CHAPTER 1.0

INTRODUCTION AND EXECUTIVE SUMMARY

INTRODUCTION

The proposed project includes <u>Refinery</u>-modifications to the Equilon Los Angeles <u>Refinery</u> (<u>Refinery</u>), Carson Terminal, Mormon Island Marine Terminal, Los Angeles Terminal, Signal Hill Terminal, Van Nuys Terminal, Colton Terminal and Rialto Terminal that will improve the air quality in the South Coast Air Basin (Basin) by producing 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 Basin. The objective of the proposed project is to comply with California's Phase 3 Reformulated Fuels requirements, which includes the phase out of Methyl Tertiary Butyl Ether (MTBE), while minimizing the loss in the volume of gasoline produced by the Refinery or blended at the terminals.

This document constitutes the Final Environmental Impact Report (EIR) for the Equilon California Air Resources Board Reformulated Gasoline Phase 3 (CARB RFG Phase 3) requirements. The Final EIR includes the Notice of Preparation of a Draft EIR (September 21, 2000), the Draft EIR (July 2001), a Final EIR (September 2001), a Health Risk Assessment (Volume II, September 2001), and a Worst Case Consequence Analysis (Volume III, September 2001). All documents comprising the EIR for the proposed project were circulated for public review and are available at the South Coast Air Quality Management District (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 Notice of Preparation (NOP) of an EIR for the CARB RFG Phase 3 proposed project and <u>Initial Study (IS) werewas</u> released for public review on September 21, 2000. The <u>ISNOP</u> contains a project description and the environmental checklist as required by the California Environmental Quality Act (CEQA) Guidelines. A copy of the NOP/<u>IS</u> areis included in Appendix A of this EIR. The environmental disciplines that were determined to have potentially significant impacts and were analyzed in the EIR include air quality, geology/soils, hazards, noise, solid/hazardous waste, and transportation/traffic.

The Draft EIR for the Equilon CARB RFG Phase 3 proposed project was released for a 45-day public review and comment period beginning on July 13, 2001 and ending on August 27, 2001. Nine comment letters were received during the comment period for the Draft EIR. Responses to those comment letters were prepared and are included in Appendix D of this document. Minor changes were made to the text of the EIR where necessary due to public comments received on the Draft EIR. Those changes are italicized for easier review. The environmental disciplines that were determined to have potentially significant impacts and were analyzed in the EIR

include air quality, geology/soils, hazards, noise, solid/hazardous waste and transportation/traffic. The environmental resource where significant adverse environmental impacts would occur after implementation of mitigation measures was 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 the EIR.

PURPOSE/LEGAL REQUIREMENTS

In accordance with <u>Section-15121(a)</u> 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, Section-§21000 et seq.).

This EIR addresses both project-specific and cumulative impacts of the proposed project. The focus of this EIR is to address potentially significant environmental issues identified in the <u>NOPNotice of Preparation and IS</u> –(see Appendix A) and to recommend feasible mitigation measures, where possible, to reduce or eliminate significant <u>adverse</u> environmental impacts.

SCOPE AND CONTENT

The NOP and IS werewas circulated for a 30-day comment period beginning on September 21, 2000. The NOP and IS werewas 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 and responses are also included in Appendix A. The NOP and IS formed the basis for and focus of the technical analyses in this EIR. The following environmental issues were identified in the IS as potentially significant and topics are addressed in this document:

- Air Quality,
- Geology/Soils,
- Hazards,
- Noise,
- Solid/Hazardous Waste, and
- Transportation/Traffic.

The <u>IS concluded that the proposed project would not create significant adverse environmental impacts to the following areas: NOP determined that the following environmental topics were less than significant:</u>__aesthetics, agriculture resources, biological resources, cultural resources, energy, hydrology/water quality, land use/planning, mineral resources, population/housing, public services, and recreation.

A discussion of potential cumulative impacts is also provided. The alternatives section of this EIR is prepared in accordance with <u>Section §15126.6(d)</u> of the CEQA Guidelines. This section describes a range of reasonable alternatives that could feasibly attain the basic objectives of the proposed project or are capable of eliminating or reducing some of the significant adverse environmental effects associated with the proposed project.

LEAD AGENCY

CEQA, Public Resources Code §21000 <u>et seq.</u>, requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. To fulfill the purpose and intent of CEQA, the SCAQMD is the lead agency for this project and has prepared this Draft EIR to address the potential environmental impacts associated with the Equilon RFG Phase 3 proposed project.

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment (Public Resources Code §21067). It was determined that the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines §15051(b)). The proposed project requires discretionary approval from the SCAQMD for modifications to existing stationary source equipment and installation of new stationary source equipment. The SCAQMD Permits to Construct and

Permits to Operate are considered to be discretionary. Once the SCAQMD approves the project by certifying the EIR, permits can be issued.

RESPONSIBLE AGENCIES

Section–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."

No agencies have been identified as a Responsible Agency for the proposed Project.. The following agencies <u>may</u> have <u>ministerial</u> permitting authority for aspects of modifications at the Refinery and Terminals' operations, and have been given an opportunity to review and comment on the NOP and EIR; however, no new discretionary 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 Cities of Los Angeles, Carson, Signal Hill, Rialto, and the Port of Long Beach.

- State Water Resources Control Board (SWRCB),
- Los Angeles Regional Water Quality Control Board (RWQCB),
- Los Angeles City Bureau of Sanitation (LACBS), and
- Department of Toxic Substances Control (DTSC)
- Port of Los Angeles,
- City of Los Angeles,
- City of Carson,
- City of Signal Hill, and
- City of Rialto.

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

INTENDED USES OF THE EIR

The EIR is intended to be a decision-making tool that provides full disclosure of the environmental consequences associated with the discretionary actions required to implement the proposed project. <u>It will be used by the SCAQMD</u>, any other responsible agencies, and the general public in the review of the proposed project. <u>Additionally, CEQA Guidelines</u> §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.

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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.

EXECUTIVE SUMMARY – CHAPTER 2: PROJECT DESCRIPTION

Project Applicant

Equilon Enterprises, LLC 2101 E. Pacific Coast Highway Wilmington, CA

The proposed project includes modifications to the Equilon Refinery which is located at 2101 E. Pacific Coast Highway in the Wilmington district of the City of Los Angeles. The Wilmington Terminal is located adjacent to the southwestern portion of the Refinery at 1926 E. Pacific Coast Highway. The Refinery occupies about 300 acres of land; the larger portion of which is located within the jurisdiction of the City of Los Angeles, and the smaller portion of which is located within the City of Carson. The Refinery is bounded to the north by Sepulveda Boulevard, to the west by Alameda Street, to the south by the Southern Pacific Railroad tracks, and to the east by the Dominguez Channel. The Refinery is bisected by Pacific Coast Highway, with the larger portion of the Refinery to the north of Pacific Coast Highway and the smaller portion to the south. The Refinery and all adjacent areas are zoned for heavy industrial use.

The proposed project will also require changes to distribution terminals in the southern California area. The Signal Hill Terminal is located at 2457 Redondo Avenue in Signal Hill. The terminal is located just south of the Interstate (I) 405 Freeway and south of Willow Street. The Signal Hill Terminal is located in a commercial industrial area (C1). The land use in the vicinity of the terminal also includes light and general industrial. Residential land uses are located about one-quarter mile south of the terminal.

The Carson terminal is located at 20945 S. Wilmington Avenue, Carson (the former location of the Shell Oil Refinery). The terminal is located in an industrial area and surrounded primarily by industrial and commercial land uses on the east, west, and north. Residential land uses are located adjacent to and south of the terminal.

The Van Nuys Terminal is located at 8100 Haskell Boulevard in Van Nuys. The terminal is located immediately west of the I-405 Freeway, south of Roscoe Boulevard, and is primarily surrounded by heavy industrial land uses. The Van Nuys Terminal is located in a heavy industrial zone (M2-1). The land use in the immediate vicinity of the terminal is primarily zoned heavy industrial. Residential land uses are located north and north east of the terminal. The closest residents are located about 1,300 feet north of the terminal.

The Colton and Rialto Terminals are located at 2237 and 2307 South Riverside Avenue within the City of Rialto. These two terminals are located immediately adjacent to each other. The

terminals are located south of Slover Avenue, east of Willow Avenue and to the north of Santa Ana Avenue and are primarily surrounded by heavy industrial land uses. The Colton and Rialto Terminals and surrounding land uses in the immediate vicinity of the terminal are primarily zoned for heavy industrial. Residential land uses are located about 600 feet north and north east of the terminal.

The Marine Terminal is located on Mormon Island within the Port of Los Angeles. The Marine Terminal is located at Berths 167-169 and is surrounded by other heavy industrial port-related uses including the GATX marine terminal and the U.S. Borax facility. The closest residential land uses are located about one mile north of the terminal.

Project Description

In order to comply with CARB RFG Phase 3 requirements, Equilon is proposing modifications to its existing Los Angeles Refinery, Los Angeles Terminal, Mormon Island Terminal, Carson Terminal, Signal Hill Terminal, Van Nuys Terminal, Colton Terminal, and Rialto Terminal. The primary objective of these modifications is to change the oxygenate used in the manufacture of gasoline from MTBE to ethanol and to produce more alkylate which is required for meeting the CARG RFG Phase 3 Reid Vapor Pressure (RVP) standard, as well as meeting the benzene and sulfur standards. At the Refinery, process unit modifications are required to the Hydrotreater Unit No. 2, C4 Isomerization Unit, Catalytic Reforming Unit No. 2, Alkylation Unit, Hydrotreating Unit No. 4, and fractionation changes to a number of columns. Modifications to the Refinery will also include a new 50,000 barrel pentane sphere, modifications to the service and/or throughput of storage tanks, and modifications to the existing flare and vapor recovery systems. The proposed project will not increase the crude throughput capacity of the Refinery and is expected to result in a small decrease in the production of gasoline produced by the Refinery and blended at the terminals.

Modifications to the Carson Terminal include a new rail car off-loading rack, a new truck loading rack and vapor processor, and modifications to the service of five above ground storage tanks.

Modifications to the Equilon Mormon Island Marine Terminal are minor and include the modification of *two* existing above ground storage tanks to handle ethanol, replacement of one pump with a larger capacity pump, and piping modifications to place blind flanges on some pipelines.

The Wilmington Terminal will require the construction of a new 12,800 barrel internal floating roof tank, a truck unloading pad, and various pipeline metering and blending changes at the loading rack.

The Signal Hill Terminal will require the construction of a new 30,000 barrel internal floating roof tank, the conversion of one existing tank to store ethanol, the construction of a truck off-loading facility, and various pipeline metering and blending changes at the truck loading rack.

The Van Nuys Terminal will require the construction of a new approximately 7,400 barrel internal floating roof tank, a truck unloading facility, and various pipeline metering and blending changes at the existing truck loading rack.

The Colton Terminal will require the construction of a new approximately 7,150 barrel internal floating roof tank, a truck loading facility, and various pipeline metering and blending changes at the existing truck loading rack.

The Rialto Terminal will require the construction of a new approximately 7,150 barrel internal floating roof tank, a truck loading facility, and various pipeline metering and blending changes at the existing truck loading rack.

As a result of reformulating all of California's gasoline through its Phase 3 requirements, CARB estimates that the Phase 3 requirements will reduce statewide mobile source hydrocarbon emissions by 0.5 ton per day, nitrogen oxides (NOx) emissions by 19 tons per day, and will eliminate MTBE in gasoline. Toxic emissions are expected to decrease by about seven percent. These emission reductions were based on comparing the properties of the 1998 average gasoline to the properties a representative CARB RFG Phase 3 fuel. The CARB RFG Phase 3 requirements are expected to preserve and enhance the motor vehicle emission reduction benefits of the current program and will further aid in meeting the emission reductions required by the State Implementation Plan (CARB, 1999).

EXECUTIVE SUMMARY – CHAPTER 3: 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, Solid/Hazardous Waste, and Transportation/Traffic.

Air Quality

Over the last decade and a half, these has been significant improvement in air quality is 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.

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 Refinery and terminals 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. The risk associated with a facility is defined by the probability of an event and the consequence (or hazards) should the event occur. This section discusses existing hazards to the community from potential upset conditions at the Refinery and terminals, 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 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 chlorine and ammonia. The Refinery and terminals 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 Refinery and terminal operations 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, and 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.

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 and terminals are subject to the noise ordinances of the local jurisdictions. Chapter 3 provides estimates of the existing noise levels in the Wilmington area near the Refinery and in the areas surrounding the terminals. The Refinery and the terminals are surrounded by industrial facilities, commercial

activities and transportation corridors. Major contributors to the ambient noise levels in the vicinity of the Refinery, Los Angeles Terminal and marine terminal include local railways, vehicular traffic, industrial facilities, construction activity and numerous port-related activities. Major contributors to the ambient noise levels in the vicinity of the other terminals include vehicular traffic and industrial facilities.

Solid/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 Refinery also generates non-hazardous solid or municipal wastes that are disposed of in local landfills. 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 and 2001 to determine the existing traffic in the area. The traffic analysis indicates typical urban traffic conditions in the area surrounding the Refinery, Carson Terminal, and Los Angeles Terminal, with most intersections operating at Level of Services (LOS) A to B. The only exception to this is that the Wilmington Avenue/223rd Street intersection is operating at LOS E.

EXECUTIVE SUMMARY – CHAPTER 4: SUMMARY OF IMPACTS AND MITIGATION MEASURES

This section summarizes the environmental impacts, mitigation measures, and residual impacts associated with the proposed project. Table 1-1 includes a brief description of the environmental issues identified 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 to be issued per CEQA Guidelines §15093 if the project is approved. Potentially Significant levels. The SCAQMD interprets §15091 to require findings only if impacts are not significant. If an impact is mitigated to insignificance, findings are not required. 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 Adverse Impacts

Air Quality: The emissions of carbon monoxide (CO), volatile organic compounds (VOC), and nitrogen oxides (NOx), and PM10 will exceed mass daily emissions during project

construction, primarily from off-road, heavy duty construction equipment and site preparation.

The emissions of CO, VOC, and NOx will exceed mass daily emission levels during operation. Emission sources include both stationary source equipment and on-road mobile sources.

Hazards: The proposed modifications to HTU2 could extend the hydrogen sulfide hazard zone an additional 200 feet west of Alameda, resulting in potential exposure to hydrogen sulfide in concentrations equal to or greater than the Emergency Response Planning Guideline (ERGP) 2 levels. The hazards associated with these modifications are potentially adverse significant impacts.

Potentially Significant But Mitigable Impacts

Transportation/

Traffic:

Adverse traffic impacts during the peak p.m. hour were identified for the operational phase at the Wilmington Ave./I-405 SB Ramp. Mitigation measures were identified to reduce the project impacts to less than significant.

Less Than Significant Impacts

Air Quality:	SOx emissions from the construction phase of the proposed project are less than significant. SOx and PM10 emissions during the operation of the proposed project are expected to be less than significant.	
	During the operational phase of the project, ambient concentrations of criteria pollutants, CO hot spots, emissions of toxic air contaminants and odors are expected to be less than significant.	
Geology/Soils:	Adverse project impacts on topography, unique geological resources, soil contamination, and geological hazards are less than significant.	
Hazards:	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 increased risk of off-site injury, and exposure to a hazardous chemical in concentrations equal to or greater	

	than the ERGP 2 levels are expected to be less than significant for all proposed modifications, with the exception of HTU2.
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 phase are expected to be less than significant.

TABLE 1-1

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
AIR QUALITY		
Construction activities will generate emissions of CO, VOC, NOx and PM10 that are significant. The construction emissions of SOx is are less than significant.	Develop a Construction Traffic Emission Management Plan. The Plan shall include measures to minimize emissions from mobile sources including requiring measures to proincluding an average vehicle ridership goal of 1.5, avoid morning peak hour traffic.	Construction emissions are expected to remain significant for CO, VOC, NOx, and PM10.
	vide parking, scheduling truck deliveries, <u>deliveries to avoid</u> consolidating truck deliveries to avoid	
	peak traffic hours, and limit idling to 10 minutes.	
	Suspend use of construction equipment during first stage smog alerts.	
	Prohibit trucks from idling longer than <u>10 minutes.</u> ten minutes.	
	Use electricity or alternate fuels for on-site mobile equipment ment instead of diesel equipment ment, when <u>feasible</u>.	<u>re</u>
	Maintain_construction equipment tuned up and retard diesel engine timing, to the extent feasible.	
	Use electric welders to avoid emissions from gas or diesel welders in portions of the project sites where electricity is available.	
	Use on-site electricity rather than temporary power	

TABLE 1-1

ІМРАСТ	MITIGATION MEASURES	RESIDUAL IMPACT
	generators in portions of the project sites where electricity is available.	
	Diesel powered construction equipment shall use low low sulfur diesel, as defined in SCAQMD Rule 431.2 to the maximum extent feasible.	

TABLE 1-1

ІМРАСТ	MITIGATION MEASURES	RESIDUAL IMPACT
Air Quality (cont.)	Evaluate the feasibility of retrofitting the large off- road construction equipment that will be operating for significant periods and use them if they are commercially available and can be feasibly retrofitted onto construction equipment.	
Operational emissions of criteria pollutants are significant for CO, VOC, and NOx from non- RECLAIM sources.	Project emissions are controlled through the use of BACT. No feasible mitigation measures were identified for truck, railcars, and marine engines. Emissions from these sources are controlled by the CARB, U.S. EPA, and/or International Maritime Organization.	Mass daily emissions of VOCs, CO, NOx, SOx and PM10 are expected to remain significant.
Operational emissions of criteria pollutants are less than significant for NOx and SOx from RECLAIM sources and for PM10 emissions from all sources.	None required.	Mass daily emissions of NOx and SOx from stationary sources at RECLAIM facilities are expected to be less than significant. PM10 emissions are less than significant.
The ambient air concentrations of NOx, PM10, and CO are below SCAQMD <u>significance</u> threshold level <u>levels and</u> are less than significant since no new combustion sources are proposed.	None required. Is and	Concentrations of NOx, PM10, and CO are less than significant.
No significant traffic impacts were identified at local intersections so no significant increase in CO hot spots are expected.	None required.	CO hot spots are less than significant.
The project is consistent with the General Plan and is consistent with the Air Quality Management Plan so no significant impacts are expected.	None required.	Impacts on the AQMP are less than significant.

TABLE 1-1

ІМРАСТ	MITIGATION	RESIDUAL
	MEASURES	IMPACT
Air Quality (cont.)		
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.	None required.	Cancer risk impacts are less than significant.
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.	None required.	Non-carcinogenic (non-cancer) health impacts are less than significant.are less than
Potential odor impacts from the proposed project are not expected to be significant	None required	Project impacts on odors are less than significant
GEOLOGY		
No topographic changes are expected to the project sites so impacts are less than significant.	None required.	Topographic impacts are less than significant.
No unique geological resources are present that could be disturbed by the proposed project. No significant impacts are expected.	None required.	Impacts on geological resources are less than significant.
Soil erosion from wind or water could occur during construction activities but construction_dust controlp expected to minimize potential impacts.	None required as standard construction practices will ractices measures -are	Soil erosion impacts are less than significant. be employed to minimize wind/water erosion.
Compliance with Uniform Building Codes is expected to result in less than significant impacts.	Equilon is required to obtain building permits, as applicable, for all new structures.	Geological hazard impacts are less than significant.

TABLE 1-1

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
GEOLOGY (cont.)		
Construction activities could generate contaminated soils.	Any contaminated soils or ground water shall be addressed pursuant to local, state and federal regulations and requirements, including requirements of U.S. EPA, DTSC, SCAQMD, and RWQCB.	Soil/water contamination impacts are less than significant due to extensive regulations.
HAZARDS		
Impacts associated with modifications to HTU2 could result in off-site exposure to hydrogen sulfide at levels that could cause injury. Hazard impacts are considered significant for HTU2 modifications.	Equilon will be required to update its Process Safety Management Program and Risk Management Program. No additional feasible mitigation measures were identified, over and above the extensive safety regulations that apply.	Hazard impacts for the modifications to HTU2 are significant.
Impacts associated with on-site releases are not expected to result in off-site exposure to levels that could cause injury for the other proposed Refinery and terminal modifications. These hazard impacts are considered less than significant.	None required because of the extensive regulations Equilon will be required to update its Process Safety Management Program and Risk Management Program.	Hazard impacts associated with other Refinery and terminal modifications are expected to be less than significant.
The proposed project impacts on water quality aredu an accidental release are expected to be less than sig significant. significant.		Hazard impacts on water quality are expected to be <u>to</u> existing containment facilities. less than
The project is expected to increase the transport of acutely hazardous materials or petroleum products via truck or <u>The impact is less</u> railcar. The accidental release is less than than-significant.	None Required.	Hazard impacts due to transportation are less than significant.
The project is expected to comply with all applicable applicable design codes and regulations.	e None Required.	Hazard impacts are less than significant.

TABLE 1-1

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
NOISE		
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.	None Required.	Construction noise is less than significant.
Operational noise is considered less than significant as the estimated noise increase is less than 3 dBA and within the noise levels established under the local cities noise ordinance.	None Required.	Operational noise impacts are expected to be less than significant.
SOLID/HAZARDOUS WASTE		
Construction activities will generate solid/hazardous waste but sufficient landfill capacity exists to handle the increases so that no significant impacts are expected.	None Required.	Solid/hazardous waste impacts are less than significant.
The proposed project is expected to increase the generation of sulfuric acid and spent catalyst. These waste streams are regenerated or recycled at approved off-site facilities so that no significant impacts are expected.	None Required.	Solid/hazardous waste impacts during project operation are less than significant.

TABLE 1-1

IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
TRANSPORTATION/CIRCULATION No significant change in the level of service (LOS) a rating at <u>any</u> intersection is expected, so that no significant traffic impacts due to construction of the proposed project are expected.	ny None required.	Traffic impacts during the construction phase are less than significant.
The change in LOS at the Wilmington Ave./I-405 SB Ramp is expected to change from C to D during the p.m. peak hour which is considered to be significant. The project impacts on LOS at all other intersections are expected to be less than significant.	Truck traffic from the Carson Terminal shall be scheduled to avoid the Wilmington Ave./I-405 SB ramp during the evening peak hour.	Traffic impacts due to operation of the proposed project are less than significant following mitigation.

EXECUTIVE SUMMARY – CHAPTER 5: CUMULATIVE IMPACTS

A number of other projects that have the potential to generate 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. Potentially significant cumulative impacts were identified for air quality, noise and traffic.

EXECUTIVE SUMMARY – CHAPTER 6: PROJECT ALTERNATIVES

This EIR provides a discussion of 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 reasonable 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.

Alternatives presented in this EIR were developed by reviewing different methods to eliminate MTBE as an oxygenate and obtain more alkylate. Consequently, each project alternative described below is similar to the proposed project in most respects except for the source of additional alkylane. The rationale for selecting specific components of the proposed project on which to focus the alternative analysis rests on CEQA's requirements to present a reasonable range of project alternatives that could feasibly attain the basic objectives of the project, while generating fewer of less severe adverse environmental impacts. The EIR includes a discussion of the following alternatives to the proposed project:

- Purchase of Additional Alkylate Under this alternative, the need for additional alkylate would by purchased (rather than produced) and transported via marine vessel to the Equilon Los Angeles Refinery.
- Construction of a New Alkylation Unit Under this alternative, a new alkylation unit would be constructed to produce the additional alkylate required by the facility instead of modifying the existing alkylation unit.
- Alternate Location for Ethanol Railcar Unloading Facilities Under this alternative the railcar unloading facilities would be constructed at an alternate site in the City of Carson.

In addition, several alternatives were rejected as infeasible. Alternative oxygenates other than ethanol were considered infeasible since ethanol is the only oxygenate that can be used at this time. Alternative terminals for the distribution of ethanol were considered but rejected because more construction and/or transportation impacts would occur.

Alternative analyses typically evaluate the "No Project Alternative" as a basis for comparing potential significant adverse environmental impacts. However, Public Resources Code §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 project sites. Accordingly, this EIR addresses only those alternatives that could be developed within the existing Equilon facilities. The exception to this is that Equilon has identified another potential site for railcar unloading of ethanol and this site is evaluated as an alternative herein.

It was determined that all of the alternatives would achieve the objectives of the proposed project. However, none of the project alternatives would eliminate the significant adverse environmental impacts identified for the proposed project. In fact, the alternatives were expected to result in higher operational emissions than the proposed project. No other feasible alternatives have been identified that would reduce the proposed project 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 Equilon 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.

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