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.

GENERAL INFORMATION

Project Title:	**Equilon Enterprises LLC – Los Angeles Refinery** **CARB Phase 3 Clean Fuels Project**
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 E. Copley Drive Diamond Bar, CA 91765
Contact Person:	Mike Krause
Contact Phone Number:	(909) 396-2706
Project Sponsor's Name:	Equilon Enterprises LLC
Project Sponsor's Addresses:	Equilon Enterprises 2101 E. Pacific Coast Highway (Los Angeles Refinery) 1936 E. Pacific Coast Highway (Terminal) Wilmington, CA 90744 Signal Hill Terminal 2457 Redondo Avenue Long Beach, CA 90806 Carson Terminal 20945 S. Wilmington Avenue Carson, CA 90810 Van Nuys Terminal 8100 Haskell Avenue Van Nuys, CA 91406 Colton Terminal 2307 S. Riverside Avenue Bloomington, CA 92316 Rialto Terminal 2237 S. Riverside Avenue Bloomington, CA 92316

	Mormon Island Marine Terminal Berth 167-169 Los Angeles Harbor, CA 90749
General Plan Designation:	Heavy Industrial and Industrial
Zoning:	M3-1 and MH
Description of Project:	The Clean Fuels Project will allow Equilon to comply with the California Air Resources Board ban on the use of MTBE and the recently adopted Phase 3 reformulated fuels requirements (see Project Description in Chapter 1).
Surrounding Land Uses and Setting:	Industrial and commercial uses including petroleum refining, hydrogen production facilities, storage tank facilities, distribution terminals, bulk loading facilities, manufacturing, commercial, and scrap yards. Residential areas are located adjacent to several of the teminals.
Other Public Agencies Whose Approval is Required:	South Coast Air Quality Management District, City of Los Angeles, Port of Los Angeles, City of Colton, City of Signal Hill, City of Rialto

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.

☐ Aesthetics	☐ Agriculture Resources	☑ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☑ Geology/Soils	☑ Hazards & Hazardous Materials	☐ Hydrology/ Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☑ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☑ Solid/Hazardous Waste	☑ Transportation/ Traffic	☑ Mandatory Findings of Significance

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: September 21, 2000 Signature: Steve Smith

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

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

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b) Construction activities are not expected to adversely impact views and aesthetics since most of the heavy equipment and activities will occur in the center portion of the Refinery and will not be visible to areas outside the Refinery. The majority of construction equipment is low in height and will not be visible to the surrounding area due to the presence of fencing and structures that buffer the views of low structures at the Refinery. A few cranes may temporarily be visible. Construction of the terminals will be visible to surrounding areas that are also largely industrial areas. The construction activities are temporary in nature and will cease following project completion.

The proposed project will introduce a minor visual change to the Refinery. The new and modified units will include a new heater/boiler stack and new units that may will be visible to the areas outside of the Refinery. The new and modified units will be about the same size profile as the existing Refinery. The new units and additional stacks, specifically, would be visible from adjacent areas. The appearance of the new and modified units is not expected to differ significantly from other Refinery units so that no significant impacts to aesthetics are expected.

Minor visual changes also are expected at the terminals due to the construction of new above ground storage tanks within the confines of the existing terminals. The general area around the terminals is heavy industrial. The addition of new storage tanks within the confines of an existing industrial facility, while noticeable to the surrounding areas, is expected to be compatible with the surrounding areas and less than significant.

No scenic highways or corridors are located in the vicinity of the Refinery or terminals. No significant adverse aesthetic impacts are expected.

c,d) Lighting will be provided as necessary in accordance with applicable safety standards and is expected to be consistent with existing lighting at the Refinery and the terminals. Additional lighting may be provided on new structures associated with the proposed project. The new lights are not expected to create light and glare impacts to areas adjacent to the Refinery due to the industrial nature of the Refinery. Additional lighting at the terminals is not expected.

Conclusions: No significant impacts on aesthetics are expected from the proposed project. Therefore, aesthetics impacts will not be addressed in the EIR.

		Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
II.	**AGRICULTURE RESOURCES.** 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?	☐	☐	☑
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☑
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?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c) All proposed modifications would occur within the confines of the existing Refinery or existing terminals. The proposed project would be consistent with the heavy industrial zoning for the Refinery (M3-1) and there are no agricultural resources or operations on or near the proposed project site. No agricultural resources including Williamson Act contracts are located within or would be impacted by construction activities at the terminals.

Conclusions: No significant impacts to agricultural resources are expected from the proposed project. Therefore, agricultural resources will not be addressed in the EIR.

	Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
III. AIR QUALITY. Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑
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)?	☑	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☑	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☑	☐
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b) The project is being proposed to allow the Refinery to comply with the CARB RFG Phase 3 requirements. These requirements have been developed to provide additional air quality emission reductions from vehicles that use reformulated gasoline. As outlined in the Air Quality Management Plan (AQMP), additional emission reductions from mobile sources are necessary for the South Coast Air Basin (and other air districts within California) to comply with the ambient air quality standards. Therefore, the proposed project will assist in the implementation of the AQMP and will assist the Basin to move towards compliance with the ambient air quality standards.

c) Construction-related activities will generate air emissions from worker vehicles, trucks, and construction equipment. The air quality impacts associated with the construction phase of the proposed project are potentially significant and will be evaluated in the EIR.

The proposed project would add emission sources to the Refinery including new heaters, boilers, pumps, valves, flanges, storage tanks, drains and pressure relief valves. The SCAQMD requires that best available control technology (BACT) be installed on new emission sources within the South Coast Air Basin that should minimize project-related emissions. The proposed project impacts on air quality during the operational phase are potentially significant and will be evaluated in the EIR.

The proposed project may also alter the transport of raw materials to the Refinery, the transport of products from the Refinery, the distribution of materials to/from the terminals, and the mode of transportation. The air emission impacts related to changes in the amount or type of material transported will be evaluated in the EIR.

d) New emission sources associated with the proposed project may emit toxic air contaminants. The impact of the emissions of toxic air contaminants on sensitive populations, including individuals at hospitals, nursing facilities, daycare centers, schools, and elderly intensive care facilities, as well as residential and off-site occupational areas, will be evaluated in the EIR.

e) The proposed project is not expected to create significant objectionable odors, either during construction or during operations. Sulfur compounds (e.g., hydrogen sulfide) are the primary odor source within Refinery operations. The proposed project would remove additional sulfur and sulfur bearing compounds from the Refinery streams. The sulfur-bearing materials are handled and treated in the Sulfur Recovery Units where they are converted to elemental (solid) sulfur. Odors are not associated with elemental sulfur. The Refinery will continue to process sulfur-bearing materials in the Sulfur Recovery Units. The proposed project is expected to generate additional sulfur-bearing compounds that will be handled by the Refinery. The Refinery maintains a 24-hour staff available for

odor investigation. This activity contributes to minimizing the frequency and magnitude of odor events at the facility. Therefore, no significant odor impacts are expected.

f) The proposed project will be required to comply with the applicable SCAQMD, CARB, and U.S. EPA rules and regulations. Therefore, the proposed project is not expected to diminish an existing air quality rule or future compliance requirements. In addition, the proposed project will allow the Refinery to comply with the CARB Phase 3 reformulated fuels requirements.

Conclusions: The air quality impacts associated with increased emissions of air contaminants (both criteria and toxic air contaminants) during the construction and operation phases of the proposed project will be evaluated in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES.** 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?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑
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?

e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☑
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c,d,e,f) The proposed project will be located within the confines of an existing, operating petroleum Refinery and related terminals. Past development of the sites has virtually eliminated all natural habitats within the Equilon Refinery and terminal boundaries. Currently, no species of rare, threatened, or endangered plants or animals have been reported in the vicinity of the project. Thus, no listed species are expected to be significantly adversely impacted by construction or operation of the proposed project. Because the area in and near the Refinery and the terminals is devoid of native habitat, impacts to other, non-listed species are not expected.

The project site is not located on or near a wetland habitat, and will not create any barriers to the movements of animals.

Conclusions: The construction/operation of the proposed project is not expected to have significant impacts to biological resources since no native habitat is located within the confines of the existing Refinery or terminals. Therefore, biological resources will not be addressed in the EIR.

		Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
V.	**CULTURAL RESOURCES.** Would the project:			
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☑
b)	Cause a substantial adverse change in the	☐	☐	☑

	significance of a archaeological resource as defined in §15064.5?			
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☑
d)	Disturb any human remains, including those interred outside a formal cemeteries?	☐	☑	☐

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c) Additional excavation and grading for the construction of the new units or storage tanks will occur within the confines of the existing and operating Refinery and terminals which have already been developed and graded. The new and modified units will be located within areas that currently have process equipment and some of these units will require demolition of existing equipment prior to construction of the new/modified units. There are no known paleontological, archaeological or historical resources (other than those discussed below) within the confines of the existing Equilon facilities. No cultural resources are expected due to the heavily developed nature of the Refinery and terminal sites.

d) Work conducted as part of construction activities at the Refinery uncovered human remains within the confines of the Refinery near the eastern property line, just north of Pacific Coast Highway and adjacent to the Dominguez Channel. The human remains were determined to be of Native American origin (Applied EarthWorks, 1999). Construction activities were suspended until all the remains were uncovered and a complete site investigation could be conducted. Additional site investigations did not uncover any additional human remains and construction activities resumed.

The proposed project is not expected to uncover additional human remains as the construction activities will occur within portions of the Refinery that are currently graded and developed with process units. Should any remains be encountered during construction, activities will be halted within the area until a qualified individual can be retained to evaluate the remains. A qualified individual will include a certified archaeologist/paleontologist or an individual from the coroner's office.

Conclusions: No significant impacts on cultural resources are expected from the proposed project. Therefore, impacts of the proposed project on cultural resources will not be addressed in the EIR.

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

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) The proposed project is not subject to any existing energy conservation plans. Additionally, project construction and operation activities will not utilize non-renewable resources in a wasteful or inefficient manner.

b,c,d,e) Electrical power may be required for certain construction equipment. This requirement can be met with the existing electrical capacity. A minimal amount of natural gas may also be required during construction of the proposed project at the Refinery that could be supplied by the Refinery or the local utility. No significant impacts to electrical or natural gas utilities are expected due to construction activities.

Operation of the proposed project will require about additional two megawatts of electricity. This electricity will be supplied from Equilon generated electricity through existing on-site steam cogeneration units that supply about 58 megawatts per hour of electricity to the Refinery power grid. No increase in electrical use is expected at the terminals.

Operation of the proposed project will require additional refinery fuel gas and natural gas. Most of the increase can be supplied via the refinery's fuel gas system. About three million standard cubic feet per day of natural gas is expected to be required for the proposed project. Sufficient natural gas supplies exist, about 5,700 million cubic feet per day (SCAQMD, 1997), so that the increase in

natural gas use is not expected to be significant. No increase in natural gas use is expected at the terminals.

Conclusion: No significant impacts to energy are expected from the construction/operation of the proposed project so this resource will not be addressed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
• 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?	☑	☐	☐
• Strong seismic ground shaking?	☑	☐	☐
• Seismic–related ground failure, including liquefaction?	☑	☐	☐
• Landslides?	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☑	☐	☐
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?	☑	☐	☐
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?	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) The Los Angeles area is considered a seismically active region with a number of earthquake faults throughout Southern California. Construction of additional units at the Refinery and terminals would subject additional units to potential impacts associated with earthquakes. The potential impacts of earthquakes on the proposed project structures will be evaluated in the EIR.

b) During construction of the project the possibility exists for temporary erosion resulting from excavation and grading activities, if required. These activities are expected to be minor since the Refinery and terminals are generally flat and have already been graded. The proposed project involves the addition of new structures to an existing facility so that grading will be required to provide stable foundations. The impacts related to grading will be addressed in the EIR. No unstable earth conditions or changes in geologic substructures are expected from the project.

c,d) The potential for liquefaction will be evaluated in the EIR. Liquefaction is most likely to occur in unconsolidated granular sediments that are water saturated less than 30 feet below ground surface (Tinsley, et al., 1985). The County of Los Angeles General Plan identifies areas along the Dominguez Channel as being areas subject to liquefaction. Therefore, the potential impacts associated with liquefaction will be evaluated in the EIR.

Subsidence has been a historic problem in the Wilmington/Long Beach area due to the removal of subsurface oil and gas reserves. Subsidence is the settling of the earth's surface due to compaction of underlying soils. This is most common in uncompacted soils, thick unconsolidated alluvial material and in some artificial fill. Subsidence was accelerated in the Los Angeles/Long Beach Harbors area due to extraction of oil and gas reserves in the Wilmington Oil Field. This affected the majority of the harbor area. The City of Long Beach Department of Oil Properties instituted the first major water injection program in 1958 to replace the removed oil and gas and allow the ground surface to rebound. This program has been successful so that subsidence has been reversed and the area has rebounded. Subsidence is no longer considered a problem in the Wilmington Oil Field.

Local site subsidence resulting from the addition of structures and pipelines will be considered during engineering design of any facility modifications or construction at the site. Proper foundation design will reduce potential effects of vibrating equipment. As a result, the proposed project is not expected to contribute to or affect local site subsidence in the vicinity of the project.

The Refinery and surrounding area is underlain by a sequence of granular fill extending to 15 or 20 feet below ground surface. From 20 to 70 feet below ground surface are soft to firm lagoonal/lacustrine silts and clays interbedded with

thin layers of fine sand. These types of soil have a moderate rate of water transmission, and thus are not susceptible to expansion hazards.

The project areas are not subject to landslide, mudflow, seiche, tsunami or volcanic hazards since the area is flat, not located near volcanic activity and located approximately one mile from the water.

e) The Refinery has existing wastewater treatment systems that will continue to be used as part of the proposed project. Sewer systems are available to handle wastewater produced by the Refinery. The Refinery does not and the proposed project will not use septic systems or alternative wastewater disposal systems. Therefore, the proposed project will not adversely affect soils associated with a septic system or alternative wastewater disposal system.

Conclusions: The potential earthquake, liquefaction, and grading (soil erosion) impacts of the proposed project will be evaluated in the EIR. Other geological issues are expected to be less than significant and will not be evaluated further.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous materials?	☑	☐	☐
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?	☑	☐	☐
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☑	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☑	☐	☐

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 result in a safety hazard for people residing or working in the project area?	☐	☐	☑
f)	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?	☐	☐	☑
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑
h)	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?	☐	☐	☑
i)	Significantly increased fire hazard in areas with flammable materials?	☑	☐	☐

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b) Hazard analyses have been completed for the existing Refinery units. The proposed project may alter the hazards associated with the existing Refinery. New units will be installed, including a new CD Tech Unit, Merichem Unit and pentane sphere that may increase the potential hazards at the Refinery. The proposed project may increase the transport of hazardous materials. The proposed project also may alter the transportation modes for feedstocks and products to/from the Refinery and related terminals. The potential hazard impacts related to the proposed project are potentially significant and will be addressed in the EIR.

c) The Equilon Refinery, Signal Hill Terminal, Van Nuys Terminal, Riato/Colton Terminal, and Mormon Island Marine Terminal are not located within one-quarter mile of an existing or proposed school. A school is located within one-quarter mile of the Carson Terminal. The potential for impacts from hazardous emissions or the handling of acutely hazardous materials, substances and wastes on schools is expected to be less than significant. Schools near the Refinery and terminals will be included in the health risk assessment completed as part of the EIR for the proposed project.

d) The proposed project will be constructed within the confines of the existing Refinery and terminals. The Refinery, Wilmington Terminal, Signal Hill Terminal, Carson Terminal, and Van Nuys Terminal are included on a list of hazardous material sites compiled pursuant to Government Code §65962.5. The potential for the project to impact the public or the environment will be evaluated in the EIR.

e,f) The proposed project will be constructed within the confines of the existing Refinery and terminals. These facilities are not located within two miles of an airport (either public or private) and are not located within an airport land use plan.

g) The proposed project is not expected to interfere with an emergency response plan or emergency evacuation plan. The proposed project will result in modifications to an existing Refinery and related terminals. All construction activities will occur within the confines of the Refinery and the terminals so that no emergency response plans are expected to be impacted. Equilon has implemented an emergency response plan, but no modifications to the plan are expected as a result of the proposed project.

h) The proposed project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees. No vegetation exists at or near the Refinery processing units or within the terminals so the proposed project is not expected to expose people or structures to wild fires.

i) The proposed project involves the use of flammable materials in the refining process. The proposed project would increase the amount of flammable materials used, transported, and stored at the Refinery, the impacts of which will be evaluated in the EIR.

Conclusions: The potential hazard impacts related to Refinery operations and the transport of hazardous materials associated with the proposed project will be addressed in the EIR.

	Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
IX. HYDROLOGY AND WATER QUALITY. Would the project:			
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☑
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)?			
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?	☐	☑	☐
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?	☐	☑	☐
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?	☐	☑	☐
f)	Otherwise substantially degrade water quality?	☐	☑	☐
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?	☐	☐	☑
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flaws?	☐	☐	☑
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?	☐	☐	☑
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☑
k)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☑	☐
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?			
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?	☐	☑	☐
n)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☑	☐
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?	☐	☑	☐

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,k,l,o) Equilon's current Industrial Wastewater Discharge Permit entitles it to discharge wastewater. The proposed project is expected to increase the wastewater generated by the Refinery by about 70 gallons per minute (gpm), about 100,800 gallons per day. The increased wastewater is expected to include boiler blowdown. The Refinery has applied for a revision to its Industrial Wastewater Discharge Permit that will allow the discharge of noncommingled process wastewater to be discharged to the sanitary sewer system. This revision will change the average discharge rate from 750 gpm to an average of 2,200 gpm. The increased wastewater discharge due to the proposed project is within the 25 percent variation allowed by the LACSD. The impacts of the proposed project on the Refinery's wastewater discharge and the Industrial Wastewater Discharge Permit are considered to be less than significant. No increase in wastewater discharge is expected from the terminals so no significant impacts on wastewater discharge are expected from the terminals.

b) The proposed project is not expected to significantly adversely affect the quantity or quality of ground water in the area for the reasons discussed below. There is no beneficial use of ground water in the Refinery area since all aquifers in this area are unusable for fresh water supply because of salt-water intrusion. The project would not interfere with the operation of ground water or monitoring wells maintained by the Los Angeles County Department of Public Works for the West Coast Basin Barrier Project designed to stop salt water intrusion. No significant adverse impacts are expected to ground water quality from the proposed project

because: (1) wastewater will continue to be collected and treated in the Refinery's wastewater treatment system or in compliance with wastewater discharge permits; (2) no underground storage tanks will be constructed as part of the proposed project; (3) containment berms are proposed or exist around the new/modified units and tanks to minimize the potential for a spill to contaminant soil/ground water; and (4) new tanks will be required to comply with double bottom and monitoring requirements.

c,d,e,m) Changes to the Refinery's storm water collection system are expected to be less than significant since most of the changes will occur within existing units. Most of the project area is currently paved and will remain paved. The new units will be curbed and existing units will remain curbed to contain any runoff. Any runoff at the process unit area will be handled in the Refinery wastewater system and sent to the on-site wastewater treatment system prior to discharge to the Los Angeles County Sanitation District (LACSD) system. The surface water runoff is expected to be handled within the current wastewater treatment system. Storm water runoff from outside the process unit areas will be collected and discharged through an NPDES permit.

Storm water at the terminals is collected, treated or inspected as appropriate, and discharged to the sewer systems under the requirements of the storm water permit or NPDES permit. Changes may be required to storm water system at the terminals due to the construction of new storage tanks. The new tanks will require secondary containment that will control storm water runoff from the facilities. This storm water will be directed to the existing storage system and be treated or inspected as appropriate. The changes to the storm water systems are expected to be minor so that no significant impacts are expected.

f) The impacts of the proposed project are not expected to degrade water quality further than evaluated in this Initial Study/NOP.

g,h,i) The proposed project involves the construction and modifications within an existing Refinery and does not include the construction of any housing or would not place housing within a 100-year flood hazard area. The Refinery is not located within a 100-year flood hazard area so the proposed project would not impede or redirect 100-year flood flows. The proposed project is not located within a flood zone and would not expose people or property to any known water-related hazards.

j) The Refinery is located near the Port of Long Beach and Los Angeles. The port areas have been protected from tsunamis by the construction of breakwaters. The Refinery is located about one mile from the inner portions of the port and at least two miles from the outer portions of the port. The construction of the breakwaters combined with the distance of the Refinery from the water is expected to minimize the potential impacts of a tsunami or seiche so that no significant impacts are expected. The proposed project is not located in an area susceptible

to mudflows, e.g., hillside or slope areas, so that no significant impacts from mudflow would be expected.

n) The major source of process water to the Refinery is from on-site water wells. Equilon has received water rights for use of ground water from the West Basin Municipal Water District. Process water needs in excess of the amount pumped under the agreement with the West Basin Municipal Water District are supplied from the Dominguez Water Corporation. The Refinery uses about 5.6 million gallons of water per day. This water is used in many of the refining processes at the facility including crude desalting, cooling towers, and steam generation.

The proposed project is expected to incrementally increase the water demand at the Refinery. The additional water will be used for boiler make-up water, cooling tower make-up, and steam. The increase in water demand is expected to be within the available water supply. No increase in water demand is expected at the terminals.

Conclusions: The proposed project impacts on wastewater discharge, storm water discharge, and water demand are expected to be less than significant and will not be evaluated in the EIR. The impacts of other water impacts are expected to be less than significant and will not be addressed in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING.** Would the project:			
a)	Physically divide an established community?	☐	☐	☑
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?	☐	☐	☑
c)	Conflict with any applicable habitat conservation or natural community conservation plan?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) The proposed project site will be located within an existing Refinery and the existing terminals and would not disrupt or divide an established community.

b,c) The proposed project would be consistent with the zoning for the Refinery (M3-1 and MH) and with the Wilmington-Harbor City Plan (City of Los Angeles, 1999) and the City of Carson General Plan. All proposed modifications would occur within the confines of the existing Refinery or existing terminals. The land use at the existing terminals also is industrial. Project development will be confined to the existing terminals or Refinery site. Therefore, significant impacts on land use are not expected.

Conclusion: The impact of the proposed project on land use is expected to be less than significant and will not be addressed in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES.** 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?	☐	☐	☑
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?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a, b) The only significant resource in the vicinity of the Refinery is the production of oil from the Wilmington field. While much of the operation for this field has been decommissioned, limited production facilities remain in the vicinity of the Refinery. None of these production facilities will be affected by the proposed project so no significant impacts are expected.

Conclusion: No significant impacts to mineral resources are expected from the construction/operation of the proposed project so these resources will not be addressed in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XII.	**NOISE.** 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?	☑	☐	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☑	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐	☐
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?	☐	☐	☑
f)	For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c,d) Construction activity for the proposed project will generate noise associated with the use of heavy construction equipment and construction-related traffic. The potential construction noise impacts may be significant.

Noise from the proposed project is expected to produce noise in excess of current operations. The proposed project will add new noise sources to the Refinery and

terminals including pumps, fans, and a boiler. These noise increases are potentially significant and the impacts will be evaluated in the EIR.

e,f) The proposed project is not located at sites within an airport land use plan, or within two miles of a public airport. The proposed project would not expose people residing or working in the project area to excessive noise levels associated with airplanes.

Conclusion: The noise impacts associated with the proposed project are potentially significant and will be addressed in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XIII.	**POPULATION AND HOUSING.** 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)?	☐	☐	☑
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☑
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c) Construction activities at the Refinery and the terminals will not involve the relocation of individuals, impact housing or commercial facilities, or change the distribution of the population because the proposed project will occur completely within existing industrial facilities. The construction work force, which is temporary, is expected to come from the existing labor pool in the Southern California area. Additionally, the project operation is not expected to require a significant number of new permanent employees at the Refinery and no new employees are expected at the terminals. Therefore, construction and operation of the proposed project is not expected to have a significant impact on population or housing.

Conclusion: No significant impacts on population and housing are expected due to the proposed project; therefore, this issue will not be discussed further in the EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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?	☐	☑	☐
b) Police protection?	☐	☐	☑
c) Schools?	☐	☐	☑
d) Parks?	☐	☐	☑
e) Other public facilities?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) Construction activities are not expected to result in an increased need for fire response services. Construction activities include safeguards, monitoring for hazards with equipment designed to detect sources of flammable gases and vapors, written procedures, training, and authorization of equipment used on-site.

Compliance with state and local fire codes is expected to minimize the need for additional fire protection services. The Refinery is served by its own emergency response team along with local fire department and other emergency services. The proposed project will include requirements for additional fire protection services. Fire-fighting and emergency response personnel and equipment will continue to be maintained and operated at the Refinery. Close coordination with local fire departments and emergency services will also be continued.

It is expected that the required fire-flow requirements for this project will be the same as other portions of the Refinery [9,000 to 12,000 gallons per minute (gpm)]. The Refinery has a number of on-site fire hydrants. Additional fire hydrants may be required near new Refinery units. Fireflow is expected to be sufficient to handle the proposed project.

Existing fire protection equipment at the Refinery includes two fire trucks with foam pumping capabilities; heavy cranes, an electric bucket truck, and various refinery trucks; portable foam carts; portable monitors; self-contained air packs; respirators and other protective clothing; dry chemical extinguishers; and fire hoses. The Refinery maintains a segregated fire water distribution system with hydrants and monitors throughout the Refinery. In addition, Equilon maintains an on-site Emergency Response Team composed of six to 10 personnel per shift with fire-fighting experience. Members of the team receive hands-on fire training and emergency response training. On-site fire training exercises are conducted at the Refinery. The emergency response team members are responsible for implementing the emergency plan.

The terminals maintain emergency response plans as well, which can be implemented in the event of an emergency. The modifications to the terminals are not expected to result in changes to the emergency response plan.

b) The City of Los Angeles Police Department is the responding agency for law enforcement needs in the vicinity of the proposed project. The Refinery is located within the jurisdiction of the Los Angeles Police Department's Harbor Division. The Harbor Division Station, located at 2175 John Gibson Boulevard in San Pedro, is approximately five miles from the Refinery. The station has six to twelve units available for response, depending on the time of day. Because police units are in the field, response times vary depending on the location of the nearest unit.

Construction activities within the confines of the Refinery will be monitored by the existing security force stationed at the Refinery 24 hours a day, seven days a week. The Refinery is fenced and a 24-hour security force will continue to be maintained. Entry and exit of the construction work force would be monitored and no additional or altered police protection is expected.

Construction activities also will occur within the confines of the terminals that are fenced and entry is restricted. Entrance to the terminals will continue to be restricted so additional police protection at the terminals also is not expected.

c) Construction activities at the Refinery or terminals will not involve the relocation of individuals, impact housing or change the distribution of the population. No significant increase in the number of permanent workers is required as part of the proposed project. Thus, the proposed project will not alter existing, or require additional schools.

d,e) No significant increase in the number of employees is expected due to operation of the proposed project. Therefore, this project would not affect the maintenance of public facilities, nor would it create an increase in demand for additional public facilities such as parks or new roads.

Conclusions: No significant impacts on public services are expected due to the proposed project. Therefore, public services will not be addressed in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.				
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.?	☐	☐	☑
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?	☐	☐	☑

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) The proposed project would not increase the demand for neighborhood or regional parks, or other recreational facilities in the area since the project is not expected to increase the local population.

b) This proposed project would not adversely affect existing recreational opportunities. Due to the heavy industrialization of the area, there are no recreational opportunities of significance at or in the immediate vicinity of the Refinery or the terminals that would be impacted by the proposed project.

Conclusions: No significant impacts on recreation are expected from the proposed project. Therefore, impacts of the proposed project on recreation will not be addressed in the EIR.

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

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) Construction activities may generate additional solid waste. In addition, contaminated soil may be uncovered, given the heavily industrialized nature of the Refinery and the fact that refining and/or storage activities have been conducted at the sites for a number of years. Contaminated soils may require remediation and disposal of contaminated materials.

The proposed project is expected to increase the waste generated by the Refinery. This waste is associated with solid materials from catalysts, etc., and will result in an incremental increase in total waste generated by the Refinery. However, the increase is expected to be minimized through the Refinery's Waste Minimization Program and practice of regenerating, reclaiming or recycling catalyst, in lieu of disposal. The impact of the waste generation will be evaluated in the EIR.

b) The Refinery and terminals currently comply and the proposed project will continue to comply with federal, state, and local regulations related to solid and hazardous wastes.

Conclusions: The proposed project impacts on hazardous and solid waste facilities are potentially significant and will be evaluated in the EIR.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII.	**TRANSPORTATION/TRAFFIC.** 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)?	☑	☐	☐
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☑	☐	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☑
d)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☑
e)	Result in inadequate emergency access or access to nearby uses?	☑	☐	☐
f)	Result in inadequate parking capacity?	☐	☑	☐
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☑	☐

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,e) The proposed project will increase the traffic in the area associated with construction workers, construction equipment, and the delivery of construction materials. The impacts of the traffic impacts during the construction phase will be evaluated in the EIR.

The work force at the Refinery and the terminals are not expected to significantly increase as a result of this project and operation-related traffic is expected to be minimal. The proposed project may alter the transportation of oxygenate to/from the marine terminal, Refinery and truck terminals. Therefore, the traffic impacts associated with the operation of the proposed project and revisions in the transportation of oxygenate will be evaluated to determine the potential impacts of the proposed project on traffic and circulation.

Operation of the proposed project may also alter the transportation of feedstocks into and products from the facility. Equilon will eliminate the marine transport of MTBE but increase the marine transport of ethanol. The potential increase or decrease in the transportation of feedstocks or products to/from the Refinery and terminals associated with truck, marine vessel or railcar traffic will be evaluated in the EIR.

c) The refining of petroleum products does not require the transport of materials to or from the Refinery or marine terminals via air traffic. Therefore, the proposed project is not expected to result in a change in air traffic patterns.

d) The Refinery and terminals are consistent with surrounding land uses and traffic/circulation in the area has been designed to accommodate refinery-related traffic from Equilon, as well as traffic from other nearby refineries and port activities. Traffic hazards in the vicinity of the Refinery are generally associated with the construction occurring near the Refinery related to the Alameda Corridor. Aside from temporary effects during construction, the proposed project is not expected to alter the long-term circulation patterns. No circulation modifications are proposed, so there would be no long-term impacts on the traffic circulation system.

f) Parking will be provided for construction workers on or near the Refinery or terminal properties. Parking for construction workers at the Refinery will be located at the Refinery or within close proximity to the Refinery. The terminals have sufficient parking to handle the increased vehicles during construction within the existing sites. No additional parking will be needed after construction because the work force at the Refinery and the terminals is not expected to significantly increase as a result of the proposed project.

g) Construction and operation of the proposed project are not expected to conflict with policies supporting alternative transportation since the proposed project is not expected to impact alternative transportation modes, e.g., bicycles or buses because the construction and operation will occur solely at existing industrial areas.

Conclusions: The impacts on traffic during the construction and operation phases of the proposed project will be evaluated in the EIR. The impacts associated with the truck, marine vessel and railcar traffic associated with the proposed project also will be evaluated.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII.	**MANDATORY FINDINGS OF SIGNIFICANCE.**			
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?	☐	☐	☑
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)	☑	☐	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☑	☐	☐

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a) The proposed project is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The site is part of an existing Refinery facility, which has been previously graded, and this project will not extend into environmentally sensitive areas.

b) The Environmental Checklist indicates that the proposed project has potentially significant impacts on air quality, geology/soils, hazards and hazardous materials, noise, solid/hazardous waste and transportation/traffic. The potential for cumulative impacts on these resources will be evaluated in the EIR.

c) The proposed project may result in emissions of toxic air contaminants and may also increase the hazards at the Refinery. The potential for these impacts to have adverse impacts on human beings, either directly or indirectly, will be evaluated in the EIR.

DABWORD:1994NOP2r

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