

CHAPTER 1.0

INTRODUCTION AND EXECUTIVE SUMMARY

INTRODUCTION

The proposed project includes modifications to the Ultramar Inc. (a Valero Energy Company) Wilmington Refinery (Refinery), Marine Tank Farm, Olympic Tank Farm, and Marine Terminal necessary to produce cleaner-burning reformulated gasoline for use in motor vehicles. Cleaner-burning gasoline will reduce emissions of criteria and toxic air pollutants and, thereby, help to achieve and maintain federal and state ambient air quality standards in the South Coast Air Basin (Basin). The objective of the proposed project is to comply with California's Phase 3 Reformulated Fuels requirements, which include the phase out of methyl tertiary butyl ether (MTBE).

The California Environmental Quality Act (CEQA) document for the modifications to the Ultramar Wilmington Refinery for the production of California Air Resources Board (CARB) Phase 3 fuels (Final EIR: Ultramar, Inc. Wilmington Refinery CARB Phase 3 Proposed Project) was certified by the South Coast Air Quality Management District (SCAQMD) in December 2001. All documents comprising the Final Environmental Impact Report (EIR) for the proposed project are available at the SCAQMD, 21865 East Copley Drive, Diamond Bar, California, 91765. These documents can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by accessing <http://www.aqmd.gov/ceqa/nonaqmd.html>. State CEQA Guidelines, 14 California Code of Regulations (CCR) §15000 *et seq.*, require additional analysis to a previously prepared and certified EIR if subsequent changes are proposed in the project which involve new significant environmental impacts not previously considered, or new information of substantial importance which was not known and could not have been known becomes available and shows significant effects previously examined will be substantially more severe (CEQA Guidelines §§15153 and 15162).

After Ultramar's existing lease expired at the Mormon Island Marine Terminal in the Port of Los Angeles, the Port of Los Angeles would only renew the lease for a portion of the Marine Terminal's property, which provided storage facilities for various petroleum products. To supplement their storage facilities, Ultramar acquired two tank farms previously used by the Los Angeles Department of Water and Power. Ultramar is proposing modifications to these terminals to allow the storage of petroleum products (primarily gasoline and gasoline blending components). It has been determined that these proposed modifications in support of their CARB Phase 3 project constitute new information of substantial importance which may result in new significant adverse environmental impacts and/or increase the severity of significant adverse impacts identified in the previous Final EIR for Ultramar's CARB Phase 3 project. Consequently, this EIR to be prepared for the proposed project will be subsequent to and compliment the December 2001 Final EIR: Ultramar, Inc. Wilmington Refinery CARB Phase 3 Proposed Project (SCH No. 2000061113), and will be referred to herein as the "Subsequent EIR."

This document constitutes the *Final* Subsequent EIR for the Ultramar California Air Resources Board Reformulated Gasoline Phase 3 (CARB RFG Phase 3) requirements. The *Final* Subsequent EIR includes the revised project description, the environmental setting, environmental impacts and mitigation measures, cumulative impacts, project alternatives, a Health Risk Assessment (Volume II), a Hazards Analysis (Volume III), and *Responses to Comments (Volume IV)*. All documents comprising the *Final Subsequent Environmental Impact Report (EIR)* for the proposed project are available at the SCAQMD, 21865 East Copley Drive, Diamond Bar, California, 91765. These documents can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by accessing <http://www.aqmd.gov/ceqa/nonaqmd.html>.

The Draft SEIR was released for a 45-day public review and comment period beginning on March 6, 2002 and ending on April 22, 2002. Approximately 180 comment letters were received during the comment period for the Draft SEIR. Responses to comments were prepared and are included in Volume IV of this document. Minor modifications were made to the Draft SEIR and incorporated into the Final SEIR. Modifications made in the Draft SEIR to the Final SEIR are made in italics for easier review. The environmental disciplines that were determined to have potentially significant adverse impacts in the previous Final EIR are analyzed in this Subsequent EIR and include air quality, geology/soils, hazards and hazardous materials, hydrology/water quality, land use/planning, noise, solid/hazardous waste, and transportation/traffic. No other environmental disciplines that may be adversely affected by the currently proposed project have been identified. *The environmental resources where significant adverse environmental impacts would occur after implementation of mitigation measures were air quality and hazards. Accordingly, a Statement of Findings and Overriding Considerations has been prepared for these significant adverse impacts and is included as Attachment 1 to this Final SEIR.*

PURPOSE/LEGAL REQUIREMENTS

In accordance with §15121(a) of the State CEQA Guidelines (California Administrative Code, Title 14, Division 6, Chapter 3), the purpose of an EIR is to serve as an informational document that: "will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

The EIR is an informational document for use by decision-makers, public agencies and the general public. It is not a policy document that sets forth policy about the desirability of the project discussed. The proposed project requires discretionary approval from the SCAQMD and, therefore, it is subject to the requirements of CEQA (Public Resources Code, §21000 et seq.).

This Subsequent EIR addresses both project-specific and cumulative impacts of the revised proposed project. The focus of this Subsequent EIR is to address potentially significant adverse environmental issues identified in the previous Final EIR and to recommend feasible mitigation measures, where possible, to reduce or eliminate significant adverse environmental impacts.

SCOPE AND CONTENT

The Notice of Preparation (NOP) and Initial Study (IS) for the previous Final EIR were circulated for a 30-day comment period beginning on June 23, 2000. The NOP and IS were circulated to neighboring jurisdictions, responsible agencies, other public agencies, and interested individuals in order to solicit input on the scope of the EIR. Comments received on the NOP and IS were included in Appendix A of the previous Final EIR. The NOP and IS formed the basis for and focus of the technical analyses in the previous Final EIR and this Subsequent EIR. The following environmental issues were identified in the IS as potentially significant and are addressed in this document:

- Air Quality,
- Geology/Soils,
- Hazards and Hazardous Materials,
- Hydrology/Water Quality,
- Land Use/Planning,
- Noise,
- Solid/Hazardous Waste, and
- Transportation/Traffic.

The IS concluded that the proposed project would not create significant adverse environmental impacts to the following areas: aesthetics, agriculture resources, biological resources, cultural resources, energy, mineral resources, population/housing, public services, and recreation. This conclusion remains valid for the currently proposed project. A discussion of potential cumulative impacts is also provided. The alternatives analysis discussed in Chapter 6 of this Subsequent EIR is prepared in accordance with §15126.6 of the CEQA Guidelines. Chapter 6 describes a range of reasonable alternatives that could feasibly attain the basic objectives of the proposed project and are capable of eliminating or reducing some of the significant adverse environmental effects associated with the proposed project. No feasible alternatives to the proposed project were identified that achieved the basic objectives of the proposed project with fewer or less significant adverse environmental impacts.

LEAD AND RESPONSIBLE AGENCIES

The Lead Agency is 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). For this project, the SCAQMD has the primary discretionary approval authority over the proposed project and was determined to be the Lead Agency (California Code of Regulations §15051(b)). Air quality Permits to Construct/Operate are required for the revised proposed project and are considered to be discretionary. By issuing permits, the SCAQMD is approving the project.

State CEQA Guidelines §15381 defines a "responsible agency" as: "a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared

an EIR or Negative Declaration. For purposes of CEQA, responsible agencies include all public agencies other than the lead agency that have discretionary approval authority over the project."

The California Coastal Commission is a Responsible Agency for the proposed project and has discretionary approval authority as the project will require a Coastal Development Permit or a de minimus waiver. No other agencies have been identified as a Responsible Agency for the proposed project. The following agencies, other than the Coastal Commission, may have ministerial permitting authority for aspects of the Refinery; however, no new permits or permit modifications are expected to be required from these agencies for the proposed project, with the exception that building permits are expected to be required by the Port of Los Angeles and City of Los Angeles. In addition, revised NPDES permits may be required from the Regional Water Quality Control Board (RWQCB).

- California Coastal Commission
- California State Lands Commission (CSLC)
- State Water Resources Control Board (SWRCB)
- Los Angeles Regional Water Quality Control Board
- County Sanitation Districts of Los Angeles (LACSD)
- Department of Toxic Substances Control (DTSC)
- Port of Los Angeles
- City of Los Angeles

For convenience, all the above agencies will be referred to generally as Responsible Agencies in this EIR.

INTENDED USES OF THE SUBSEQUENT EIR

The Subsequent EIR is intended to be a decision-making tool that provides full disclosure of the potential environmental consequences associated with the discretionary actions required to implement the proposed project. Additionally, CEQA Guidelines §15124(d)(1) require a public agency to identify the following specific types of intended uses:

- A list of the agencies that are expected to use the EIR in their decision-making;
- A list of permits and other approvals required to implement the project; and
- A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

To the extent that local public agencies, such as cities, county planning commissions, etc., are responsible for making land use and planning decisions related to the proposed project, they could possibly rely on this EIR during their decision-making process. See the preceding section for a list of public agencies' approval that may be required.

CHAPTER 2 SUMMARY - PROJECT DESCRIPTION

The objectives of the proposed project are as follows:

- Comply with the state mandated phase out of MTBE from gasoline.
- Comply with California's Phase 3 Reformulated Fuels requirements.
- Provide sufficient storage for petroleum products.

Project Applicant

Ultramar Inc., A Valero Energy Corporation (Ultramar)
2402 East Anaheim Street
Wilmington, CA

The proposed project includes modifications to the Ultramar Refinery, Marine Tank Farm, Olympic Tank Farm and Marine Terminal. The Refinery is located at 2402 E. Anaheim Street in the Wilmington district of the City of Los Angeles. The Refinery is bisected by the Terminal Island Freeway, with the larger portion of the Refinery to the north of the freeway and the smaller portion to the south. The Refinery and all adjacent areas are zoned for heavy industrial use. The land use in the vicinity of the Refinery is heavy industrial. Residential land uses are located about three-quarters of a mile northwest of the Refinery. The Marine Tank Farm is located at 130 "A" Street in an industrial area with the nearest residential area located approximately one-quarter of a mile north of the facility. The Olympic Tank Farm is located at 1220 N. Alameda Street in an industrial area with the nearest residential area located approximately 300 feet west of the facility. The Marine Terminal is located at 961 La Paloma Avenue at Berth 164 on Mormon Island in the Port of Los Angeles. The nearest residential area is located approximately one mile north of the Marine Terminal facility.

Project Description

Ultramar is proposing to add new equipment, make modifications to existing equipment, and/or make operational changes to the Wilmington Refinery, Marine Tank Farm, Olympic Tank Farm, and Marine Terminal primarily to comply with CARB Phase 3 requirements. The proposed project description has been divided into two sections: (1) project modifications identified in the previous Final EIR (SCAQMD, 2001f); and (2) project description for the revised CARB Phase 3 project.

Project Modifications Identified in the Previous Final EIR

The modifications associated with the Ultramar CARB RFG Phase 3 project that were evaluated in the previous 2001 Final EIR included modifications to its existing Wilmington Refinery, including the existing Fluid Catalytic Cracking Unit, Selective Hydrogenation Unit, Light Ends Recovery Unit/Naphtha Hydrotreater Unit, Olefin Treater, and the Light Ends Recovery Unit/Naphtha Hydrotreater. A new Fuel Gas Mercaptan Extraction Unit and two new propane propylene bullets were also proposed. The service of several storage tanks that currently handle MTBE will be modified and the throughput of the tanks also is expected to change. In addition, Ultramar proposed construction of three new ten-inch pipelines between the Refinery and British Petroleum (BP, formerly ARCO) refinery for the transport of isoctane/alkylate, butane, and

propane/propylene. Ultramar also proposed the construction of three pipelines from the Refinery to the Olympic Tank Farm (formerly owned by the Los Angeles Department of Water and Power).

Project Description for the Revised CARB Phase 3 Project

Ultramar is proposing to add a storage tank at the Refinery, modify two storage tank farms, and modify the Marine Terminal, as described below. In addition, these changes require modifications to current tank operations, and installation of new auxiliary equipment.

Modifications to the Ultramar Wilmington Refinery: The modifications to the Ultramar Wilmington Refinery include the installation of a new 150,000 barrel storage tank with an external floating roof equipped with primary and secondary seals. The tank will store gasoline and gasoline blending components. Piping modifications and new blending pumps will also be required.

Modifications to the Marine Tank Farm: The modifications to the Marine Tank Farm will include the modifications of one existing storage tank to include the installation of a secondary seal (the tank is currently equipped with an external floating roof with a primary seal), tank modifications to allow for a low pump-out heel, and a change of service that will allow the storage of various products including naphtha. New pipeline pumps will be installed and piping modifications will be required.

Modifications to the Olympic Tank Farm: A number of modifications will be required for the Olympic Tank Farm. The changes will result in about a 42 percent increase in storage capacity at the Olympic Tank Farm. Three existing tanks will be removed and replaced. These tanks will be new 150,000-barrel capacity welded tanks with external floating roofs and primary and secondary seals and a dome. The service of these three tanks will be changed to gasoline and gasoline blending components.

A new 150,000-barrel storage tank is being installed with an external floating roof equipped with primary and secondary seals and a dome. This new tank is proposed to be in gasoline and gasoline blend component service and will include a leak detection system.

An existing storage tank will be modified to install an internal floating roof with primary and secondary seals. The service of this tank will be changed to store various products including naphtha.

Four existing storage tanks will be replaced with four new 100,000-barrel capacity, welded tanks with external floating roofs equipped with primary and secondary seals and a dome. The service of the tanks will be changed to gasoline and gasoline blending components. A leak detection system will be installed on all four tanks.

Two tanks will be modified to install internal floating roofs with primary and secondary seals. The service of the tanks will be changed to gasoline and gasoline blend components. Double bottoms also will be installed on these storage tanks.

Other modifications to the Olympic Tank Farm include new pipeline pumps, new firewater pumps, and piping modifications.

Modifications to the Marine Terminal: As a result of lease negotiations with the Port of Los Angeles, the size of the Ultramar Marine Terminal has been reduced. The Marine Terminal provided storage facilities for various petroleum products. A number of storage tanks will be closed and dismantled. Ultramar has acquired two terminals previously used by the Los Angeles Department of Water and Power in order to provide additional storage (the Olympic and Marine Tank Farms, see above descriptions).

Ultramar will retain the use of a small portion of the existing Marine Terminal and is proposing modifications to this portion of the site. Modifications to one existing storage tank will include the installation of an external floating roof and a change of service that will allow the storage of various products including naphtha.

Changes to Material Transport: The proposed project is expected to result in an increase in gasoline blending stocks transported to the Marine Terminal via marine vessel. About 32 marine vessels per year were associated with the transport of MTBE to the Marine Terminal, which will be eliminated following completion of the proposed project. The proposed modifications are estimated to require 97 marine vessels per year to transport gasoline blending stocks. Therefore, the proposed project is expected to result in an increase of about 65 marine vessels per year compared to existing conditions. Ultramar receives materials at the Marine Terminal and transfers the materials to its tank farms and Refinery via pipeline. The materials will be blended at the Refinery and transferred to third party terminals via pipeline.

Ultramar is proposing to increase the amount of gasoline blending components imported to the Marine Terminal in order to make up for the loss in volume associated with the removal of MTBE from gasoline. No increase in the amount of gasoline produced by Ultramar is expected.

The materials stored at the Marine and Olympic Tank Farms and Marine Terminal will be transported to/from the Refinery via existing and new pipelines. The impacts of the construction of the new pipelines were evaluated in the Ultramar CARB Phase 3 EIR (SCAQMD, 2001f).

CHAPTER 3 SUMMARY – EXISTING ENVIRONMENTAL SETTING

Pursuant to CEQA Guidelines §15125, Chapter 3 – Existing Environmental Setting, includes descriptions of existing environment only for those environmental areas that could be adversely affected by the proposed project. The following subsections briefly highlight the existing settings for the identified environmental areas that could potentially be adversely affected when implementing the proposed project, including Air Quality, Geology/Soils, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Solid/Hazardous Waste, and Transportation/Traffic.

Air Quality

Over the last decade and a half, there has been significant improvement in air quality in the SCAQMD's jurisdiction. Nevertheless, several air quality standards are still exceeded frequently and by a wide margin. Of the National Ambient Air Quality Standards (NAAQS) established for six criteria pollutants [ozone, lead, sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM₁₀)], the area within the SCAQMD's jurisdiction is in attainment with the state and NAAQS for SO₂, NO₂, and lead. Chapter 3 provides a brief description of the existing air quality setting for each criteria pollutant as well as for toxic air contaminants from a regional perspective. Chapter 3 also provides baseline criteria pollutant emissions and toxic air contaminant risks from each of the facilities that are part of the proposed project.

Geology/Soils

Southern California is characterized by a variety of geographic features that form the basis for subdividing the region into several geomorphic provinces. The Ultramar facilities are located within the Peninsular Range Province, a major physiographic and tectonic province characterized by a prevailing northwesterly orientation of structural geologic features. The general area within the Los Angeles Basin is about 50 miles long and 20 miles wide and slopes gently in a southwesterly direction to the Pacific Ocean.

The Refinery and surrounding area overlies a portion of the Wilmington Oil Field. The Wilmington Oil Field is a broad, asymmetric anticline, which is broken by a series of transverse faults. These faults created major oil producing zones. The Los Angeles area is a seismically active region. Most of the earthquake epicenters occur along the San Andreas, San Jacinto, Whittier-Elsinore and Newport-Inglewood faults. All of these faults are elements of the San Andreas Fault system.

Hazards and Hazardous Materials

Hazards at a facility can occur due to natural events, such as earthquake, and non-natural events, such as mechanical failure or human error. This section discusses existing hazards to the community from potential upset conditions to provide a basis for evaluating the changes in hazards posed by the proposed project.

The major types of public safety risks at the Refinery, tank farms and terminal consist of risk from releases of hazardous substances and from major fires and explosions. Shipping, handling, storing, and disposing of hazardous materials inherently poses a certain risk of a release to the environment. The regulated substances handled by the Refinery include hydrogen fluoride, chlorine and ammonia. The Refinery, tank farms and terminal also handle petroleum products including propane, butane, isobutane, MTBE, gasoline, fuel oils, diesel and other products, which pose a risk of fire and explosion. Accident scenarios for the existing Ultramar facilities evaluated herein include releases of regulated substances and potential fires/explosions, including transportation risks. The hazards that are likely to exist are identified by the physical and

chemical properties of the materials being handled and their process conditions, including toxic gas clouds, torch fires, flash fires, pool fires, vapor cloud explosions, thermal radiation and explosion/overpressure.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of to prevent or mitigate injury to health or the environment in the event that such materials are accidentally released.

Hydrology/Water Quality

The Refinery, tank farms and terminal are located over the Los Angeles Basin ground water aquifer system. Four major aquifers are present within the Los Angeles Basin including the Silverado, Lingo, Gaspar, and Gage aquifers, which are found in the San Pedro formation.

State Water Resources Control Board and the regional water quality control boards (RWQCB) are responsible for protecting surface and ground water supplies in California. These agencies also regulated discharges to state waters through the federal National Pollution Discharge Elimination System (NPDES) permits. Wastewater discharges to publicly-owned treatment works are regulated through federal pre-treatment requirements, which are enforced through the Los Angeles County Sanitation Districts for the Refinery.

Land Use/Planning

The Refinery and tank farms are located in the Wilmington District of the City of Los Angeles within southern Los Angeles County. The Marine Terminal is located within the Port of Los Angeles. The community of Wilmington is generally urbanized and includes a substantial amount of industrial and port-related development. The Ports of Los Angeles and Long Beach are located along the coastal boundary of Wilmington. The Refinery is located within a district zoned by the City of Los Angeles for heavy industrial uses (M3-1-VL). Refinery land uses are compatible within this zoning designation. The tank farms and marine terminal are also located in heavy industrial zones that are compatible with petroleum storage facilities. The Refinery is located within the Coastal Zone, as defined by the California Coastal Act. The California Coastal Commission has reviewed development in the past at the Refinery and has issued a number of coastal act permits and de minimus waivers.

Noise

Noise is a by-product of urbanization and there are numerous noise sources and receptors in an urban community. Noise is usually defined as unwanted sound. The Refinery, tank farms and terminal are subject to the noise ordinances of the City of Los Angeles Municipal. Chapter 3 provides estimates of the existing noise levels in the Wilmington area. The Refinery is surrounded by industrial facilities, commercial activities and transportation corridors. Major contributors to the ambient noise levels in the vicinity of the Refinery, tank farms and marine terminal include local railways, vehicular traffic, industrial facilities, construction activity and numerous port-related activities.

Solid/Hazardous Waste

The Refinery generates about 760 tons per year of material that is classified as hazardous waste. The hazardous waste disposal facilities within the state have about 59 years of life expectancy, based on their current levels of waste receipt. The Tank Farms and Marine Terminal can generate hazardous waste when the tanks are cleaned out. However, the Tank Farms have not been operating for the last few years so no hazardous waste has been generated by the Tank Farms in the last two years. A large portion of the Marine Terminal, including a number of storage tanks, has been closed due to lease negotiations with the Port of Los Angeles.

The Refinery also generates non-hazardous solid or municipal wastes that are disposed of in local landfills. The Tank Farms can generate non-hazardous waste through administrative activities, since small office buildings are located at the sites. However, the Tank Farms have not been operating for the last few years so no non-hazardous waste has been generated by the Tank Farms in the last two years. The Los Angeles County Sanitation Districts anticipates that landfill capacity in the county will be exceeded in the near future.

Transportation/Traffic

The transportation network in the Wilmington area includes roads, highways, freeways, railroads, airports, seaports, and intermodal terminals. Traffic counts including turn counts were taken in 2000 to determine the existing traffic in the area. The traffic analysis indicates typical urban traffic conditions in the area surrounding the Ultramar facilities, with most intersections operating at Level of Services A to B.

CHAPTER 4 SUMMARY - ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section summarizes the environmental impacts, mitigation measures, and residual impacts associated with the proposed project that are analyzed in Chapter 4. Table 1-1 includes a brief description of the environmental resources that were identified as being potentially significant for the proposed project, potential environmental impacts prior to mitigation, proposed mitigation measures, and residual impacts remaining after mitigation. Impacts are divided into four classifications: Unavoidable Adverse Impacts, Potentially Significant but Mitigable Impacts, Less Than Significant Impacts, and Beneficial Impacts. Unavoidable adverse impacts are significant impacts that require a Statement of Findings pursuant to CEQA Guidelines §15091 and a Statement of Overriding Considerations pursuant to CEQA Guidelines §15093, before the proposed project can be approved. Potentially Significant but Mitigable Impacts are adverse impacts that can be feasibly mitigated to less than significant levels and which require that findings be made in accordance with the CEQA Guidelines §15091 if the proposed project is approved. Less than significant impacts may be adverse but do not exceed any significance threshold levels and do not require mitigation measures. Beneficial Impacts reduce existing environmental problems or hazards.

Unavoidable Significant Adverse Impacts

Air Quality: Emissions of volatile organic compounds (VOCs), NO_x, and PM₁₀ from construction equipment will exceed mass daily emissions significance thresholds during project construction.

Emissions of VOCs, NO_x, sulfur oxides (SO_x), and PM₁₀ will exceed mass daily emission significance thresholds during project operation.

Hazards/Hazardous Materials: The potential for an accidental release of hazardous materials associated with modifications to several of the Refinery units and a storage tank farm have the potential to exceed the Emergency Response Planning Level 2 concentrations and are considered to be significant.

Less Than Significant Impacts

Air Quality: CO and SO_x emissions from the construction phase of the proposed project are expected to be less than significant.

CO emissions from the operational phase of the proposed project are expected to be less than significant.

During the operational phase of the project, ambient concentrations of criteria pollutants (as demonstrated through air quality modeling), carbon monoxide hot spots, emissions of toxic air contaminants and odors are expected to be less than significant.

Geology/Soils: Adverse project impacts on topography, geological resources, soil contamination, and geological hazards are less than significant.

Hazards and Hazardous Materials: The proposed project is expected to comply with applicable design codes and regulations, with National Fire Protection Association Standards, and with generally accepted industry practices. The proposed project impacts are expected to be less than significant for transportation hazards, pipeline hazards, and releases of hazardous materials to water bodies.

Hydrology/Water Quality: The proposed project impacts on ground water resources, surface water, wastewater, and water demand are expected to be less than significant.

Land Use/Planning:	The proposed project complies with the applicable land use zoning ordinances and land use designations, and is compatible with the surrounding land uses. No significant impacts on land use are expected.
Noise:	Adverse noise impacts during the construction and operational phases are expected to be less than significant.
Solid/Hazardous Wastes:	The generation of solid/hazardous waste as part of the construction and/or operational phases of the proposed project are expected to be less than significant.
Transportation/ Traffic:	Adverse traffic impacts during the construction and operational phases are expected to be less than significant.

CHAPTER 5 SUMMARY - CUMULATIVE IMPACTS

A number of projects with the potential to have cumulative impacts with the proposed project were identified, including transportation projects related to the development of the Alameda Corridor and other refinery reformulated fuel projects. These projects and associated cumulative impacts relative to the proposed project are discussed in Chapter 5.

Unavoidable Significant Adverse Cumulative Impacts

Air Quality:	Cumulative emissions of CO, VOCs, NO _x , SO _x and PM ₁₀ from construction equipment will exceed mass daily emissions significance thresholds during project construction.
	Cumulative emissions of CO, VOCs, NO _x , and SO _x will exceed mass daily emission significance thresholds during project operation.

Less Than Significant Impacts

Air Quality:	During the operational phase of the project, the cumulative PM ₁₀ emissions are less than significant. Cumulative toxic air contaminants impacts are expected to be less than significant.
Geology/Soils:	Adverse cumulative impacts on topography, geological resources, soil contamination, and geological hazards are less than significant.
Hazards/Hazardous	The potential for an accidental release of hazardous

Materials	materials associated with modifications to several of the Refinery units and a storage tank farm have the potential to exceed the ERPG 2 concentrations and are considered to be significant. Sufficient distance exists between the Ultramar facilities and other projects to avoid cumulative impacts.
Hydrology/Water Quality:	The cumulative impacts on ground water resources, surface water, wastewater, and water demand are expected to be less than significant.
Land Use/Planning:	No significant cumulative impacts on land use and zoning are expected.
Noise:	Adverse cumulative noise impacts are expected due to the construction and operation of the Alameda Corridor and Port 2020 plan modifications. The noise impacts associated with the proposed Ultramar project and the other related projects are not expected to be significant or result in cumulative adverse noise impacts during construction or operation that would contribute to the Port 2020 Plan or Alameda Corridor cumulative noise impacts.
Solid/Hazardous Wastes:	The generation of solid/hazardous waste as part of the construction and/or operational phases of the cumulative projects are expected to be less than significant.
Transportation/Traffic:	Adverse traffic impacts during the construction and operational phases are expected to be significant. for the construction of some of the Port projects and the Alameda Corridor modifications. Traffic impacts associated with general growth in the Wilmington area is expected to be significant. The traffic impacts associated with the related refinery projects are not expected to be significant or result in cumulative adverse traffic impacts during construction or operation that would contribute to the cumulative traffic impacts.

CHAPTER 6 SUMMARY - PROJECT ALTERNATIVES

This EIR identifies and compares the relative merits of a range of reasonable alternatives to the proposed project as required by the CEQA guidelines. According to the guidelines, alternatives should include realistic measures to attain the basic objectives of the proposed project and provide means for evaluating the comparative merits of each alternative. In addition, though the range of alternatives must be sufficient to permit a reasoned choice, they need not include every conceivable project alternative (CEQA Guidelines, §15126.6(a)). The key issue is whether the

selection and discussion of alternatives fosters informed decision making and public participation. PRC §21178(g) exempts projects that will enable the production of CARB RFG Phase 3 compliant fuels from the requirements of analyzing a No Project Alternative and alternative sites.

No alternatives were identified in the previously prepared 2001 Final EIR that would eliminate the potentially significant air quality and hazard impacts of the proposed project as compliance with the CARB Phase 3 requirements will require construction activities and modifications to the Refinery, Olympic Tank Farm, Marine Tank Farm, and the Marine Terminal. Alternatives evaluated in the previous Final EIR were developed by reviewing different methods to eliminate MTBE as an oxygenate. There are a number of other oxygenates besides MTBE and ethanol that could potentially be used in gasoline. However, with the Governor's ban on MTBE and the requirements of the CARB Phase 3 regulations (e.g., vapor pressure limitations), ethanol is the only oxygenate that can be used to replace MTBE at this time (CARB, 2000). Alternative transportation modes were evaluated but would not reduce or eliminate emissions associated with transportation.

Alternatives evaluated in this Subsequent EIR included alternative locations for the storage of petroleum products and alternatives to the transport of gasoline blending components. No feasible alternatives have been identified that would reduce the proposed project's environmental impacts to a less than significant level while achieving the project objectives. Consequently, the proposed project is considered the preferred alternative to ensure that Ultramar will be able to achieve all the objectives of the proposed project, which is to produce reformulated fuels as specified by state regulations, and minimize environmental impacts.

CHAPTERS 7 AND 8 SUMMARY – REFERENCES AND ACRONYMS AND GLOSSARY

Information on References cited (including organizations and persons consulted) and the acronyms and glossary are presented in Chapters 7 and 8, respectively.

TABLE 1-1

SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND RESIDUAL IMPACTS

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>AIR QUALITY</p> <p>Construction activities will generate emissions of CO, VOCs, NOx and PM10 that are significant.</p> <p>The construction emissions of SOx and PM10 are less than significant.</p>	<p>Develop a Construction Emission Management Plan. The Plan shall include measures to minimize emissions from mobile sources including requiring measures to provide parking, scheduling truck deliveries, consolidating truck deliveries to avoid peak traffic hours, and limit idling to 10 minutes.</p> <p>Prohibit trucks from idling longer than 10 minutes at the Ultramar sites.</p> <p>Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment, where feasible.</p> <p>Maintain construction equipment tuned up and with two to four degree retard diesel engine timing.</p> <p>Use electric welders to avoid emissions from gas or diesel welders in portions of the Refinery, tank farms, and terminal, where electricity is available.</p> <p>Use on-site electricity rather than temporary power generators in portions of the Refinery, tank farms, and terminal, where electricity is available.</p> <p>Suspend all construction activities during first stage smog alerts.</p>	<p>Construction emissions are expected to remain significant for VOC, NOx and PM10.</p>

TABLE 1-1

SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND RESIDUAL IMPACTS

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>AIR QUALITY (CONT.)</p> <p>Operational emissions of criteria pollutants are significant for VOC, NOx, SOx, and PM10.</p> <p><i>Operational emissions of CO are not significant.</i></p> <p>The ambient concentrations of NOx, PM10, and CO from marine vessels at berth are below SCAQMD significance threshold levels and are less than significant.</p>	<p>Evaluate the feasibility of retrofitting large off-road construction equipment with pollution control equipment.</p> <p>Evaluate the feasibility of using alternative fuels in large off-road construction equipment that will be operating for significant periods.</p> <p>Use low sulfur diesel fuels where feasible.</p> <p>Use CARB-certified equipment for all construction equipment that requires CARB certification.</p> <p>The engine size of construction equipment shall be the minimum practical size.</p> <p>Develop a fugitive emission control plan.</p> <p>Minimize the use of paints at the facility and investigate the use of paints with a VOC content less than 3.5 lbs/gallon.</p> <p>Project emissions are controlled through the use of BACT (e.g., internal floating roof tanks, sealless pumps, bellow seal valves, etc.). No feasible mitigation measures for emissions from trucks, railcars and marine vessels were identified.</p> <p><i>None required since there are no significant impacts.</i></p> <p>None required since no significant impacts were identified.</p>	<p>Mass daily emissions are expected to remain significant for CO, VOC, NOx, SOx, and PM10.</p> <p>Concentrations of NOx, PM10, and CO are less than significant.</p>

TABLE 1-1

SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND RESIDUAL IMPACTS

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>AIR QUALITY (CONT.)</p> <p>No significant adverse traffic impacts were identified at local intersections so no significant adverse increase in CO hot spots is expected.</p> <p>The project is consistent with the General Plan and is consistent with the Air Quality Management Plan so no significant adverse impacts are expected.</p> <p>The estimated cancer risk due to the operation of the proposed project is expected to be less than the significance criterion of 10 per million so that the project impacts are deemed to be less than significant.</p> <p>The acute and chronic hazard indices due to operation of the proposed project are less than 1.0 and are deemed to be less than significant.</p> <p>Potential odor impacts from the proposed project are not expected to be significant.</p>	<p>None required since no significant impacts were identified.</p>	<p>CO hot spots are less than significant.</p> <p>Impacts on the AQMP are less than significant.</p> <p>Cancer risk impacts are less than significant.</p> <p>Non-carcinogenic (non-cancer) health impacts are less than significant.</p> <p>Project impacts on odors are less than significant.</p>
<p>GEOLOGY</p> <p>No topographic changes are expected so impacts are less than significant.</p> <p>No unique geological resources are present that could be disturbed by the proposed project. No significant adverse impacts are expected.</p>	<p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p>	<p>Topographic impacts are less than significant.</p> <p>Impacts on geological resources are less than significant.</p>

TABLE 1-1

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IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>GEOLOGY (CONT.)</p> <p>Soil erosion from wind or water could occur during construction activities but dust control measures are expected to minimize potential impacts.</p> <p>Construction activities could uncover contaminated soils.</p> <p>Compliance with Uniform Building Codes is expected to result in less than significant impacts.</p>	<p>See air quality mitigation measures.</p> <p>Any contaminated soils or ground water shall be addressed pursuant to local, state and federal regulations and requirements, including the U.S. EPA, DTSC, SCAQMD, and RWQCB. No mitigation measures were identified beyond the existing requirements.</p> <p>Ultramar is required to obtain building permits, as applicable, for all new structures. No mitigation measures were identified beyond existing requirements.</p>	<p>Soil erosion impacts are less than significant.</p> <p>Soil/water contamination impacts are less than significant due to regulatory compliance.</p> <p>Geological hazard impacts are less than significant.</p>
<p>HAZARDS AND HAZARDOUS MATERIALS</p> <p>Impacts associated with on-site releases are potentially significant.</p> <p>The proposed project impacts on water quality due to an accidental release are expected to be less than significant.</p> <p>The project is expected to increase the transport of petroleum products via truck or railcar. The impact from an accidental release is less than significant.</p> <p>The probability of a pipeline rupture is low for new pipelines so that no adverse significant impacts are expected.</p>	<p>None identified because of the extensive safety regulations. Ultramar will be required to update its Process Safety Management Program and Risk Management Program.</p> <p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p>	<p>Hazard impacts are expected to remain potentially significant.</p> <p>Hazard impacts on water quality are expected to be less than significant.</p> <p>Hazard impacts due to transportation are less than significant.</p> <p>The pipeline hazard impacts are less than significant.</p>

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IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>HYDROLOGY/WATER QUALITY</p> <p>The proposed project is not expected to degrade or deplete ground water resources so proposed project impacts are less than significant.</p> <p>The proposed project is not expected to result in an increase in surface water discharge so no significant adverse impacts are expected.</p> <p>The proposed project is not expected to result in an increase in wastewater discharge so that no significant adverse impacts are expected.</p> <p>The proposed project is not expected to result in a significant increase in water demand.</p>	<p>None required since no significant impacts were identified.</p>	<p>Project impacts on ground water are less than significant</p> <p>Project impacts on surface water discharge are less than significant.</p> <p>Project impacts on wastewater discharge are less than significant.</p> <p>Project impacts on water demand are less than significant.</p>
<p>LAND USE/PLANNING</p> <p>The proposed project complies with the land use and zoning requirements of the Cities of Los Angeles and Carson, Port of Los Angeles and the policies of the California Coastal Commission so that no significant adverse impacts are expected.</p>	<p>None required since no significant impacts were identified.</p>	<p>Project impacts on land use/planning are less than significant.</p>
<p>NOISE</p> <p>Construction noise levels are expected to be less than significant since noise increases would not exceed the noise levels identified in the noise ordinance for the local cities.</p> <p>Operational noise is considered less than significant as the estimated noise increase is less than three dBA and within the noise levels established under the local cities noise ordinance.</p>	<p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p>	<p>Construction noise is less than significant.</p> <p>Operational noise impacts are expected to be less than significant.</p>

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IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
<p>SOLID/HAZARDOUS WASTE</p> <p>Construction activities will generate solid/hazardous wastes but sufficient landfill capacity exists to handle the increases so that no significant adverse impacts are expected.</p> <p>The proposed project is not expected to increase the generation of solid or hazardous waste during project operation so that no significant adverse impacts are expected.</p>	<p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p>	<p>Solid/hazardous waste impacts during construction are less than significant.</p> <p>Solid/hazardous waste impacts during project operation are less than significant.</p>
<p>TRANSPORTATION/CIRCULATION</p> <p>No significant change in the level of service (LOS) rating at any intersection is expected, so no significant adverse traffic impacts due to construction of the proposed project are expected.</p> <p>No significant change in the level of service (LOS) rating at any intersection is expected, so no significant adverse traffic impacts due to project operation are expected.</p>	<p>None required since no significant impacts were identified.</p> <p>None required since no significant impacts were identified.</p>	<p>Traffic impacts during the construction phase are less than significant.</p> <p>Traffic impacts due to operation of the proposed project are less than significant.</p>

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