated equipment along with a minor increase in refinery hydrogen consumption.

## **Liquefied Petroleum Gas (LPG) Rail Facilities – Vessels, Loading, and Additional Track**

To process the volumes of additional butanes and pentanes that would be removed from the various component streams, the refinery is planning on installing LPG rail facilities and associated equipment. The equipment would include one butane, two iso-pentane storage vessels, an on/off-loading facility and the additional track required to support the rail loading operation.

## **Fuel Ethanol Storage – Tanks, Rail and Off-loading Facilities**

Although Mobil does not plan to blend fuel ethanol at the refinery, fuel ethanol would be stored at the refinery for blending at the Torrance loading rack. Two new tanks would be constructed at the tank farm west of Prairie Avenue to store the fuel ethanol. Additional piping, valves, flanges, and regulators would need to be constructed to transport the fuel ethanol from this new storage facility to the Torrance loading rack on the opposite side of Prairie Avenue. Additional rail and off-loading facilities would also be constructed at the Prairie site.

## **Gasoline Storage – Tanks**

Ethanol has a strong affinity for combining with water. To minimize the potential for water contamination of gasoline, domed geodesic roofs would be installed on up to eight aboveground gasoline storage tanks.

### **2.1.1.2 Gasoline Sulfur Reduction**

Another feature of the CARB 3 specifications is the reduction of sulfur content in gasoline. The following paragraphs present the processes and equipment Mobil proposes to modify to meet this requirement.

## **FCC – Hydrotreater Reactors and Heater Modifications**

One of the main objectives of the Hydrotreater (HDT) is to remove organic sulfur compounds from its feedstock. Currently the HDT removes approximately 95 percent of the organic sulfur compounds from its feedstock, however, additional sulfur removal is needed to meet the CARB 3 fuel specifications. Operation of the existing HDT Reactors would be modified to increase reactor temperatures and hydrogen consumption in order to achieve greater FCCU gasoline sulfur reduction. No physical modifications to the reactors are planned.

HDT operational changes alone would tend to reduce gasoline production below existing levels. To maintain current gasoline production levels, part of the HDT modification project may involve potential heater modifications and increased fuel firing rates. These modifications are expected to make up for the reduction in

gasoline. The additional sulfur removed will be sent to the refinery's existing sulfur plant.

### **Alkylate– Additive Water Wash System and Merox System**

The alkylation unit produces alkylate, which is a gasoline component with a high octane. The existing Additive Water Wash System operations would be modified to minimize the entrainment of specific additives in the alkylate stream, which would reduce the sulfur content of alkylate. No physical modifications would be conducted at the additive water wash system. Operational changes would include purging additional water. There would be an expected minor increase in wastewater flow rates due to the increased purge rate. In addition, the existing Merox System would be modified to increase sulfur removal. The modification would include alterations to increase the Merox System's naphtha wash efficiency.

### **Sulfur Contamination Elimination – Overhead Compressor Modifications**

The crude unit uses high temperatures and pressures to distill the crude oil into lighter more valuable products, which are ultimately used in gasoline production. The refinery plans to modify an existing compressor in order to minimize crude unit atmospheric overhead gas to the USGP or re-route the stream to an alternate location. A second compressor would be upgraded and the Isoabsorber in the SGP would be retrayed. This would reduce sulfur contamination.

#### **2.1.1.3 Other CARB 3 Elements – Distillation and Aromatic Hydrocarbon Caps**

The refinery plans to comply with distillation and aromatic hydrocarbon cap specifications of CARB 3 by making several other miscellaneous refinery changes.

#### **Light HDC Gasoline Component Isolation - Piping**

To meet the distillation and aromatic cap fuel specifications and to achieve further sulfur reductions, the refinery plans to isolate the light HDC gasoline stream through additional piping, regulators, valves, and flanges. Six new valves on an existing line are planned. The isolation of this gasoline component would also help to meet the gasoline sulfur specification by preventing sulfur contamination from other refinery streams.

#### **Light FCC Gasoline – Splitter Modifications**

The refinery is planning to build a Light FCCU gasoline splitter in order to optimize the CARB 3 distillation and sulfur specifications. The modifications consist of a new tower, tank, reboiler and associated equipment including additional piping, valves, flanges and an additional Merox sulfur extraction system.

## **Component Purchase/Sales Logistics – Tank Farm**

To comply with CARB 3 distillation and aromatic hydrocarbon cap specifications, the refinery may have to import additional alkylate, raffinate (gasoline blending component) and iso-octane (gasoline blending component). In addition, heavy FCC Naphtha, straight run naphtha, pentane, and butane may need to be exported. In order to optimize available tankage, pipeline modifications are expected for these additional imports and exports. As discussed under the LPG Rail Facilities subsection, one butane and two iso-pentane storage vessels would also be constructed adjacent to Prairie Avenue to store the pentanes and butanes prior to export via rail. The rail spurs adjacent to Prairie Avenue would be modified for delivery and export of pentane/ butane. A separate spur and loading rack would be constructed for importing ethanol.

## **FCC ‘Mid-Cut’ Gasoline Component Optimization**

The refinery would separate heavy FCC naphtha into two streams for distillation T50/T90 management, sulfur reduction, and light-ends containment. The refinery would do this by modifying the USGP re-run tower to accommodate the required fractionation and by adding a stripping tower to remove the light-ends and sulfur from the ‘mid-cut’ component stream.

If the option described above is not conducted, the refinery would separate out heavy end naphtha into light cycle oil (LCO) at the main column of the FCC. The existing tower would be modified.

### **2.1.2 Marine and Distribution Terminal Improvements**

To meet the oxygenate requirements of the CARB 3 gasoline without MTBE, fuel ethanol will be blended into the gasoline. However, because of the affinity of ethanol for water, blending activities will be conducted at the terminals instead of at the refinery. Fuel ethanol is not produced commercially in Southern California, so it will be transported to the Los Angeles area by rail and by ship. Currently large amounts of MTBE are imported by ship from the Gulf Coast. Replacing MTBE with fuel ethanol will result in displacing MTBE marine vessel trips by fuel ethanol marine vessel trips.

Fuel ethanol will be off-loaded from train tank cars at both the Vernon terminal and Torrance refinery. The fuel ethanol will be distributed from the mentioned off-loading facilities by trucks, as necessary, to Mobil’s distribution terminals.

In addition, fuel ethanol will be off-loaded from ships at the existing Mobil Southwestern marine terminal in the POLA. Fuel ethanol will be distributed from the Southwestern marine terminal by trucks, as necessary, to Mobil’s distribution terminals.

Table 2-3 presents a summary of the proposed equipment modifications and additions proposed for each terminal. The following subsection summarizes the modifications and improvements at the terminals.

**Table 2-3**  
**Proposed Terminal Changes**

<b>Terminal</b>	<b>Proposed Change and/or Addition</b>
Torrance Loading Rack	<ul style="list-style-type: none"> <li>• Construct new fuel ethanol off-loading rack</li> <li>• Modify existing vapor recovery unit</li> <li>• Modify existing piping and manifolds to allow for in-line blending</li> </ul>
Vernon Terminal	<ul style="list-style-type: none"> <li>• Modify existing rail spur</li> <li>• Construct new rail car off-loading system</li> <li>• Construct two new truck off-loading areas</li> <li>• Modify existing loading rack</li> <li>• Modify existing vapor recovery unit for blended gasoline</li> <li>• Modify existing vapor destruction unit or add new vapor destruction unit for ethanol loading</li> <li>• Convert two existing storage tanks to store fuel ethanol</li> <li>• Construct one new gasoline tank</li> <li>• Install new area lighting and drainage system</li> </ul>
Atwood Terminal	<ul style="list-style-type: none"> <li>• Modify existing truck rack</li> <li>• Construct two new truck off-loading areas</li> <li>• Install one new storage tank</li> <li>• Install new area lighting and drainage system</li> </ul>
Southwestern Marine Terminal	<ul style="list-style-type: none"> <li>• Construct one new truck loading rack</li> <li>• Convert two existing tanks</li> <li>• Construct new vapor combustor</li> <li>• Install new area lighting and drainage system</li> </ul>

#### **2.1.2.1      Torrance Loading Rack (City of Torrance)**

Improvements at the Torrance loading rack include constructing a new fuel ethanol off-loading rack and modifications to an existing vapor recovery unit and equipment to allow in-line blending.

#### **2.1.2.2      Vernon Terminal (City of Vernon)**

Improvements at the Vernon terminal include modifying three existing railroad spurs to accommodate fuel ethanol off-loading and installing a new rail car off-loading system. Approximately 15 rail cars carrying fuel ethanol would be offloaded per day

at the Vernon terminal. Two vertical can pumps would be installed to accommodate up to 15 rail car off-loading positions.

Additional improvements include the construction of two new truck fuel ethanol off-loading areas with two off-loading positions in each area. The truck off-loading areas would be used to substitute or supplement fuel ethanol delivery via rail. Modifications would be also made to an existing loading rack and a new truck loading lane would be constructed for ethanol. Operational changes would be made to an existing vapor recovery unit (VRU) for blending gasoline loading. The existing vapor destruction unit would be modified to accommodate ethanol loading or a new dedicated vapor destruction unit would be constructed. In addition, piping for in-line blending at the loading rack and on- and off-loading of fuel ethanol would be modified. Four 400-gallon-per-minute (gpm) self priming pumps and new meters for the off-loading of trucks would be installed. Approximately 22 trucks per day would carry fuel ethanol out of Vernon to Atwood and potentially to two other third-party terminals located in Colton and Mission Valley.

Fuel ethanol storage at the Vernon facility would be accommodated by the conversion of two existing aboveground storage tanks (Tanks 3 and 4) which total approximately 80,000 barrels. A new 50,000 barrel aboveground storage tank and associated containment dike and piping would be installed in the east tank farm for additional gasoline storage capacity formerly accommodated by Tank 4. Two 1,600 gpm pumps and piping would be installed in association with the new gasoline tank. Additional piping, valves, flanges, and regulators would also be installed in association with the conversion of the existing tanks and the new gasoline storage tank.

New area lighting and a drainage system would be installed at the rail, truck off-loading and new aboveground storage tank areas.

### **2.1.2.3 Atwood Terminal (City of Anaheim)**

Improvements required at the Atwood terminal include the modification of a truck rack, piping and metering which would be used for off-loading, storage and blending of fuel ethanol. A new fuel ethanol header would be installed at the truck rack and branch lines to the existing lanes would be installed.

Two fuel ethanol truck off-loading areas with two off-loading positions at each area would be constructed. Four 400-gpm self priming pumps would be installed to off-load the fuel ethanol from the trucks. In addition, new meters would be installed to ensure control of the system. Approximately 10 trucks per day of fuel ethanol would be brought to Atwood.

Fuel ethanol storage at the Atwood facility would be accommodated by the installation of an approximately 10,000 to 15,000 barrel aboveground storage tank to the northwest of the existing loading rack. The existing storage tank dike wall would be modified and two 400 gpm pumps and piping would be installed. Additional valves, flanges, and regulators would also be installed in association with the new tank.

New area lighting and a drainage system would be installed at the truck-off loading and new aboveground storage tank areas.

#### **2.1.2.4 Southwestern Marine Terminal (Port of Los Angeles)**

The improvements at the Southwestern marine terminal include the installation of a new truck loading rack, a new vapor combustor, and piping and metering modifications for loading fuel ethanol. The truck on- and off-loading rack would accommodate up to 48 trucks per day. The new truck rack would be equipped with three fuel ethanol loading arms with meters, control valves, overfill protection, grounding and preset controllers. In addition, a canopy would be constructed for the new truck lane.

Fuel ethanol storage at the Southwestern marine terminal would be accommodated by the conversion of two existing aboveground storage tanks, whose capacity totals approximately 160,000 barrels. Internal piping, controls and meters would be installed in association with the storage tanks. Two 1,200 gpm pumps would be installed to transfer fuel ethanol from the tanks to the truck loading rack. Additional piping, valves, flanges, and regulators would also be installed in association with the conversion of the existing tanks.

New area lighting and a drainage system would be installed at the truck on- and off-loading area.

#### **2.1.3 Los Angeles Basin Pipelines**

Numerous Mobil-owned and common carrier pipelines already transport hazardous liquids within the Los Angeles area. These existing pipelines could be used to transport fuel ethanol to the terminals for distribution and blending.

## **2.2 PERMITS AND APPROVALS**

The proposed project will require a number of permits and approvals before construction and operation can commence. The majority of the permits and approvals will include SCAQMD permits (e.g., permits for new sources, and changes to existing permits). While no changes in land use are proposed at any of the facilities, approvals typically in the form of conditional use permits and building

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permits may be required from each of the cities or jurisdictions where the facilities are located. Modifications to existing wastewater and stormwater discharge permits, and other ministerial permits such as grading and electrical permits may also be required. The EIR will identify to the extent possible all new or modified permits required for the proposed project and the associated permitting agencies.

## **2.3 CONSTRUCTION SCHEDULE**

Construction of the proposed project at the Torrance refinery is currently scheduled to begin in June 2001. Activities associated with producing gasoline that complies with the MTBE Phase-out mandate and CARB 3 gasoline specifications will be completed by January 2003. Other follow-up activities will be undertaken between June 2001 and 2006 to return gasoline production levels to pre-CARB 3 volumes. Construction is anticipated to take place four days per week, Monday through Thursday, from 7:00 a.m. to 5:00 p.m. Occasional night or weekend shifts may be required to maintain the construction schedule.

The construction activities at the terminals will begin in March 2001 and be completed within 15 months. The maximum duration for construction at an individual terminal will be 12 months. Construction activities will occur Monday through Friday from 7:00 a.m. to 5:00 p.m. Occasional night or weekend shifts may be required to maintain the construction schedule.

## **2.4 OPERATION**

The proposed project will not require additional workers for operations and maintenance of the new and modified equipment, technical and laboratory support, and product marketing. Consistent with existing refinery operations, the project will operate 24 hours per day for 365 days per year.

## **2.5 PROJECT TERMINATION AND DECOMMISSIONING**

The estimated lifetime of the proposed project additions and modifications to the Torrance refinery is over 40 years. The appropriate equipment may then be shut down and/or decommissioned, modified, and/or expanded in accordance with the applicable regulations and market conditions prevailing at the time of termination. The form of decommissioning would likely involve a combination of salvage or disposal at an approved landfill, as well as site restoration.



## **CHAPTER 3**

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### **ENVIRONMENTAL CHECKLIST**

### 3.1 INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

### 3.2 GENERAL INFORMATION

<b>Project Title:</b>	<b>Mobil California CARB Phase 3 Reformulated Gasoline Project</b>
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 E. Copley Drive Diamond Bar, CA 91765
Contact Person:	Jonathan Nadler
Contact Phone Number:	(909) 396-3071
Project Sponsor's Name:	Mobil Oil Corporation
Project Sponsor's Address:	3700 West 190th Street Torrance, California 90509
General Plan Designation:	Torrance Loading Rack –Industrial (Heavy) and Industrial (Business Park) (west of Prairie Avenue) Vernon Terminal – M (General Industry) Atwood Terminal –General Industrial Uses Southwestern Marine Terminal – Commercial/Industrial (General Cargo/Bulk Uses)
Zoning:	Torrance Loading Rack – M2 (Heavy Manufacturing) Vernon Terminal – M (General Industry) Atwood Terminal – SP94-1 (Development Area 1 – Northeast Area Specific Plan – Industrial Area) Southwestern Marine Terminal – [Q]M3 (Qualified, Manufacturing)
Description of Project:	Mobil is proposing modifications to its existing refinery, loading rack and three related terminals in order to meet the CARB 3 specifications for gasoline without MTBE, to blend and transport ethanol instead of MTBE as an oxygenate in gasoline, to continue to comply with State and Federal reformulated fuels requirements and to return gasoline production to pre-CARB 3 volumes. Ethanol is currently the only oxygenate that is approved by CARB as a replacement for MTBE in gasoline.
Surrounding Land Uses and Setting:	The refinery, loading rack and terminals are located in industrial areas of Los Angeles and Orange counties. See Chapter 1, page 1-2 for additional project location and setting information.
Other Public Agencies Whose Approval is Required:	Various local agencies where the project sites are located, including the cities of Torrance, Vernon and Anaheim, as well as the POLA.

### 3.3 POTENTIALLY SIGNIFICANT IMPACT AREAS

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input checked="" type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Energy
<input checked="" type="checkbox"/> Geology/Soils	<input checked="" type="checkbox"/> Hazards & Hazardous Materials	<input checked="" type="checkbox"/> Hydrology/ Water Quality
<input checked="" type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise
<input type="checkbox"/> Population/Housing	<input checked="" type="checkbox"/> Public Services	<input type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Solid/Hazardous Waste	<input checked="" type="checkbox"/> Transportation/ Traffic	<input checked="" type="checkbox"/> Mandatory Findings of Significance

### 3.4 DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: August 29, 2000

Signature: Steve Smith  
Steve Smith, Ph.D.  
Program Supervisor

### 3.5 ENVIRONMENTAL CHECKLIST AND DISCUSSION

Issues identified that may result in significant impacts will be fully evaluated in the EIR for the proposed project.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

I.a and b) The Torrance Refinery is located in an area surrounded by residential uses to the north and south, and by similar 'heavy industry' facilities to the east, west and south. The Torrance Loading Rack is in the western portion of the refinery and not readily visible from outside the refinery.

I.a and b continued) The Vernon, Atwood, and Southwestern terminals are all located in developed industrial settings. The Vernon terminal is fully surrounded by industrial properties and is not readily visible from residences, freeways, or thoroughfares leading directly to residences. The Atwood terminal has residences to the north and industrial properties to the west, south, and east. The residences to the immediate north are somewhat elevated above the level of the terminal but located at least ¼ mile away and shielded from the facility by fencing and buildings. Other residences farther to the north and east are at a still higher elevation but are several miles from the facility. The Southwestern marine terminal sits on a triangular property and is bounded on the west and southeast by water and the north by a container terminal. As with the Atwood facility, the Southwestern marine terminal has residential areas that are at higher elevations and could look down on the facility, however those residences are also several miles away.

There are neither scenic vistas nor scenic resources in or near the project areas. The modifications to the equipment at the Torrance refinery are not expected to negatively affect visual resources since the equipment is located entirely within the boundaries of the existing refinery. Storage vessels will be constructed within a portion of the refinery which is located to the west of Prairie Avenue. The storage vessels will be similar in size and appearance to storage vessels which are currently located in this area. In addition, components similar in appearance and size to the existing refinery equipment would be used. Based on these considerations, the proposed project will not impact a scenic vista or damage scenic resources. Therefore, this area will not be addressed in the EIR.

I.c.) Proposed equipment modifications and construction at the Torrance refinery, the three terminals and the Torrance loading rack would be conducted within the confines of the existing facilities and would include the modification of existing equipment and the installation of equipment and storage vessels which are similar in size and appearance to the existing equipment.

Based on the small changes that will occur at the facilities, the addition of structures similar to those already located at the sites, and distance to sensitive receptors, the project is not expected to result in a significant impact to visual resources. As a result, this issue area will not be examined in the EIR.

I.d.) Additional permanent light sources required as part of the proposed project would be installed and operated in a manner consistent with the existing lighting in the project areas. Construction and/or modification activities are scheduled to occur during daylight hours and will require no additional lighting. If nighttime construction and/or modification activities are necessary, temporary lighting may be required. Since the project locations are completely within the boundaries of existing Mobil facilities, additional temporary lighting is not expected to be discernible from the existing lighting. No significant impacts to light and glare are anticipated as part of this project.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE RESOURCES.</b> Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

II.a and c) The proposed project includes improvements and modifications at existing industrial facilities. No agricultural resources are present on the refinery or terminal sites. Therefore, the project would not convert farmland [as defined in Item a) above] to non-agricultural use or involve other changes in the existing environment that could convert farmland to non-agricultural use.

II.b.) Additionally, no land in the vicinity of the refinery or terminal sites is currently zoned for agricultural use. Therefore, the project does not conflict with existing agricultural zone or Williamson Act contracts. Based on these considerations, agricultural resources will not be discussed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY.</b> Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



III.a and c) Overall, the proposed project would contribute to improving air quality by reducing mobile source emissions from vehicles using CARB Phase 3 reformulated gasoline. The proposed project would, therefore, contribute to attaining and maintaining ambient air quality standards as outlined in the AQMP, as well as reducing toxic air contaminant emissions as outlined in the SCAQMD's Air Toxic Reduction Plan. However, potential short term impacts may occur as a result of project construction. Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOCs), and fugitive dust (PM<sub>10</sub>) may be generated from construction-related traffic, the operation of construction equipment, and related disturbances to the ground surface. The impacts of these construction emissions will be evaluated in the EIR.

An increase in emissions may occur during the operation of the proposed project. The proposed project may result in an increase in emissions of VOCs due to construction of new fugitive components and process vents and/or drains. VOC emissions contribute to the formation of ozone in the atmosphere. Additional emissions from changes to the combustion devices at the refinery may occur. Emissions may also occur from mobile sources (e.g., truck and rail trips) during operation of the project. Alternatively, there may also be reductions in tank emissions due to a decrease in the RVP of stored gasoline. The impacts of these operation emissions will be evaluated in the EIR.

III.b and d) As a first step in the analysis, changes in the emissions of criteria pollutants will be estimated. If significant increases in criteria pollutant emissions, except VOC, are estimated, air dispersion modeling will be performed to determine the potential project impacts on localized ambient concentrations of criteria pollutants. The results of the modeling will be included in the EIR.

The project may also change the amount and nature of toxic air contaminant emissions from the refinery and terminals. Toxic emissions changes from the refinery will be evaluated and a human health risk assessment to assess the net effect of expected changes in air toxic emissions from the refinery will be performed and included in the EIR.

The change in toxic emissions, if any, from the terminals is expected to be minimal. Screening level health risk assessments will be performed for the terminals. If significant effects are identified, appropriate mitigation will be defined and included in the EIR.

III.e and f) The proposed project would not significantly alter air movement, moisture, or temperature, or cause climatic changes because of the small size of the changes relative to the scale of these criteria. Ethanol will be stored in covered tanks with vapor recovery systems. There are no changes that would contribute to odors from the refinery or terminals; therefore, the project is not expected to cause noticeable changes in odors from the refinery.

The project proponent will be required to comply with all relevant source-specific rules for existing equipment (SCAQMD Regulation XI rules); all relevant prohibitory rules (SCAQMD Regulation IV rules); all rules governing installation of new, modified, or relocated equipment (SCAQMD Regulation XIII rules); etc. Consequently, the proposed project will not diminish existing or future air quality rules or regulations.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:			
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV.a, b, c, and d) The proposed project would be located within existing boundaries of the Torrance refinery and related terminals, which have already been greatly disturbed. These areas do not support riparian habitat, federally protected wetlands, or other sensitive natural communities; nor are there migratory corridors on any of the proposed project sites. Based on a review of California Natural Diversity Data Base maps for the project areas (June 2000), no state or federal threatened or endangered plants or animals are located within a mile of any of the four project areas. Two plants [*Atriplex serenana var davidsonii* (California Native Plant Society [CNPS] rare) and *Nemacaulis denudata var denudata* (CNPS 1B)] have been recorded as occurring within a one-mile radius of Mobil's Southwestern terminal. However, the identification of these species in the project area is based on surveys performed between 1891 and 1906.



One animal [*Phrynosoma coronatum blainvillei* (California Department of Fish and Game special concern)] is recorded as occurring within a one-mile radius of the western edge of the Torrance refinery. Based on the fact that the project areas have experienced historic, long-term disturbance, it is highly unlikely that the animals and two plant species would be located in the project areas. While no specific surveys have been performed for this IS, no significant impacts to special-status plants or animals are expected from the construction and continued normal operations of the project.

IV.e and f) The proposed project will conflict with neither local policies or ordinances protecting biological resources nor local, regional, or state conservation plans of any type. In addition, the proposed project will not conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan or other approved local, regional or state conservation plan of any type.

Since impacts to biota are not expected, this issue area will not be considered in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a archaeological resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside a formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

V. a) Because construction is confined within the footprints of existing facilities, no impacts to historical resources will occur as a result of this project. Therefore this area will not be discussed in EIR.

V. b, c and d) According to information obtained from the Archaeological Information Center at the UCLA Institute of Archaeology, only the Southwestern marine terminal has had an archaeological survey performed. Although, constructing new tanks, below-grade piping, rail and truck on- and off-loading facilities, and the installation of drainage features will require minimal disturbance to the ground surface, potential impacts to historical, archaeological or paleontological resources will be evaluated further in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VI. ENERGY.</b> Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VI.a, b, and c) It is in the economic interest of Mobil to conserve energy and comply with existing energy standards thereby minimizing operating costs. Consequently, the project is not expected to conflict with energy conservation plans. The project will result in a small increase in the amount of natural gas consumed by the Torrance refinery although there will be no such increase at the terminals. Because the infrastructure and natural gas supply is ample to supply this increased demand, the project will not result in the need for new natural gas utility systems. In addition, no new or substantially altered power or natural gas utility systems will be required by the project components. The project would also result in an increase in electrical power use due to an increase in pumping requirements and operation of other new or modified equipment. These increases are expected to be greatest at the Torrance facilities and the Vernon terminal. These two locations will have the most modified or new equipment. The EIR will review the requirement for additional electricity in relation to the available supply within the region as well as effects on peak and base demands for electricity.

VI.e.) The proposed project will comply with existing energy standards, therefore this area will not be discussed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:			
a.) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:			
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII.a) According to the Alquist-Priolo Earthquake Fault Zoning Map, the proposed project will be constructed in an area of known seismic activity. The construction of the project elements will conform to the Uniform Building Code and other applicable codes. Based on the nature of each project component (modification or new construction), a civil or structural engineer with training in design methods to limit damage from a possible earthquake will review and approve these components. The potential for impacts from seismic shaking, liquefaction, or ground rupture from a known earthquake fault will be addressed in the EIR. If appropriate, mitigation measures will be recommended.



Since the project improvements at the terminals include the addition of a new tank at the Torrance refinery, Vernon terminal and Atwood terminal, the EIR will evaluate the seismic effects on storage tanks. Similarly, since the project includes transporting ethanol and pentanes by rail and truck, the EIR will analyze the potential impacts that would result from a seismic event. Project activities at the Southwestern terminal are limited to the construction of a loading rack and the conversion of two existing storage tanks. No new tanks will be constructed. Therefore, geology and soils will not present a significant concern to the Southwestern Marine terminal project components.

VII.b and e) Minimal grading is planned and therefore, the proposed project is not expected to result in substantial soil erosion or the loss of topsoil. No septic tanks or alternative waste water disposal systems will be used as part of the proposed project, therefore, no impacts as a result of incompatible soils will occur as a result of the project. These two areas will not be evaluated further in the EIR.

VII.c) The potential for the proposed project to be located on a geologic unit or soil that is unstable or would become unstable will be addressed in the EIR.

VII.d) No expansive soils are present in the proposed project areas. Therefore, the proposed project will not create substantial risks to life or property as a result of expansive soils. This area will not be evaluated further in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:			
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



VIII.a) The refinery currently stores, uses and transports hazardous materials. However, the proposed project would result in the storage, use, and transportation of different types of hazardous materials. The hazardous materials include: pentane, butane, fuel ethanol, and hazardous petroleum waste products from tank cleaning. Current hydrofluoric acid usage will not be impacted as a result of the proposed project. Pentane and butane are regulated flammable substances under the Federal Risk Management Program and the California Accidental Release Program. Based on these considerations, the potential exists that significant hazard impacts could occur. The potential effects of an accidental release of hazardous materials being stored, used, and transported will be evaluated in the EIR. If significant impacts are identified, appropriate mitigation will be included in the EIR.

VIII.b) Upset and accident conditions may release hazardous materials into the environment. Various release scenarios and the potential impacts of the releases will be modeled in the EIR. Mitigations to reduce the potential frequency and severity of releases will be recommended.

VIII.c) None of the proposed facility modifications are expected to create hazardous emissions within one-quarter of a mile of an existing or proposed school. This information will be verified during the EIR for all the municipalities in which the project sites are located.

VIII.d.) An evaluation of whether the proposed project is listed on a hazardous materials sites list and as such would create a significant hazard to the public will be included in the EIR.

VIII.e and f) The proposed project areas are not located within two miles of a public or private airport. In addition, the modifications to the facilities required for the project are comparable to existing facilities and would not increase safety hazards for people residing or working in the project area.

VIII.g) The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evaluation plan. Procedures for emergency response are provided to all employees along with training guidelines and the use of personal protective equipment. All construction and operation personnel would be safety-trained in accordance with Mobil's procedures. No adverse occupational health impacts are expected as a result of construction and operation of this project. Therefore, this specific issue does not warrant further analysis in the EIR.

VIII.h) The proposed project areas are located in an urban areas and no impacts to wildlands will occur.

VIII.i) The proposed project makes extensive use of flammable materials. Increased fire hazards will be addressed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY.</b>			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY.</b>			
Would the project:			
f) Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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## IX. HYDROLOGY AND WATER QUALITY.

Would the project:

- |  |                                     |                          |                          |
|--|-------------------------------------|--------------------------|--------------------------|
| n) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o) Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

IX.a and f) Based on recent information provided by Lawrence Livermore National Laboratories (December 1999), the use of ethanol will have less impacts on groundwater quality than the use of MTBE because the structural characteristics of ethanol favor faster biodegradation. Information concerning the fate and transport of fuel-blended ethanol and other sources on impacts to surface and groundwater due to contamination with ethanol will be summarized in the EIR. Because the project will include the construction of new storage tanks, the potential for spills to surface waters will be examined in the EIR.

IX. c, d, e, g, h, i, j, m.)As the project would be constructed at existing facilities and involves the construction of a limited number of surface features, no significant changes in stormwater runoff, drainage patterns, groundwater characteristics or flow would result. In addition, the project will not result in an increased risk of flood, seiche, tsunami or mud flow hazards. Therefore, these areas will not be discussed in the EIR.

IX.b, k, l, n and o.) The project will result in an increase in the use of water and the generation of wastewater. The affects of the additional water use and wastewater discharge will be addressed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b> Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X.a and c) The proposed project is not expected to conflict with local habitat conservation plans or natural community conservation plans as the project locations are located in industrialized areas. Additionally, no established communities occur on the project sites, and the project would not divide an established community. Based on these considerations, these areas will not be discussed in the EIR.

X.b.) The proposed project includes improvements and modifications at existing industrial facilities. The activities and products produced by the facilities in association with this project would be similar to those activities and products currently produced. No new land would be acquired for the project and no zoning and/or land use changes are anticipated to be necessary as part of the project. The City of Vernon has an ordinance precluding the construction of an aboveground gasoline storage tank larger than 1,000 gallons. In addition, the City of Vernon has an ordinance for a maximum of three 5,000 gallon tanks. The City of Vernon will need to issue a variance for the construction of the new 50,000-barrel tank. If a variance is granted, there would be less than significant impacts associated with consistency with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. This topic will be discussed in the EIR to determine if the project would conflict with the various local planning/development requirements.



	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES.</b> Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI.a and b.) The proposed project would be constructed at existing industrial sites. There are no known mineral resources on the project sites. Therefore the project would not result in the loss of a known mineral resource that would be of value to the region and residents of the state. Similarly, because there are no known mineral resources on the project sites, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Based on these considerations, potential mineral resource impacts are not considered to be significant and will not be discussed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XII. NOISE.</b> Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XII. NOISE.</b> Would the project result in:			
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII.a,b, c and d) The proposed project improvements at the refinery would be located within the existing fenceline, and construction is expected to be conducted during normal turnaround activities two times a year over the course of approximately five years. The noise levels from this construction activity would not be discernable in the project vicinity. The nearest residences to the refinery are located north of 190<sup>th</sup> Street. The proposed project will not result in excessive groundborne vibration or groundborne noise levels. As the project would occur within an existing industrial setting and operational noise would be comparable to existing activities, the project would not result in human perceptible changes in ambient noise levels.

There would be some construction at the terminals, therefore, the potential exists for a short-term increase in construction noise. However, there are no residences near the Vernon and Southwestern terminals and both facilities are located in industrial settings with noise levels typical of such a setting. The Atwood facility has residences within ¼ mile to the north, but is surrounded by open area or high industrial uses on the west, south, and east. Ambient noise at this facility would be less than at the other two terminals. However, noises typical of those being generated by this project are common in the vicinity.

The short-term noise impacts that would occur during construction will be limited to normal work hours and will have a less than significant impacts on sensitive receptors.

The project may result in an increase in truck trips at the terminals. However, as stated above, the facilities are located in industrial settings with noise levels typical of such a setting.

Based on the above discussion, construction and operational noise impacts will not be discussed in the EIR.

XII. e and f) The proposed project areas are not located within the area of an airport or private airstrip and will not affect airport activities. This area will not be discussed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING.</b> Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**XIII. POPULATION AND HOUSING.** Would the project:

necessitating the construction of replacement housing elsewhere?

XIII.a.) The project would occur within existing industrial facilities located in highly urbanized areas. Because of the large population base in the greater Los Angeles and Orange county areas, it is expected that the existing labor pool would accommodate the labor requirements for the construction of the project. No significant growth in population is expected as a result in this project, therefore, this area will not be analyzed in the EIR.

XIII.b and c) Construction at the terminals would be conducted over a period of 12 to 15 months. Up to two dozen temporary construction jobs would be created as a result of the project. Construction at the refineries will be accomplished during normal turnaround activities, so no new jobs will be created beyond those normally associated with this activity. No operations jobs would be created by the proposed project. Because the project is proposed within existing facilities located near highly urbanized areas, it is unlikely that additional housing would be necessary for the labor force needed for construction. No existing housing would be displaced and substantial housing growth in the area would not occur as a result of the project. Therefore, potential population and housing impacts are considered insignificant and no further analysis will be included in the EIR.

Potentially Significant Impact	Less Than Significant Impact	No Impact
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**XIV. PUBLIC SERVICES.** Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- |                             |                                     |                          |                                     |
|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Fire protection?         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| b) Police protection?       | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Schools?                 | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Parks?                   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XIV.a.) The Torrance refinery maintains an onsite fire department, which is supplemented by public fire departments, to respond to emergency requirements. Due to the relocation of some tankage and the construction of new pentane “vessels” to support export of pentanes and other commodities, the proposed project may increase demands for fire protection resources in support of the refinery.

At Southwestern marine terminal, the project calls for the conversion of existing tankage from MTBE service to fuel ethanol service. There may be a change in the volumes of some other commodities brought into the port. The impacts of these changes or the need for fire protection will be evaluated in the EIR.

XIV.b.) The refinery also has an onsite security department that provides protective services for people and property within the refinery bounds. If necessary, the Torrance police can provide backup and support to the refinery security department. Police protection is provided by the cities of Vernon and Anaheim and for the Vernon and Anaheim terminals, and by the Harbor police and Los Angeles police at the Southwestern marine terminal. The small changes that will result from the project at these facilities will not necessitate expanded police services in their jurisdiction. Because the project primarily involves the construction of tankage and modifications to existing facilities all within the boundaries of the refinery, there would be no increased need for new or expanded police protection in Torrance. Since the proposed project is not expected to affect the need for police protection, this will not be further evaluated in the EIR.

XIV.c, d, e) No additional operational positions will be required, therefore, the proposed project will not induce population growth in the vicinity of the affected project sites. Since there will be no increase in local population, no impacts are expected to schools, parks, or other public facilities. Since the proposed project is not expected to affect public services, such as schools, parks, etc. These areas will not be addressed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XV. RECREATION.</b>			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV.a and b) There would be no changes in population densities resulting from the proposed project and the project will not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities. Similarly the project will not necessitate the construction or expansion of recreational facilities, and thus will not have an adverse physical effect on the environment. Impacts to recreational resources in the area would not occur as a result of the project. Therefore, no further analysis of this impact area is warranted.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XVI. SOLID/HAZARDOUS WASTE.</b> Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII.a.) Solid waste generation and disposal would increase during construction. The wastes would most likely consist of concrete, asphalt, wood, and metal debris. The solid waste generated during construction would be disposed of in an appropriately classified disposal facility by a licensed contractor.

If contaminated soils are encountered during the project construction, the soils would be removed for proper disposal in accordance with SCAQMD's Rule 1166 and Mobil's Refinery Management of Excavated Soils Plan and Terminal Leaks, Spills and Remediation Plan. The potential occurrence of contaminated soils and the removal procedure will be evaluated in the EIR. In addition, potential impacts of solid/hazardous waste disposal will be evaluated in the EIR.

XVI.b) Wastes generated by the operation of the project would be properly managed and/or disposed of in compliance with federal, state, and local statutes and regulations related to solid and hazardous waste management. Based on these considerations, this area will not be discussed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION/TRAFFIC.</b> Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access or?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts and bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**XVII. TRANSPORTATION/TRAFFIC.** Would the project:

XVII.a and b) During construction, increased vehicle trips from the proposed project may potentially affect the transportation/circulation system in the area of the Torrance refinery and terminals. However, the refinery construction will occur during normal turnaround activities so the changes in traffic should not be different from what currently occurs. The terminal projects would require fewer construction workers and equipment than at the refinery. Given the industrial nature of the surrounding areas, it is unlikely that the addition of these few workers for a short term will affect the local roadways. However, because many streets in and around these facilities may already be at capacity, these issues will be assessed in the EIR.

During operation of the project, there would be additional truck trips to or from the terminals and refinery depending upon the sources of fuel ethanol and the ultimate location of the fuel ethanol distribution hub. In addition, there will be an increase in train trips to and from the refinery as fuel ethanol is brought in and pentanes (and related commodities) are exported. Similarly, there will be an increase in train trips to either the Vernon or Atwood terminals to supply fuel ethanol for use within the terminal operation and distribution to other terminals. Because these changes in transportation could affect the local transportation systems, these impacts will be evaluated in the EIR.

The project may involve the importation of fuel ethanol and exportation of pentanes and related commodities through the Southwestern marine terminal. This change in marine traffic would be offset by the discontinuation of the importation of MTBE through the Southwestern marine terminal. The net change in marine trips will be determined and the impacts assessed in the EIR.

<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**XVII. TRANSPORTATION/TRAFFIC.** Would the project:

XVII.c, d, e, f, and g) As the proposed project involves the modification of an existing refinery and associated distribution terminals, the proposed project will not result in a change in air traffic patterns, substantially increase hazards due to a design feature, result in inadequate emergency access, result in inadequate parking capacity, or conflict with adopted policies, plans or programs supporting alternative transportation.

The potential effects to road, rail, and marine transportation/circulation will be analyzed in the EIR. If significant effects are identified, appropriate mitigation will be defined and included in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XVIII.a.) No impacts to biological resources are expected as no special-status species are known or expected to exist in the proposed project areas affected by the proposed project.

XVIII.b.) The proposed project may cause significant cumulative impacts depending on other projects that are likely to occur concurrently with or subsequent to the proposed project. The potential cumulative impacts will be evaluated in the EIR

XVIII.c.) The proposed project may cause adverse effects on human beings.

Hydrology/water quality, air quality, cultural resources, energy, transportation/traffic, hazards and hazardous materials, land use and planning, public services, solid/hazardous waste, and geology/soils may be adversely affected as a result of the proposed project. These environmental issues will be evaluated in the EIR.

No impacts to land noise, aesthetics, agriculture resources, population/housing, biological resources, recreation, and mineral resources are expected as a result of the project. Therefore, these environmental issues will not be discussed in the EIR.

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## **APPENDIX A**

### **Lead Agency Letters**

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CITY OF  
TORRANCE

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PLANNING  
DEPARTMENT

JEFFERY W. GIBSON  
PLANNING DIRECTOR

April 20, 2000

Steve Smith, Ph.D.  
Program Supervisor  
CEQA Section  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Dear Dr. Smith:

Mobil Oil Corporation (Mobil) has proposed modifications to its Torrance Refinery in order to comply with the California Air Resources Board (CARB) Phase III requirements to reformulate cleaner burning gasolines. At this time, it is our understanding that in order to comply with the CARB requirements, limited new equipment and modifications to existing refinery processes will be necessary at the Torrance Refinery.

As this project is being implemented to comply with air quality regulations, Mobil has requested that the South Coast Air Quality Management District (SCAQMD) assume the lead agency role for the CEQA analysis. If the SCAQMD assumes the lead agency role, the City of Torrance will be a responsible agency and to the extent feasible make use of the SCAQMD CEQA document. Any and all permits and approvals required by the City must still be obtained through the standard process.

Based on the information provided by Mobil, we agree with their request to have the SCAQMD be the CEQA lead agency for the CARB project. If you have any questions or need additional information, please contact the undersigned at (310) 618-5990.

Sincerely,

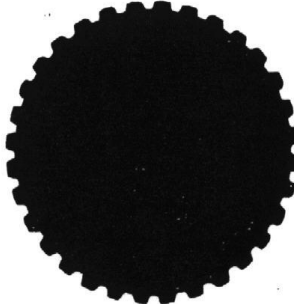
JEFFERY W. GIBSON  
PLANNING DIRECTOR

By Jane Isomoto  
Jane Isomoto  
Planning Manager

cc: Mark R. Smittle, Mobil Oil Corp. ✓

Wm. "BILL" DAVIS  
Councilman  
H. "LARRY" GONZALES  
Councilman  
W. MICHAEL McCORMICK  
Councilman

BRUCE V. MALKENHORST  
City Administrator / City Clerk  
FAX (323) 581-7924



### CITY HALL

4305 SANTA FE AVENUE, VERNON, CALIFORNIA 90058  
TELEPHONE (323) 583-8811  
April 26, 2000

DAVID B. BREARLEY  
City Attorney  
FAX: (626) 330-5818

KEVIN WILSON  
Director of Community Services & Water  
FAX: (323) 588-2761

KENNETH J. DeDARIO  
Director of Municipal Utilities  
FAX: (323) 583-1983

DAVE TELFORD  
Fire Chief  
FAX: (323) 581-1385

BRUCE W. OLSON  
Police Chief  
FAX: (323) 583-5236

Mr. Steve Smith, Ph.D.  
Program Supervisor - CEQA Section  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

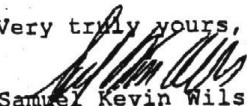
Dear Mr. Smith:

Mobil Oil Corporation (Mobil) has proposed modifications to its' Vernon Light Products Terminal (Vernon), located at 2709 E. 37<sup>th</sup> St., Vernon, CA., in order to comply with the California Air Resources Board (CARB) Phase III requirements to reformulate cleaner burning gasolines. At this time, it is our understanding that in order to comply with the CARB requirements, new equipment and modifications to existing Vernon facilities may be necessary.

As this project is being implemented to comply with air quality regulations, Mobil has requested that the South Coast Air Quality Management District (SCAQMD) assume the lead agency role for the CEQA analysis. If the SCAQMD assumes the lead agency role, the City of Vernon will be a responsible agency and to the extent feasible make use of the SCAQMD CEQA document. Any and all permits and approvals, including a conditional use permit, required by Vernon must still be obtained through the standard process.

Based on the information provided by Mobil we agree that their request to have the SCAQMD be the CEQA lead agency for the CARB project is appropriate. If you have any questions or need additional information, please contact me at (323) 583-8811, Ext 245.

Very truly yours,

  
Samuel Kevin Wilson, P.E.  
Director of Community Services & Water

SKW:ps  
cc: R.L. Cronin-Fruitt-Mobil

April 26, 2000

425 S. Palms Verdes Street  
Post Office Box 151  
San Pedro, CA 90733-0151  
Tel/TDD 310 SEA-PORT  
www.portla.com

Dr. Steve Smith  
Program Supervisor – CEQA Section  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 91765-4182

Dear Dr. Smith:

SUBJECT: MOBIL OIL-GASOLINE REFORMULATION PROJECT EIR



Richard J. Riordan, Mayor  
City of Los Angeles

Board of Harbor  
Commissioners

Theodore Stein, Jr., President

Jonathan Y. Thomas, Vice President

Carol L. Rowen

John M. Wilson

Fernando Torres Gil

Larry A. Keller  
Executive Director

Mobil Oil Corporation (Mobil) has proposed modifications to its Southwestern Terminal (SWT), 799 So. Seaside Ave., Terminal Island, CA, in order to comply with the California Air Resources Board (CARB) Phase III requirements to reformulate cleaner burning gasoline. At this time, it is our understanding that in order to comply with the CARB requirements, new equipment and modifications to existing SWT facilities may be necessary.

As this project is being implemented to comply with air quality regulations, Mobil has requested that the South Coast Air Quality Management District (SCAQMD) assume the lead agency role for the CEQA analysis. If the SCAQMD assumes the lead agency role, the Port of Los Angeles (as a Department of the City of Los Angeles) will be a responsible agency and to the extent feasible make use of the SCAQMD CEQA document. Any and all permits and approvals required by POLA must still be obtained through the standard process. We understand that SCAQMD will make every effort to accommodate the CEQA standards of the City of Los Angeles in its document.

Based on the information provided by Mobil we agree with their request to have the SCAQMD be the CEQA lead agency for the CARB project. Please ensure that the undersigned is included in all responsible agency or public review documents for the project. If you have any questions or need additional information, please contact Mr. Dennis Hagner at (310) 732-3682.

Sincerely,

A handwritten signature in cursive script that reads "Donald W. Rice".

DONALD W. RICE  
Director of Environmental Management

DWR:PJ:DH  
ADP No. 000424-521  
cc: R. L. Cronin-Fruitt – Mobil



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