

APPENDIX A

Notice of Preparation and Initial Study



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

**SUBJECT: NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL
IMPACT REPORT**

**PROJECT TITLE: CHEVRON PRODUCTS COMPANY
EL SEGUNDO REFINERY
COKE DRUM RELIABILITY PROJECT**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and will prepare a Draft Environmental Impact Report (EIR) for the project identified above. The purpose of this Notice of Preparation (NOP) is to solicit comments on the environmental analysis to be contained in the EIR.

In conjunction with the development of the proposed Project, it is necessary to address the potential adverse effects of the proposed Project on the environment. The SCAQMD is preparing the appropriate environmental analysis consistent with CEQA. The Notice of Preparation (NOP) serves two purposes: to solicit information on the scope of the environmental analysis for the proposed Project and notify the public that the SCAQMD will prepare a Draft EIR to further assess potential adverse environmental impacts that may result from implementing the proposed Project.

This NOP and the attached Initial Study are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed Project has no bearing on you or your organization, no action on your part is necessary. The project's description, location, and potential environmental impacts are described in the NOP and the attached Initial Study.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Jeff Inabinet at the address shown above, sent by FAX to (909) 396-2453, or e-mailed to jinabinet@aqmd.gov. Comments must be received no later than 5:00 p.m. on November 10, 2011. Please include the name and phone number of the contact person for your organization.

Project Applicant: Chevron Products Company

Date: October 11, 2011 **Signature:**

A handwritten signature in black ink that reads "Steve Smith".

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

Reference: California Code of Regulations, Title 14, Sections 15082, 15103, and 15375

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765-4182

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Project Title:

Chevron Products Company El Segundo Refinery – Proposed Coke Drum Reliability Project

Project Location:

The Chevron Products Company El Segundo Refinery is located at 324 West El Segundo Boulevard, El Segundo, CA 90245

Description of Nature, Purpose, and Beneficiaries of Project:

Chevron proposes to replace the six existing coke drums located at the El Segundo Refinery with six new coke drums of the same size and at the same location.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

Initial Study and all Supporting Documentation are Available at:

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

Or by Calling:
(909) 396-2039

Or by accessing:

<http://aqmd.gov/ceqa/nonaqmd.html>

Scheduled Scoping Meeting Date:

A CEQA scoping meeting will be held on October 20, 2011, in the Council Chamber at the El Segundo City Hall, 350 Main St., El Segundo, CA 90245 at 6:00 p.m., for the proposed project.

The Notice of Preparation is provided through the following:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Los Angeles Times and Daily Breeze (October 11, 2011) | <input checked="" type="checkbox"/> SCAQMD Website |
| <input checked="" type="checkbox"/> El Segundo Herald | |
| <input checked="" type="checkbox"/> SCAQMD Public Information Center | <input checked="" type="checkbox"/> Interested Parties |
| | <input checked="" type="checkbox"/> SCAQMD Mailing List |

Review Period:

October 11, 2011 through November 10, 2011

CEQA Contact Person:

Jeff Inabinet

Phone Number:

(909) 396-2453

E-Mail Address

jinabinet@aqmd.gov

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study for:
Chevron Products Company El Segundo Refinery
Coke Drum Reliability Project

October 2011

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CHAPTER 1

PROJECT DESCRIPTION

Introduction
Agency Authority
Project Location
Proposed Project Description
Construction Schedule

1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

Chevron Products Company (Chevron) is proposing a project at its El Segundo Refinery (Refinery) to replace the six existing coke drums with six new coke drums of the same size and location within the Refinery. The overall focus of this project is to increase reliability of coke drum operations. The proposed Project is expected to take advantage of industry changes in coke drum design, which have improved over the more than 40 years since the installation of the existing coke drums. The proposed Project will not change the Refinery crude throughput capacity or Delayed Coker Unit capacity.

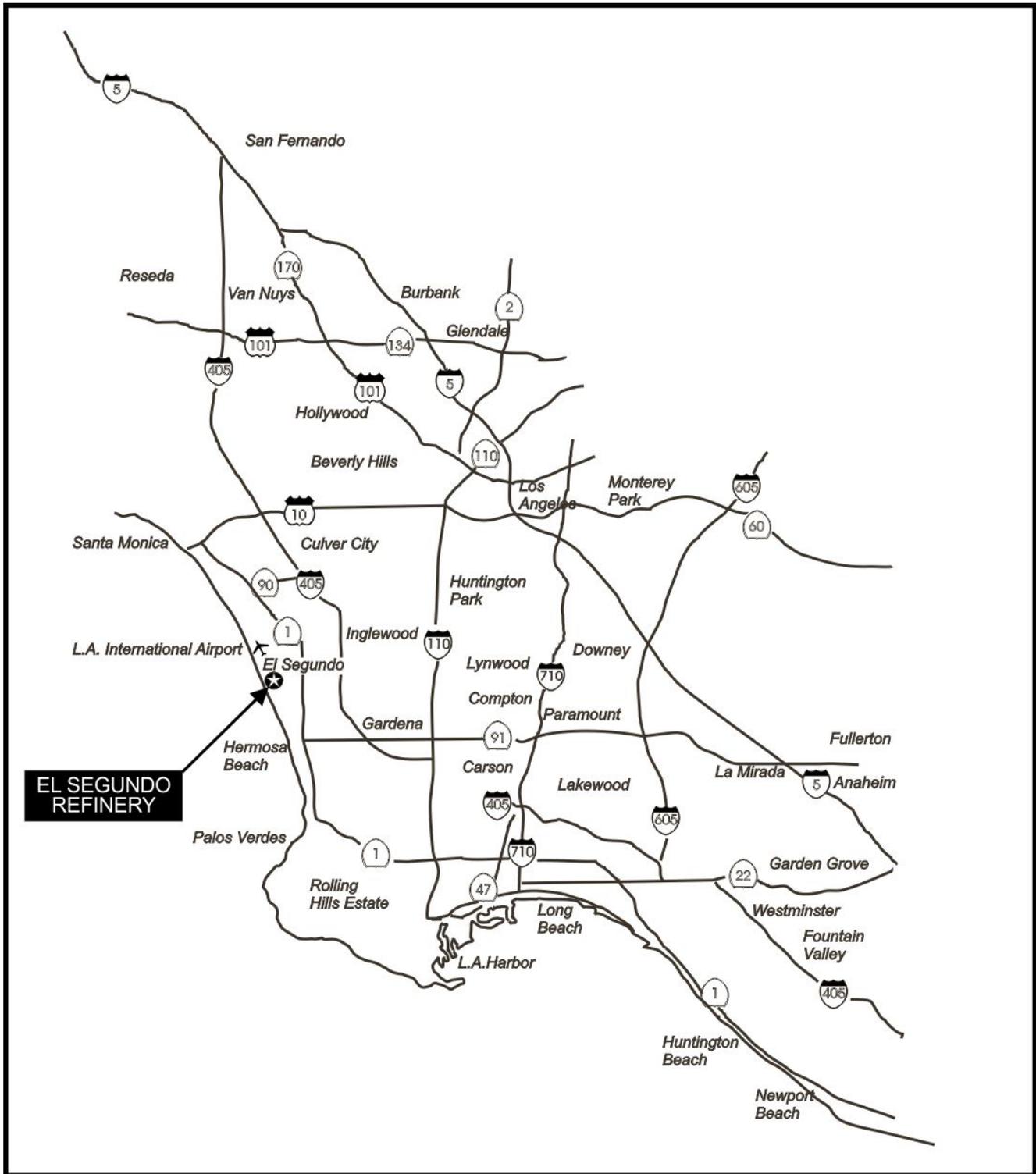
1.2 AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code § 21000 et seq., requires the evaluation of environmental impacts for proposed projects subject to CEQA (see CEQA Guidelines §15378 for the definition of project) and requires the identification and implementation of feasible methods to reduce, avoid or eliminate significant adverse impacts from these projects. To fulfill the purpose and intent of CEQA, the SCAQMD is the lead agency for this project and has prepared a Notice of Preparation and Initial Study (NOP/IS) to solicit information on the scope of the environmental analysis, provide a preliminary analysis of environmental impacts, and notify the public that a Draft Environmental Impact Report (DEIR) will be prepared that will evaluate the potential environmental impacts associated with implementing the Refinery Coke Drum Reliability Project (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 removal of existing stationary source equipment and installation of new stationary source equipment.

1.3 PROJECT LOCATION

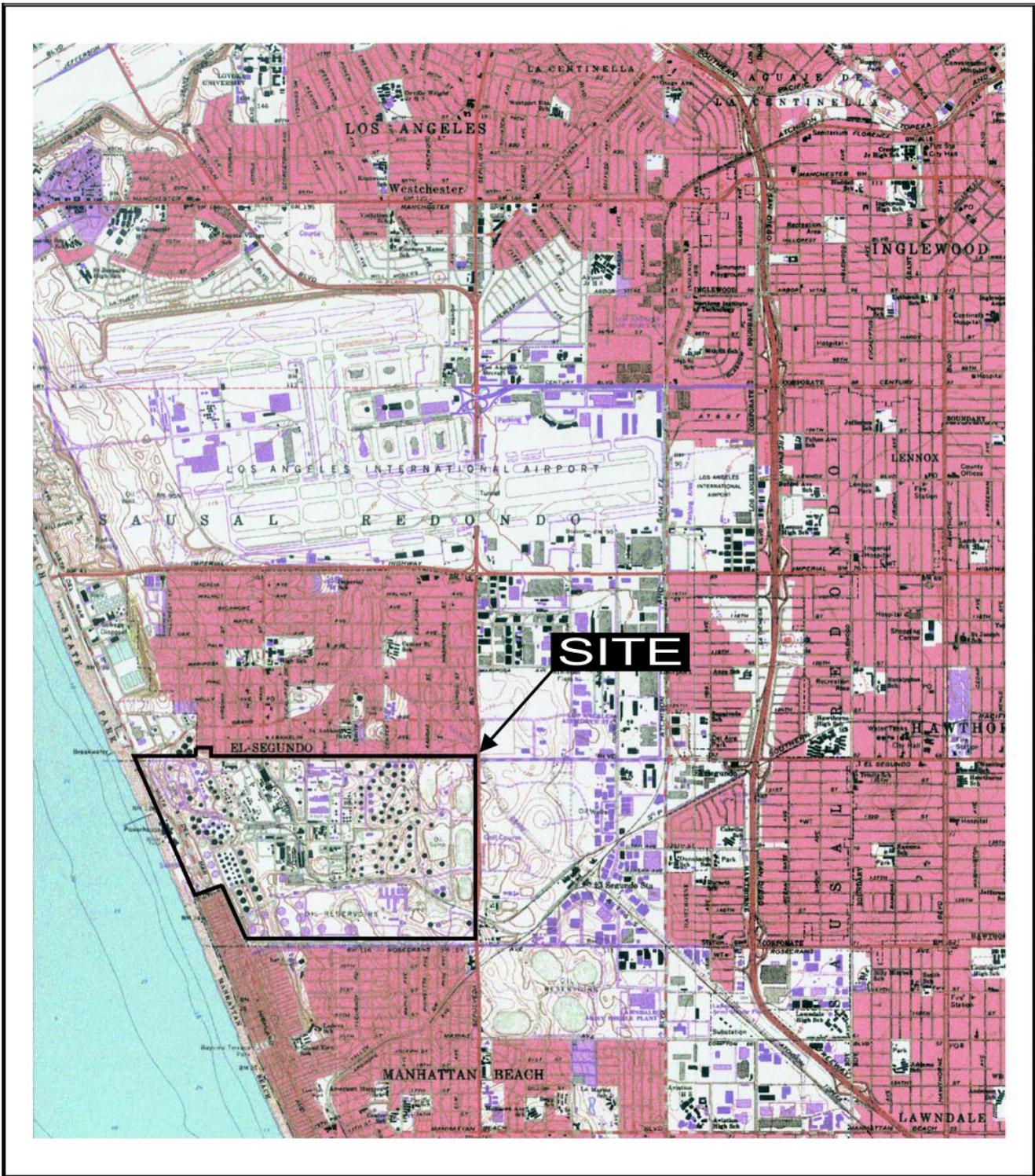
The proposed Project will occur within the confines of the Chevron Products Company El Segundo Refinery. The Refinery, which was constructed 100 years ago, is located within the overall southern California region, as shown in Figure 1-1. The Refinery is located at 324 West El Segundo Boulevard in the City of El Segundo, California, as shown in Figure 1-2. The El Segundo Refinery occupies an irregularly shaped parcel of land, between Vista Del Mar on the west, El Segundo Boulevard on the north, Sepulveda



REGIONAL MAP
Chevron Products Company
El Segundo Refinery



CHAPTER 1: PROJECT DESCRIPTION



SITE LOCATION MAP
Chevron Products Company
El Segundo Refinery

Boulevard on the east, and Rosecrans Avenue on the south. The proposed location within the Refinery for the process unit modifications are shown in Figure 1-3.

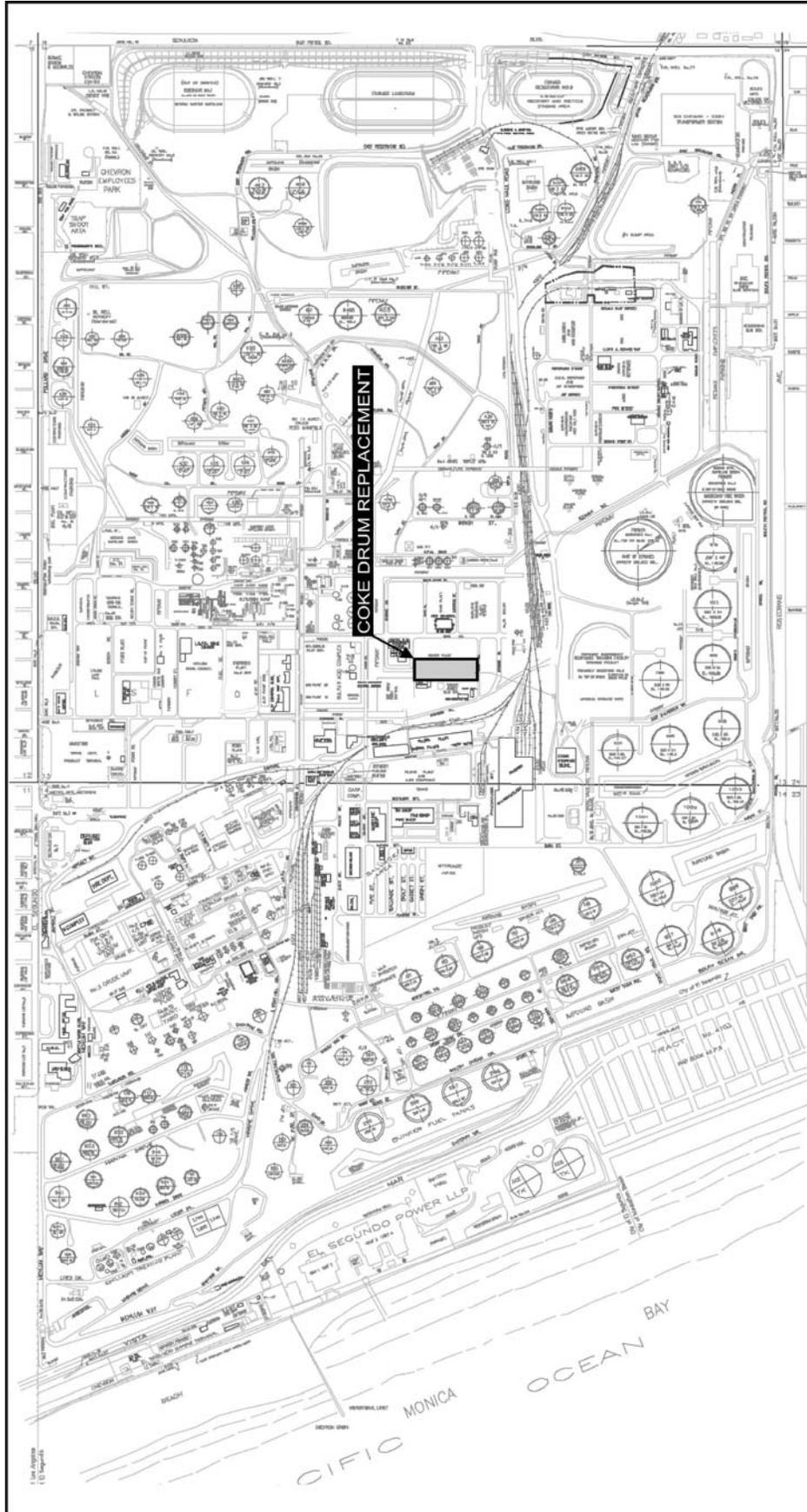
Land use at the Refinery and in the surrounding vicinity is consistent with the City of El Segundo General Plan land use designations for the area. The Land Use element of the General Plan currently in force was adopted in December 1992, and no revisions have occurred since that time (City of El Segundo Planning Department, 2007). The strip of development on the north side of El Segundo Boulevard between Main Street and Richmond St., northeast of the Refinery's main office visitor parking lot and approximately three-quarters of a mile north of the Delayed Coker Unit, is part of the Downtown Specific Plan, adopted in August 2000. The Refinery site is zoned by the City of El Segundo as Heavy Industrial (M-2) (City of El Segundo Planning Department, 2007).

The Chevron Refinery is located in an area of mixed land uses, with industrial, recreation, residential, and commercially zoned areas nearby. Land use to the north of the Chevron Refinery is primarily residential, with a mix of commercial and light industrial zoning. The predominant adjacent land uses west of the Refinery are nearly all heavy industrial or open space, which includes Dockweiler State Beach, Manhattan Beach, and the El Segundo Generating Station, although a small parcel of land at the southwest corner of the Chevron property is made up of commercial and multiple-family residential. Directly south of the Refinery, there is single-family residential use bordering the entire length of the Refinery separated by Rosecrans Avenue. The corridor immediately east of the Refinery is comprised of a golf course at the corner of Sepulveda Boulevard and El Segundo Boulevard, with light commercial and heavy industrial zoning for the rest of the tract.

1.4 BACKGROUND

Refineries produce a variety of products with the most desirable being transportation fuels (gasoline, diesel fuel, and jet fuel). The delayed coking process was developed to minimize production of heavy residual fuel oils and to increase the production of transportation fuels.

Delayed coking is a thermal cracking process where the heavy hydrocarbons are held for a period of time at high temperatures and low pressures in the coke drum, where the large molecules are cracked into small molecules. The term delayed coking derives from the fact that the heavy hydrocarbon feedstock travels at very high velocities through the charge furnace so that coking is delayed until the feed enters the coke drum. (see Figure 1-4). During the cracking process, the lighter hydrocarbons are drawn off and sent to for further processing and the coke solids remain in the drum. When a drum reaches its capacity, the feed is switched to a second drum to continue the process while the first drum is emptied.

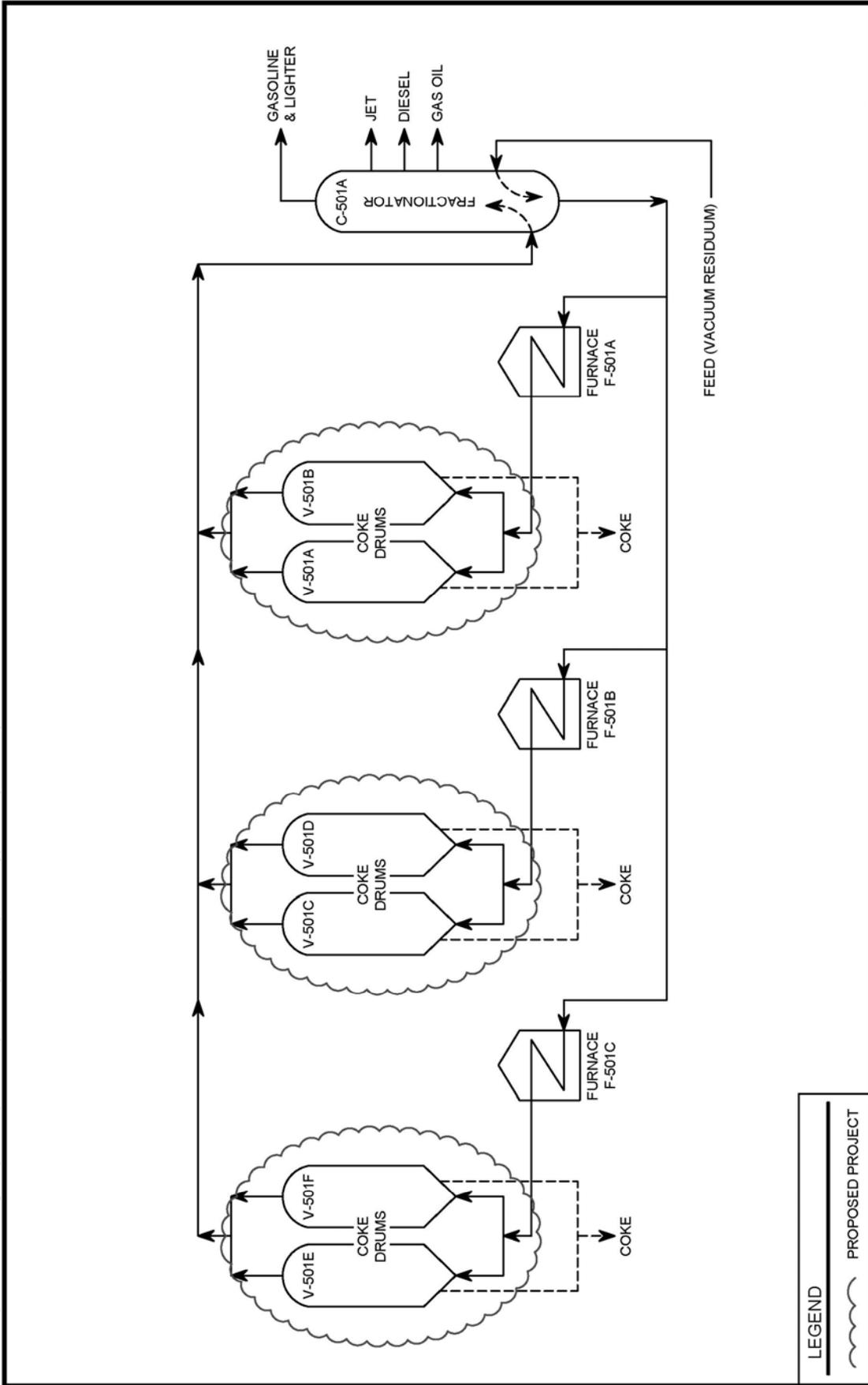


CHEVRON PRODUCTS COMPANY,
PROJECT COMPONENT LOCATION

Figure 1-3

Project No. 2706
A12706\Source\LocationsMap (rev.5).CDR

I:\2706\DelayedCokerFlowDiagram (Created) 09/12/11 (Drawn By) A.S.K. (Check By) M.R.B. (Last Rev.) 09/12/11



LEGEND
 _____ PROPOSED PROJECT
 Environmental Audit, Inc.

CHEVRON PRODUCTS COMPANY
 DELAYED COKER UNIT
 PROCESS FLOW DIAGRAM

Figure 1-4

Project No. 2706

The process of removing the solids is accomplished by a high-pressure water nozzle, which cuts the solidified coke into smaller particles that are emptied from the bottom of the drum. The high-pressure water nozzle is located in a derrick structure above each drum. Delayed Coker Units typically work in pairs of drums so that the batch process operates continuously. Chevron has three pairs of drums, which are being replaced as the proposed Project. The other equipment in the Delayed Coker Unit will not be modified as part of the proposed Project.

The Delayed Coker Unit was built in 1968 together with No. 2 Crude Unit to reduce production of heavy fuel oil by the Refinery. The Delayed Coker Unit, in combination with the Fluid Catalytic Cracking Unit (FCCU) and the Isomax, upgrade vacuum residuum and heavy and light gas oils, respectively, to high value products, such as gasoline, jet and diesel fuels. At the heart of the coking process are six large cylindrical coke drums with rounded tops and bottoms, each measuring approximately 26 feet in diameter by 96 feet tall.

1.5 PROPOSED PROJECT DESCRIPTION

The six original coke drums require increased repair/maintenance and are approaching the end of their economical useful lives; and must be replaced. The proposed replacement coke drums will have the same diameter and height as the existing drums, maintaining the current process capacity. Coke drum design improvements including upgraded metallurgy and a uniform shell thickness will be made. Seismic upgrades will be made to the existing structure that holds the current drums, which will be used to hold the replacement drums. Ancillary equipment, such as monitoring gauges will be replaced as needed. The pressure relief valves are currently vented to an existing vapor recovery system and flare and will continue to be vented to this equipment after the proposed Project becomes operational. No change will occur to the vapor recovery system and flare operations. The existing piping to the coke drums will be disconnected, set aside nearby on the Refinery property, and reinstalled once the coke drums have been replaced. Replacing piping to the coke drums is not expected to occur as part of the proposed Project.

The six replacement coke drums would be fabricated overseas in Europe or Asia. The completed drums would be shipped in their entirety to the Port of Los Angeles/Port of Long Beach. Fabrication of complete drums is proposed to take advantage of the expertise that the overseas shop fabricators have developed in recent years to fabricate coke drums, such as, plate-rolling equipment, automated grinding, beveling, and welding equipment, pre- and post-weld heat treating equipment, and well-established shop quality control procedures.

The specific route to the Refinery is in the process of being assessed to determine available routes capable of accommodating the oversized loads, taking into consideration overpass heights, bridge weight capacities, road widths, etc. While not yet finalized, the

current projected route is assumed to require transporting the drums from one of the Ports to the Refinery by barge to King Harbor and then by public roads following the approved route and appropriately permitted. Transit time is expected to be two days for each drum, one day from the Port to King Harbor and one day from King Harbor to the Refinery with a current plan to move one drum per week over the course of six weeks. Therefore, moving all six drums will require approximately six to eight weeks. It is possible that the route could exclude the barge transport and use a surface street route from the Port to the Refinery. The surface street route will take four to five days per drum to make the transfer requiring approximately one to two months to move the six drums. Transit on surface streets will occur at night coordinated with local authorities and the California Highway Patrol.

Once the replacement drums are onsite, they will be installed during a planned shutdown of the Delayed Coker Unit (commonly called a turn-around), at which time the other equipment in the Unit will also be shutdown. Installation will be accomplished by removal of the six derrick structure in one piece from the existing drums, setting it nearby at grade, and replacing the drums one by one onto the modified holding structure. Piping, electrical wiring, and control wiring will be disconnected to free the derrick structure for this lift. The derrick structure will then be reset atop the drums; piping, wiring, and controls will be reconnected; and, the Coker will be placed back in operation.

The removed drums will be dismantled on site and transported by truck for metal recycling. Other demolition debris will be transported to the appropriate disposal facility.

1.6 CONSTRUCTION SCHEDULE

The construction schedule for the Chevron Products Company's Coke Drum Reliability Project is based on receipt of permits. While there is approximately a two-year lead time expected for delivery of the new coke drums, there are pre-arrival activities such as road improvements and foundation work to be completed within the refinery prior to the drum replacement activities. Receipt of permits is expected to occur in late 2012, with construction activities commencing shortly thereafter and continuing until the proposed Project is complete, which is expected to be no later than mid-2015. The number of construction workers for the proposed Project will peak at between 150 and 200 when the drum replacement activities occur. During the periods of drum replacement, construction activities are planned for seven days per week, incorporating two 10-hour shifts per day. All other construction periods for the proposed Project are expected to require one 10-hour shift five days per week.

m:\DBS\2706 Chevron Coke Drum\NOP\2706 NOP Ch.1 Rev 2.doc

CHAPTER 2

ENVIRONMENTAL CHECKLIST

- Introduction
- General Information
- Environmental Factors Potentially Affected
- Determination
- Environmental Checklist and Discussion
 - Aesthetics
 - Agricultural and Forestry Resources
 - Air Quality and Greenhouse Gas Emissions
 - Biological Resources
 - Cultural Resources
 - Energy
 - Geology and Soils
 - Hazards and Hazardous Materials
 - Hydrology and Water Quality
 - Land Use and Planning
 - Mineral Resources
 - Noise
 - Population and Housing
 - Public Services
 - Recreation
 - Solid/Hazardous Waste
 - Transportation/Traffic
 - Mandatory Findings of Significance
- References

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:	Chevron Products Company El Segundo Refinery Coke Drum Reliability Project
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
CEQA Contact Person:	Jeff Inabinet (909) 396-2453
Project Sponsor's Name:	Chevron Products Company
Project Sponsor's Address:	324 West El Segundo Boulevard, El Segundo, California, 90245
General Plan Designation:	Heavy Industrial
Zoning:	M-2 Heavy Industrial
Description of Project:	The proposed Project includes removing the six existing coke drums and installing six new replacement coke drums of the same capacity in the same location in the Delayed Coker Unit at the El Segundo Refinery. Refer to Section 1.4 for a more complete description.
Surrounding Land Uses and Setting:	The Chevron Refinery is located in an area of mixed uses, with industrial, recreational, residential, and commercial uses nearby. The predominant adjacent land uses include: Dockweiler State Beach and the El Segundo Generating Station to the west; a residential area of Manhattan Beach to the south and southwest; a golf course, a commercial and light industrial corridor to the east; and commercial/light industrial and residential areas of El Segundo to the north.
Other Public Agencies Whose Approval is Required:	Cities of Carson, El Segundo, Hermosa Beach, Los Angeles, Manhattan Beach, Redondo Beach, and Torrance, Los Angeles County, Caltrans, and U. S. Coast Guard.

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 a "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

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

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 (EIR) 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: October 11, 2011

Signature: Steve Smith

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

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

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

1. a), b), and c) The Chevron Refinery is located in an area of mixed uses, with industrial, recreation, residential, and commercial uses nearby. The predominant adjacent land uses include: Dockweiler State Beach and the El Segundo Generating Station to the west; a residential area of Manhattan Beach to the south and southwest; a golf course, a commercial and light industrial corridor to the east; and commercial and residential areas of El Segundo to the north. Some of these areas, particularly those associated with the beaches and Santa Monica Bay, are of scenic value.

All project activities are expected to take place within the boundaries of the existing Refinery (see Figure 1-3), with the exception of coke drum transport. The six replacement coke drums to be installed as part of the proposed Project will be the same size, appearance, and profile

as the six existing coke drums and will be placed in the same location within the El Segundo Refinery. There are a number of other existing tall structures in the Refinery including the Atmospheric Distillation Column, Furnace Stacks at the No. 4 Crude Unit, and Furnace Stacks at the No. 2 Crude Unit, which are 215, 155, and 171 feet tall, respectively. The Continuous Catalytic Reformer process plant is about 172 feet tall. The top of the Main Fractionator at the Coker is approximately 122 feet above grade. The top of the FCCU Reactor is about 230 feet above grade. The coke drums are currently one of the tallest and most visible refinery structures. The derrick structure on top of the six existing coke drums result in a total structure height of about 240 feet.

The proposed Project is not expected to include changes that will result in visual resources impacts. The six replacement coke drums will be located in the central area of the Refinery, in the same location as the six existing coke drums, adjacent to other similar refinery structures. The six replacement drums will be of the same size and configuration as the six existing structures (about 240 feet high including the derrick structure) and will replace the existing structures of the same height. It is anticipated that during construction of the proposed Project several cranes will be required to install the replacement coke drums. One of these cranes will be taller than the coke drum structure, and will be visible from outside the Refinery. Four to five smaller cranes will also be used during the project execution. The cranes are temporary and will be removed following completion of construction activities for the proposed Project. Therefore, no changes are expected to the visual character of the Refinery and, as a result, the visual quality of the site will not be substantially altered or significantly degraded.

The Refinery site is zoned by the City of El Segundo as M-2 (Heavy Manufacturing), with a variety of zoning (commercial to industrial) surrounding the Refinery, reflecting the diverse land uses. Section 15-6B-7 of the City of El Segundo Municipal Code provides Site Development Standards with which all uses within the M-2 zone must comply. Section 15-6B-7B states that buildings and structures in the M-2 zone shall not exceed a height of 200 feet. The replacement coke drums may require a variance from the height limitations of the City of El Segundo. However, the views of the Refinery are expected to remain unchanged from the existing conditions.

The proposed Project is located in an existing industrial facility and will be industrial in nature. The proposed Project, once complete, will not be substantially different from the existing Refinery and will not change any scenic vistas. No scenic resources are present within the Refinery. Therefore, the proposed Project will not have substantial adverse effects on scenic vistas or scenic resources.

1. d) Construction activities associated with the proposed Project are planned to occur over the shortest time period possible to complete the installation; therefore, construction activities will occur during the nighttime as well as the daytime. Construction activities are proposed adjacent to the existing Refinery units, which are already lighted for safety purposes during nighttime operations. Additional lighting may be required to provide adequate lighting during nighttime construction activities, but these light sources will be directed towards the Refinery and the locations of construction activities (i.e., away from residential areas), are

temporary, and are not expected to be noticeable to the surrounding community because of their central location in the Refinery (see Figure 1-3).

There will be no new additional permanent light sources required as part of the proposed Project. The replacement coke drums will be illuminated at night for safety and security purposes, as are the existing coke drums, so no increase in light and glare impacts are expected.

Based on these considerations, the proposed Project is not expected to create substantial new sources of light or glare which would adversely affect day or nighttime views in the area.

Conclusion

Based upon these considerations, no significant impacts on aesthetics (i.e., impacts to the visual character to the site and surrounding areas) or light and glare are expected from the proposed Project. Therefore, aesthetic impacts will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion

2. a), c) and d) All proposed construction and operation would occur within the confines of the existing Refinery. The proposed Project would be consistent with the heavy industrial zoning for the Refinery (M2). No agricultural or forest resources are present at or in the vicinity of the Refinery and no new land will be acquired as part of the proposed Project. Further, the proposed Project would not convert farmland (as defined in Question 2.a) or forest land (as defined in Question 2c.) to non-agricultural or non-forest use, or involve other changes in the existing environment, that could convert farmland or forest land to non-agricultural or non-forest use or conflict with agricultural or forest land uses, or Williamson Act contracts.

2. b) Land in the vicinity of the Refinery is not currently zoned for agricultural use, so there are no Williamson Act contracts in effect. The proposed Project does not conflict with an existing agricultural zone or Williamson Act contract since these are not located in the vicinity of the Refinery and does not include converting agricultural land for non-agricultural uses.

Conclusion

Based upon these considerations, no significant impacts on agricultural or forest resources are expected as a result of the proposed Project. Therefore, agricultural and forest resources impacts are considered to be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

To determine whether or not air quality impacts from the proposed project may be significant, impacts will be evaluated and compared to the criteria in Table 2-1. If impacts exceed any of the criteria in Table 2-1, they will be considered further in the EIR.

TABLE 2-1

Air Quality Significance Thresholds

Mass Daily Thresholds ^(a)		
Pollutant	Construction ^(b)	Operation ^(c)
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants, Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk \geq 10 in 1 million Chronic and Acute Hazard Index \geq 1.0 (project increment) Cancer Burden \geq 0.5 excess cancer cases (in areas \geq 1 in 1 million)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000MT/hy CO ₂ eq for industrial facilities	
Ambient Air Quality for Criteria Pollutants ^(d)		
NO ₂ 1-hour average annual average	In attainment; significant if project causes or contributes to an exceedance of any standard: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM ₁₀ 24-hour annual average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^(e) and 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$	
PM _{2.5} 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^(e) and 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
SO ₂ 1-hour average 24-hour average	0.255 ppm (state) and 0.075 ppm federal – 99 th percentile 0.04 ppm (state)	
Sulfate 24-hour average	25 $\mu\text{g}/\text{m}^3$ (state)	
CO 1-hour average 8-hour average	In attainment; significant if project causes or contributes to an exceedance of any standard: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average Quarterly average	1.5 $\mu\text{g}/\text{m}^3$ (state) 0.15 $\mu\text{g}/\text{m}^3$ (federal) 1.5 $\mu\text{g}/\text{m}^3$ (federal)	

(a) Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

(b) Construction thresholds apply to both the SCAB and Coachella Valley (Salton Sea and Mojave Desert Air Basin)

(c) For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

(d) Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

(e) Ambient air quality threshold based on SCAQMD Rule 403.

KEY: ppm = parts per million; $\mu\text{g}/\text{m}^3$ = microgram per cubic meter; lbs/day = pounds per day; MT/yr CO₂eq = metric tons per year of CO₂ equivalents, \geq greater than or equal to, $>$ greater than

To determine whether or not greenhouse gas emissions from the proposed project may be significant, impacts will be evaluated and compared to the SCAQMD threshold of 10,000 metric tons CO₂ equivalent (CO₂e) per year for industrial sources.

Discussion

3. a) The Final 2007 Air Quality Management Plan (AQMP) demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are some of the inputs used to develop the AQMP. As indicated in the Population and Housing and Transportation/Traffic discussions, sections XIII and XVII respectively, of this Initial Study, the proposed Project is not expected to require additional Refinery employees, and will not generate significant worker-related traffic during operation. Therefore, the proposed Project will not cause increases in the growth projections in the City of El Segundo General Plan or require a General Plan amendment. Additionally, this project must comply with applicable SCAQMD requirements and control measures for new stationary sources. For example, new and replacement emission sources associated with the proposed Project are required to comply with the SCAQMD's Regulation XIII - New Source Review requirements that include the use of Best Available Control Technology (BACT) and emission reduction credit offsets for any emission increases greater than one pound per day. The proposed Project must also comply with prohibitory rules, such as SCAQMD Rule 403 – Fugitive Dust. By meeting these requirements, the proposed Project will be consistent with the goals and objectives of the AQMP.

3. b) The replacement coke drums associated with the proposed Project will generate emissions similar to the existing coke drums. The proposed Project must comply with SCAQMD rules and regulations.

Construction activities associated with the proposed Project will result in emissions of carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOCs), sulfur oxides (SO_x), particulate matter less than ten microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Construction activities include removal and recycling of the existing coke drums, standard land preparation activities involving grading, pouring new foundations, and installation of the replacement coke drums and ancillary equipment. Construction-related activities will generate 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 includes removing the six existing coke drums at the Refinery and installing six new replacement coke drums of the size and same capacity in the same location. The proposed Project is not expected to increase daily emissions during operation. However, the proposed Project may increase annual emissions due to increased reliability; therefore, the impact on annual emissions, if any, will be analyzed in the EIR. The SCAQMD requires the installation of BACT for new or modified emission sources within the South Coast Air Basin, which should minimize project-related emissions. Nonetheless,

the proposed Project impacts on air quality during the operational phase are potentially significant and will be evaluated in the EIR.

3. c) The proposed Project may increase emissions from the operation of the Refinery and has the potential to generate significant adverse cumulative impacts. Since the project-specific air quality impacts may be significant, they may contribute to impacts that are cumulatively considerable. The cumulative air quality impacts will be evaluated in the EIR.

3. d) There are no new emission sources associated with the proposed Project that may emit toxic air contaminants (TACs). However, the improved reliability of the coke drums may increase the annual emissions of TACs. The impact of any emission changes of TACs 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.

3. 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 sources of odors at a refinery. There are hydrogen sulfide-bearing materials involved in the coking operation at the Refinery, however, they are contained within the coking process. The proposed Project is not expected to increase the potential for odors since the exhaust from the replacement coke drums will be the same as the exhaust from the existing coke drums.

The Refinery maintains a 24-hour environmental surveillance effort, which helps to minimize the frequency and magnitude of odor events. No change to the amount, type, or frequency of odors is expected from the replacement equipment. In addition, the six replacement coke drums will be required to comply with BACT requirements as well as existing SCAQMD rules and regulations, including Rule 402 - Prohibition of Nuisances. Compliance with BACT, which controls the emission of odor-causing compounds, and Rule 402 is expected to minimize the frequency and magnitude of odor events at the Refinery. Therefore, no significant odor impacts are expected from constructing and operating the proposed Project.

3. f) The proposed Project will not diminish an existing air quality rule or a future compliance requirement because this proposed Project must comply with applicable SCAQMD rules and regulations as well as control measures applicable to new stationary sources. For example, modified emission sources associated with the proposed Project are required to comply with SCAQMD Regulation XIII – New Source Review requirements that include the use of BACT. The proposed Project must also comply with prohibitory rules, such as Rule 403, for the control of fugitive dust. The Final 2007 AQMP demonstrates that, with aggressive adoption and implementation of control measures, applicable federal ambient air quality standards can be achieved within the timeframes required under federal law. By meeting these requirements, the proposed Project will be consistent with the goals and objectives of the AQMP to improve air quality in the Basin.

3. g) and h) The proposed Project is not expected to increase daily emissions. However, the proposed Project may increase annual emissions and the impact on annual greenhouse gas

emissions, if any, will be analyzed in the EIR. The proposed Project will be evaluated for compliance with adopted greenhouse gas reduction plans, policies, and regulations in the EIR.

Conclusion

Project-specific and cumulative adverse air quality impacts associated with increased emissions of air contaminants (criteria air pollutants, toxic air contaminants, and greenhouse gases) during the construction and operation phases of the proposed Project will be evaluated in the EIR. Impacts to sensitive receptors will also be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

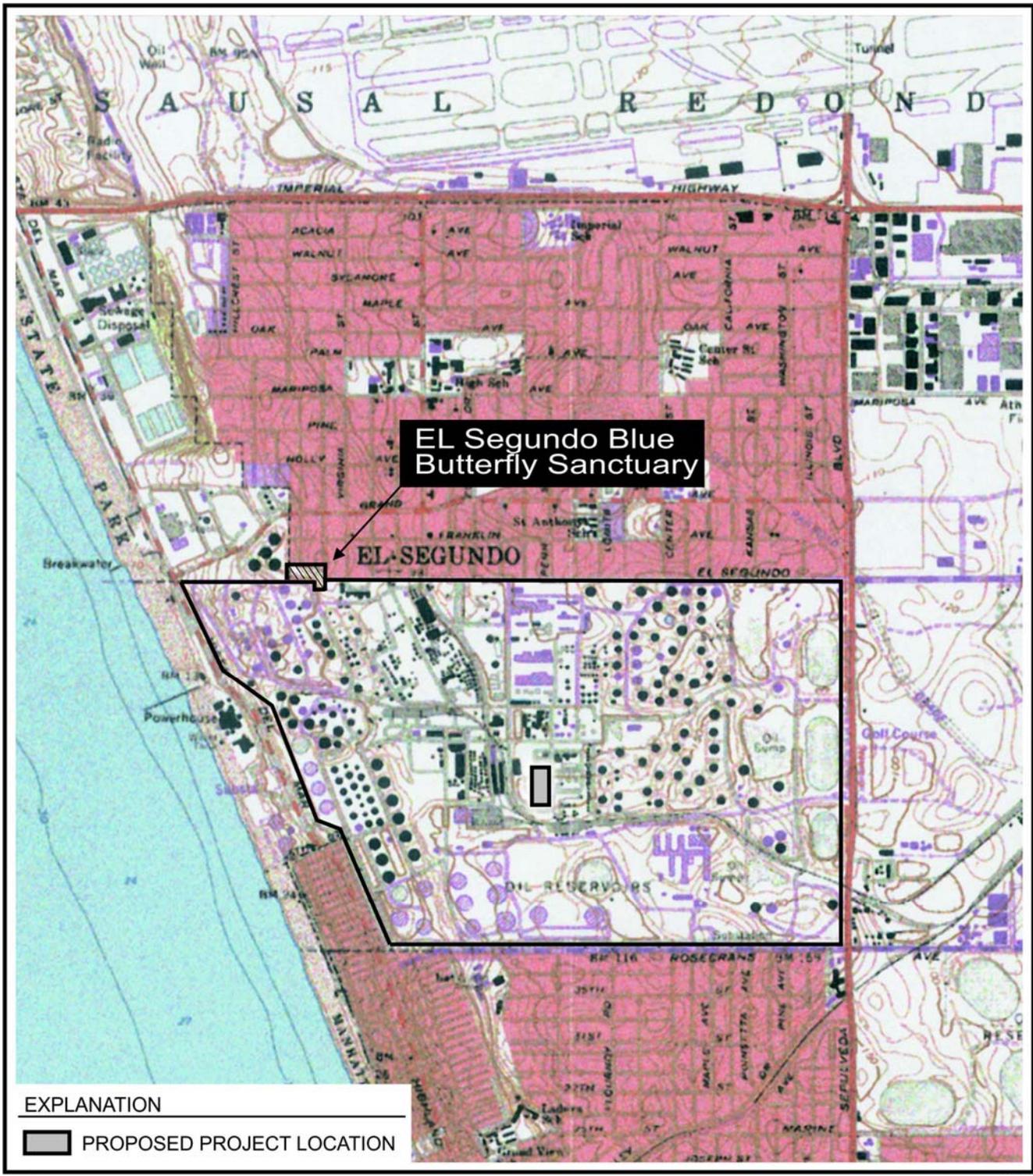
- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

4. a) The El Segundo Blue Butterfly (*Euphilotes battoides allyni*) is a small (wing span of less than one inch), brightly colored butterfly that historically has been found in the El Segundo sand dunes of Los Angeles County. Because of extensive habitat loss, degradation, and fragmentation due to urban development, the butterfly's habitat has been reduced to two areas: sand dunes near the Los Angeles International Airport (LAX), which contain the largest population of the butterfly; and two acres at the butterfly sanctuary that was created within the property of the Chevron El Segundo Refinery (see Figure 2-1).

The El Segundo Blue Butterfly was listed as an endangered species by the federal government in 1976. The butterfly was discovered on an undeveloped portion of the Refinery property in 1975, and, shortly thereafter, the area where the butterfly was found in the northwest portion of the Refinery property was voluntarily fenced by Chevron to protect the butterfly's habitat and the coastal buckwheat plant (*Eriogonum parvifolium*), upon which the butterfly feeds during all stages of its life cycle.

Because the buckwheat plant at the Refinery's butterfly sanctuary has been threatened by various invasive species and annual grasses (e.g., tumbleweeds, rye grass, and ice plant), efforts have been made on an ongoing basis since the early 1980s to inhibit weed growth and stimulate buckwheat growth. Approximately 5,000 buckwheat plants have been transplanted at the Refinery since 1983 (Chevron 2005). In the mid 1980s, there were only about 400 of these butterflies at the Chevron butterfly sanctuary; at present there are approximately 10,000 (Chevron 2005b). The butterfly population on LAX property also has increased gradually since 1985.



El Segundo Blue Butterfly Sanctuary
Chevron El Segundo Refinery

The Pacific pocket mouse (*Perognathus longimembris pacificus*) is a small brownish rodent that lives in fine-grained sandy areas (coastal strand, coastal dunes, coastal sage scrub, and river alluvium) in the immediate vicinity of the Pacific Ocean in southwestern California (SCAQMD, 2001). Historically, the mouse's range extended from Los Angeles County south to the Mexican border, including portions of the Chevron Refinery property. Only a few known populations remain, and they are in Orange County (Dana Point) and San Diego County (Camp Pendleton). The Pacific pocket mouse was last reported in the area of the Chevron Refinery in 1938, and, thus, is not expected to exist at the Refinery at present because habitat that could be used by the Pacific pocket mouse is no longer present at the Refinery.

The beach spectaclepod (*Dithyrea maritime*) is a small low-growing perennial herb. The species is native to California and occurs in foredunes, active sand, and dune scrub from San Luis Obispo south to Baja California. The beach spectaclepod is considered extremely rare by the California Native Plant Society; it is listed as threatened by the State of California and as a Species of Concern by the federal government. The only reported occurrence for this plant at the Refinery site was in 1884, and the species is not expected to exist at the Refinery at present because the Refinery site has been continuously cleared of all vegetation since 1911 for safety reasons (SCAQMD, 2001).

The proposed Project activities will take place at an existing Refinery, whose active areas (including the locations where six Refinery coke drums will be removed and replaced) have been highly disturbed and contain no significant biological resources. No impacts are expected to special status species. The Pacific pocket mouse and beach spectaclepod have not been sighted at the Refinery in decades (since 1938 for the mouse and since the late 19th century for the spectaclepod).

The Refinery area population of the federally endangered El Segundo Blue Butterfly has increased substantially over the past 20 years, due to the existence of and habitat improvements at the Refinery butterfly sanctuary. These increases in the El Segundo Blue Butterfly population have occurred while Refinery operations have continued nearby. The distance between the project construction site and the Blue Butterfly Sanctuary is approximately 4,000 feet, with other existing Refinery equipment located in closer proximity. The proposed Project would not be expected to have significant adverse impacts on the El Segundo Blue Butterfly, since it has survived and the population has expanded adjacent to the existing operating Refinery.

Additionally, as part of the proposed Project, the replacement coke drums are currently projected to be transported to the Refinery from King Harbor, which is located approximately five miles south of the Refinery in Redondo Beach. Alternatively, the coke drums would be transported on surface streets from the Port of Los Angeles/Port of Long Beach. For the King Harbor routing, it is expected that a barge will be positioned at King Harbor and a temporary ramp will be craned in place to allow the coke drum to be towed/driven off the barge. No permanent structures will be required. The area expected to be used for offloading within King Harbor is an existing parking lot adjacent to a man-made rock shoreline and as such does not have native species present or known special-status animal or plant species.

Therefore, the proposed Project would not be expected to have significant adverse impacts on native species or special-status animal or plant species.

In summary, the proposed Project would have no significant adverse impacts on special-status animal or plant species.

4. b), c), and d) The proposed Project would be located at the existing Delayed Coker Unit within existing boundaries of the Refinery, which is zoned and has been used for heavy industrial purposes since 1911, and has long since been graded and developed. The Refinery site does not support riparian habitat, federally protected wetlands (as defined by §404 of the Clean Water Act), or migratory corridors. With the exception of some decorative landscaping around the perimeter of the site, plants have previously been removed from operating areas of the Refinery for safety reasons. There are three special-status species that have been reported in the immediate vicinity of the Refinery: two animal species (the El Segundo Blue Butterfly and the Pacific pocket mouse) and one plant species (the beach spectaclepod). No special-status species or migratory wildlife have been identified at the existing Delayed Coker Unit.

4. e) Because implementation of the proposed Project will occur entirely within the boundaries of the existing Refinery and transportation of the drums will not impact native species present or known special-status animal or plant species, the project will not conflict with local policies or ordinances protecting biological resources nor local, regional, or state conservation plans of any type.

4. f) The proposed Project does not occur within the confines of the Refinery butterfly sanctuary and, therefore, does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Conclusion

Based on the above considerations the proposed Project is not expected to adversely affect special-status animal and plant species or other biological resources (riparian habitats, wetlands, or migratory corridors); or conflict with ordinances or conservation plans. Therefore, biological resources are expected to be less than significant and not analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

5. a) CEQA Guidelines §15064.5 states that resources listed in the California Register of Historical Resources or in a local register of historical resources are considered “historical resources.” A records search was conducted at the South Central Coastal Information Center (SCCIC) in August 2005 of all recorded archaeological sites and survey reports within a 0.5 mile radius of the Refinery (SCAQMD, 2006). Federal, state and local historic listings were reviewed along with historic maps. In addition, this background research was supplemented by an internet search for relevant historical information. The research revealed that the listings of the National Register of Historic Places, California Historical Landmarks, California State Historic Resources Inventory, California Points of Historical Interest, and Los Angeles County Landmarks include no properties within the Refinery. One historic site, P-186856, is recorded at the outer edge of the 0.5-mile radius and outside of the Refinery

boundary (SCAQMD, 2006, Appendix A). Site P-186856 could include buildings, structures, objects, districts, and landscapes, the details of which are kept confidential to protect the resource. Because the proposed Project activities will occur entirely within the existing Refinery boundaries, site P-186856 would not be directly or indirectly impacted by the proposed Project. Based on the results of these records searches, the proposed Project will not cause an adverse change in the significance of a resource listed in the California Register of Historical Resources or in a local register of historical resources.

Additionally, CEQA Guidelines §15064.5(a)(3) states that “generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- (D) Has yielded or may be likely to yield information important in prehistory or history”.

The California Register eligibility criteria are modeled on those of the eligibility criteria of the National Register of Historic Places. Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of Historic Places unless they can be shown to be exceptionally important. The proposed Project will not affect any structures that are more than 50 years old and, because of the industrial nature of the structures onsite, are not considered to be exceptionally important. Therefore, the proposed Project will not cause an adverse change in the significance of a resource potentially eligible for listing in the California Register of Historical Resources.

5. b), c), and d) The August 2005 records search indicated that 14 archaeological investigations have been performed within a 0.5-mile radius of the Refinery, including three surveys of small linear areas within the Refinery boundaries (SCAQMD, 2006). No prehistoric sites or Native American sacred lands are recorded within the Refinery boundaries or within a 0.5-mile radius of the facility. No paleontological resources or unique geological features are known to exist at the facility.

The 100 years of operations at the Refinery have included extensive ground disturbance associated with the construction and operation of Refinery facilities and equipment. Proposed Project activities will take place in an area where the ground surface has been previously disturbed to construct the six existing coke drums. The extent of previous earth disturbance has reduced the likelihood that previously unknown archaeological or paleontological resources will be encountered during project construction. Based on the

historical review and extensive disturbance of the land comprising the Refinery and proposed Project, it is highly unlikely that cultural resources will be encountered during the proposed Project. However, it is possible that intact prehistoric deposits may occur below the disturbed horizon, although the proposed Project will not involve extensive subsurface construction activities.

While the likelihood of encountering cultural resources is low, if such resources were to be encountered unexpectedly during ground disturbance associated with construction of the proposed Project, there would be the potential for significant adverse impacts. To minimize the risk of adverse impacts occurring, project construction will incorporate a number of standard protective measures during earth-disturbing activities:

- If cultural resources are exposed, a professional archaeologist and a Gabrielino/Tongva representative will be retained to monitor the subsurface work;
- The archaeological monitor will have the authority to temporarily halt or redirect earth disturbance work in the vicinity of the exposed cultural resources, so the find can be evaluated and mitigated as appropriate; and,
- As required by State law, if human remains are unearthed, no further disturbance will occur until the County Coroner has made the necessary findings concerning the origin and disposition of these remains. The Native American Heritage Commission will be notified if the remains are determined to be of Native American descent.

Conclusion

Based on the above considerations the proposed Project is not expected to have significant adverse impacts on historic or prehistoric cultural resources or paleontological resources. Therefore, cultural resources are expected to be less than significant.

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

Significance Criteria

Impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

6. a) and e) The proposed Project is not expected to conflict with energy conservation plans or energy standards. The proposed Project will include the installation of six replacement coke drums of the same dimensions as the existing drums and the Project will maintain the current process capacity. The proposed Project is expected to comply with existing energy standards, and new equipment installed as part of the proposed Project is expected to be as energy efficient as possible. The proposed Project is not expected to conflict with an adopted energy conservation plan because there is no known energy conservation plan or energy standards that would apply to this proposed Project. Other than during the construction period of the proposed Project, no increase in electricity or natural gas demand is expected.

The use of diesel or gasoline fueled equipment during construction, however, is not considered to be a wasteful use of non-renewable fuels.

6. b), c), and d) The Refinery is currently served by three existing Cogeneration Units and supplemented by Southern California Edison (SCE) for electricity supply. The Refinery is in the process of installing a 47.6 megawatt Cogeneration Unit (Train D) that was analyzed in the 2008 Chevron Products Company Process Reliability and Optimization Project EIR (SCAQMD, 2008). Train D is expected to be operational prior to the construction phase of the proposed Project at which time the Refinery will produce most, if not all, electricity for the Refinery except when a Cogeneration train is not operating. Therefore, additional electrical supply will be available for any increase in demand for electricity during construction of the proposed Project. Natural gas is supplied by the Southern California Gas Company and used in conjunction with refinery fuel gas.

Construction: Electrically powered welding machines and other construction equipment may be used during construction, but the increase in electrical demand will be within the variation in load already supplied by the existing and new cogeneration units and SCE. Because of the limited availability of natural gas-powered construction equipment, it is expected that construction could include a few, but very limited number of this type of equipment. As a result, limited or no impacts on natural gas utility systems are expected during construction activities. Therefore, no significant adverse impacts on energy resources are expected during the construction period.

Operation: The proposed Project is not expected to require additional electricity. The replacement coke drums, which comprise the proposed Project, are expected to use the same amount of energy resources as the existing coke drums. No increase in electricity is expected from a public utility once the proposed Project is implemented. Therefore, peak demand on local and regional electricity supplies are expected to be less than significant.

The Delayed Coker Unit uses refinery fuel gas supplemented with natural gas. After the proposed Project, the Coker will use this same fuel mix and the proposed Project will not increase the amount of natural gas required to operate the facility. Further, sufficient natural gas supplies exist, about 5,700 million cubic feet per day (SCAQMD, 2007). Thus, the natural gas use at the facility is not expected to increase or be significant.

Conclusion

Based on the above considerations, the proposed Project-specific energy resources impacts do not have a potential to create significant adverse impacts. Therefore, energy resource impacts with respect to electricity and natural gas will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction, or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

7. a), c), and d) Geological Hazards The proposed Project will be constructed in an area of known seismic activity. Approximately 35 active faults are known to exist within a 50-mile radius of the Refinery. Of primary concern are two active faults: the Newport-Inglewood Fault, approximately five miles north of the Refinery, and the Palos Verdes Fault, approximately 3.8 miles south of the site.

The Newport-Inglewood Fault Zone represents the most significant source of strong seismic ground shaking at the Refinery. The Newport-Inglewood Fault Zone extends more than 40 miles from Newport Bay to Beverly Hills and trends to the northwest. The greatest concentration of seismic events on the Newport-Inglewood Fault Zone is related to the 1933 Long Beach earthquake and its aftershocks. The fault is considered capable of generating a 6.9 magnitude earthquake.

Another significant fault in the immediate Refinery vicinity is the Palos Verdes Fault Zone. This fault extends approximately 72 miles from Santa Monica Bay south to Lausen Knoll in the southern San Pedro Channel. The Palos Verdes fault is considered capable of a 7.1 magnitude earthquake. As cited in the Final EIR for the Chevron-El Segundo Refinery CARB Phase 3 Clean Fuels Project, evaluations by the California Division of Mines and Geology (CDMG) indicate that there is a 10 percent probability of earthquake ground motion exceeding 0.45 gravity at the Refinery site over a 50-year period (CDMG, 1998).

Although within a seismically active area, according to the Alquist-Priolo Earthquake Fault Zoning Maps and Fault Activity Map of California (1994), the El Segundo Refinery is not located on a fault trace that would define the site as a special seismic study zone under the

Alquist-Priolo Act so would not likely to be subject to ground surface ruptures. Thus, the risk of earthquake-induced ground rupture is considered less than significant.

Based on the historical record, it is highly probable that earthquakes will affect the Los Angeles region in the future. Research shows that damaging earthquakes will occur on or near recognized faults which show evidence of recent geologic activity. The proximity of major faults to the Refinery increases the probability that an earthquake may impact the Refinery. There is the potential for damage in the event of an earthquake. Impacts of an earthquake could include structural failure, spill, etc. The hazards of a hazardous materials release during an earthquake are addressed in the "8. Hazards and Hazardous Materials" section below.

New structures must be designed to comply with the California Building Code requirements since the proposed Project is located in a seismically active area. The City of El Segundo is responsible for assuring that the proposed Project complies with the California Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The California Building Code bases seismic design on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic class and site coefficient, which represent the foundation conditions at the site.

The Chevron Refinery is required to obtain building permits, as applicable, for all new or replaced structures at the site. Aside from the new coke drums, this project does not include installing any new structures and will be subject to the Maintenance provisions of the California Building Code. The Refinery shall submit building plans to the City of El Segundo for review. The Chevron Refinery must receive approval of all building plans and building permits to assure compliance with the appropriate Building Code adopted by the City prior to commencing construction activities. The issuance of building permits from the local agency will assure compliance with the California Building Code requirements, which include requirements for building within seismic hazard zones. No significant adverse impacts from seismic hazards are expected since the project will be in compliance with the California Building Codes.

The proposed Project site is not subject to landslide or mudflow since the site is flat and there are no hills or mountains nearby. Therefore, no significant adverse impacts due to landslides or mudflows are expected.

Liquefaction is a mechanism of seismic ground failure in which earthquake-caused ground motion causes loose, water-saturated, cohesionless soils to be transformed to a liquid state.

The Refinery site has not been identified as an area where liquefaction is considered a significant potential risk (CDMG, 1998). The site also is not considered to be an area with the potential for permanent ground displacement due to earthquake-induced landslides or due to heavy precipitation events (CDMG, 1998).

7. b) and d) Topography and Soils The proposed Project is located within the confines of the existing Chevron Refinery. Concrete foundations presently support Refinery structures and equipment. Most of the Refinery roads, including all high traffic roads and areas around operating units have been paved. Some portions of the site have also been landscaped. The operating portions of the Refinery are relatively flat. No expansive soils are known to be present at the Delayed Coker Unit. No unstable earth conditions, loss of top soil, changes in topography or changes in geologic substructures are anticipated to occur with the proposed Project because of the limited grading and excavation involved to install the temporary crane. No significant adverse impacts on topography and soils are expected.

The proposed Project involves replacing six existing coke drums with six replacement coke drums at the same location within the facility using the existing foundation and structure. At most, ground disturbance will be limited to installing temporary foundations to support the derrick structure at grade to allow access for drum removal and replacement and for the temporary crane. Since the proposed Project will occur at the same location as the existing coke drums and within already developed facilities, no significant adverse impacts related to soil erosion are expected. No significant change in topography is expected because little grading/trenching is required that could substantially increase wind erosion or runoff from affected sites.

The proposed Project will be required to comply with SCAQMD Rule 403 – Fugitive Dust, which imposes requirements to minimize dust emissions associated with wind erosion. Relative to operation, no change in surface runoff is expected because surface conditions will remain relatively unchanged. Further, surface runoff is minimized because surface runoff at all facilities is typically captured, treated, and released to the ocean.

7. e) Waste Discharge The proposed Project is not expected to generate additional wastewater discharged by the Refinery. The Chevron Refinery discharges approximately seven million gallons per day of wastewater during dry weather to the ocean under an National Pollutant Discharge Elimination System (NPDES) permit. Neither the Refinery nor the proposed Project will use septic tanks or alternative wastewater disposal systems, therefore, no significant adverse impacts on soils from alternative wastewater disposal systems are expected.

Conclusion

Based on the above considerations no significant adverse impacts on geology and soils are expected from the proposed Project. Therefore, geology and soils impacts are expected to be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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, and disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

8. a) and b) Hazard analyses have been previously completed for the equipment at the existing Refinery and the proposed Project is not expected to alter the existing hazards at the Refinery. Hazards analyses associated with the Delayed Coker Unit were analyzed in the Heavy Crude Project EIR and were limited to distances less than 755 feet, which is localized to the Delayed Coker Unit, and remains within the confines of the Refinery (SCAQMD, 2006). The six replacement coke drums are proposed to be installed in the same location as the existing six coke drums and to operate in the same manner. No new materials are expected to be handled on-site and no increase in the potential hazards at the Refinery is expected as a result of the proposed Project. The proposed Project is not expected to increase the potential for fires and explosions at the Refinery. In addition, the proposed Project is not expected to increase the quantity of hazardous materials that will need to be transported to or from the Refinery (e.g., LPG, ammonia, etc.). The proposed Project is not expected to alter the transportation modes for feedstock and products delivered to and shipped from the Refinery and related terminals. Further, the proposed Project will not increase the feedstock or products delivered to or shipped from the Refinery. The potential hazard impacts related to the proposed Project are expected to be less than significant.

No increase is anticipated in potential hazards associated with the implementation of the proposed Project regarding the probability for upset and accident conditions that could cause a release of hazardous materials into the environment. The proposed Project will replace existing Refinery coke drums with equivalent coke drums of the same size, which will contain the same material and operate in the same manner. The potential effects of an accidental release of hazardous materials stored, used, and transported at the facility under existing operating conditions at the facility is not expected to change as a result of the proposed Project. Therefore, the potential for impacts as a result of a release or upset is expected to be less than significant.

8. c) The proposed Project affected units are not located within a one-quarter mile of an existing or proposed school site. Since the proposed Project will not create new emissions of

acutely hazardous materials or require handling new hazardous or acutely hazardous materials, substances or waste within one-quarter of a mile of an existing or proposed school, no potential hazardous emissions impacts are expected that would affect schools.

8. d) The existing Refinery is listed as a hazardous materials site compiled pursuant to Government Code §65962.5; however, the six replacement coke drums of the proposed Project are equivalent to the six existing coke drums and will also be utilized for activities related to refining crude oil. The proposed Project will be constructed within the confines of the existing Chevron Refinery. In 1985, the Regional Water Quality Control Board (RWQCB) adopted Order 85.17 requiring the Chevron Refinery (and other local refineries and terminals) to conduct subsurface investigations of soil and ground water. CEQA Section 21092.6 requires the lead agency to consult the lists compiled pursuant to Section 65962.5 of the Government Code to determine whether the project and any alternatives are located on a site which is included on such list. The Refinery is included on the list because it is on a list of Cleanup and Abatement Orders prepared by the State Water Resources Control Board (Order No. 85-17). For sites which are listed pursuant to Government Code Section 65962.5, the following information is requested:

Applicant:	Chevron Products El Segundo Refinery
Address:	324 West El Segundo Boulevard, El Segundo, California 90245
Phone:	(310) 615-5267
Address of Site:	324 West El Segundo Boulevard, El Segundo, California 90245
Local Agency:	City of El Segundo
Assessor's Book:	4138-016-005
List:	Cleanup and Abatement Order
Regulatory ID No:	008336901
Date of List:	February 14, 1985

The proposed Project is not expected to adversely affect the Refinery's Cleanup and Abatement Order. The Order will remain in effect and continue to establish requirements for site monitoring and clean up of existing contamination. Currently, there is no evidence that additional soil contamination is located within the areas proposed for grading, trenching or excavation. Construction activities could uncover contaminated soils, given the heavily industrialized nature of the Refinery and the fact that refining activities, petroleum storage, and distribution have been conducted at the site for a number of years.

Excavated soils that contain concentrations of certain substances, including heavy metals and hydrocarbons, generally are regulated under California hazardous waste regulations. The proposed Project has limited soil excavation (i.e., temporary crane and derrick structure foundations) and preliminary soil testing does not indicate contaminated soil is expected to be encountered. None the less, any required soil remediation will be handled under the approved SCAQMD Rule 1166 plan by using an organic vapor analyzer and visual inspection for detection of VOC and other hydrocarbons. Soil which demonstrates a VOC reading in excess of 50 ppm or greater at a distance of up to three inches from the surface or which otherwise appears contaminated will be segregated and stockpiled for further analysis. Soils, which exceed the standards specified in the plan, will be segregated and managed as

contaminated soil with treatment or disposal managed in accordance with state hazardous waste regulations. No significant adverse impacts are expected from the construction-related potential for encountering contaminated soils during excavation since there are numerous local, state (Title 22 of the California Code of Regulations) and federal rules which regulate the handling, transportation, and ultimate disposition of contaminated soils, including SCAQMD Rule 1166. Title 22 of the California Code of Regulations establishes many requirements for hazardous waste handling, transport and disposal, including requirements to use approved disposal/treatment facilities, use certified hazardous waste transporters, and use manifests to track hazardous materials, among many other requirements. Soil sampling will be conducted in the excavation areas and the Refinery will comply with all applicable rules and regulations.

8. e) The Refinery is located within two miles of LAX, but outside the flight pattern. The six replacement coke drums will be the same height and diameter as the six existing coke drums, which are permitted at the same location. Therefore, the equipment required for the proposed Project is comparable to existing equipment at the same location within the facility and would not increase safety hazards for people residing or working in the proposed Project area. The height of the proposed replacement coke drums will not exceed the height of the existing coke drums and are not expected to require Federal Aviation Administration notification, as specified in 14 CFR §17.13(a) and Federal Aviation Regulation Part 77. Therefore, no safety hazards are expected from the proposed Project at any airports in the region. Cranes used during construction of the proposed Project are among the largest in the world and will require precautionary measures (e.g., notification and appropriate lighting) to prevent danger due to the proximity to LAX. The use of the large cranes is expected to be temporary and intermittent occurring over a period of several months. Upon completion of the proposed Project, the construction cranes will be removed, and the Refinery will have the same configuration as is currently in operation.

There are no private airstrips in the vicinity of the Refinery. Therefore, the proposed Project would not be exposed to hazards from private airstrip activity.

8. f) The proposed Project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed Project would involve replacing old coke drums with nearly identical coke drums, both physically and operationally, within the existing Refinery. All construction activities will occur within the confines of the existing Refinery so that no emergency response plans will be affected. Chevron has prepared, adopted, and implemented emergency response plans at its facility. It will not be necessary to modify these plans due to the proposed Project because there will be no change in the materials stored on site or the manner in which those materials are handled. Procedures for emergency response are provided to employees along with training guidelines and the use of personal protective equipment. All construction and operation personnel will be safety-trained in accordance with Chevron's procedures. During transport of the coke drums, coordination with local agencies and the California Highway Patrol will ensure public emergency response plans and routes are functional. The proposed Project is not expected to alter the route that employees would take to evacuate the site, as the evacuation routes generally direct employees outside of the main operating portions of the Refinery.

Therefore, the proposed Project is not expected to significantly impact any emergency response plans or emergency evacuation plans.

8. g) The proposed Project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees and will not expose people or structures to wildland fires because the Refinery is not located near any forested wildlands. Although the Refinery will continue to use and produce flammable materials, the proposed Project would not increase the handling, production, or storage of flammable materials. No substantial wildland or native vegetation exists within the Refinery, and only landscape vegetation is present around the perimeter of the Refinery. Therefore, no significant increase in wildland fire hazards associated with the proposed Project is expected at the Refinery.

8. h) The proposed six replacement coke drums are expected to operate in the same manner as the six existing coke drums and handle the same materials (some of which are flammable). Existing process equipment and storage tanks at the Refinery store large volumes of flammable materials, and the proposed Project will not change the amounts or locations of these materials. Therefore, increased fire hazard in areas with flammable materials is not expected as a result of the proposed Project.

Conclusion

Based on the above considerations, the effects of an accidental release of hazardous materials being stored, used, and transported are considered less than significant, as are fire hazards associated with the proposed replacement coke drums. As a result, accidental release of hazardous materials and fire hazards associated with the proposed Project are expected to be less than significant and will not be analyzed in the EIR.

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

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) 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, or inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion

9. a), g), and i) Wastewater Generation Refinery wastewater is currently collected and treated in two separate drain and treatment systems: a segregated system and an unsegregated system. The unsegregated system, which consists of an API separator and induced air flotation (IAF) units, is normally used for non-process wastewater, including cooling tower blowdown, steam condensate, a portion of the water pumped from groundwater recovery wells, and other wastewater streams containing free oil recovered with primary (physical) treatment only. Primary treatment consists of the separation of oil, water, and solids in two stages. During the first stage (API separator), wastewater moves very slowly through the separator allowing free oil to float to the surface and be skimmed off and solids to settle to the bottom. Periodically, the separator is shut down and the sludge is collected for disposal. The second stage utilizes an IAF unit, which bubbles air through the wastewater, and both oil and suspended solids are skimmed off the top. The unsegregated system is used to collect and treat stormwater. Both structural (impoundments, berms, and curbs) and non-structural (inspections and training) controls are used to keep contaminants from entering the unsegregated system. The unsegregated system can be operated such that flow can be diverted to effluent diversion tankage or to the segregated treatment system, where additional treatment can be performed.

The segregated system is normally used to treat process wastewater containing emulsified oil, organic chemicals, and a portion of the water pumped from groundwater recovery wells. This system consists of gravity separators, a dissolved air flotation (DAF) unit, and activated sludge units for secondary (biological) treatment. In secondary treatment, dissolved oil and other organic pollutants may be consumed biologically by microorganisms. Effluent that does not meet the discharge limits may receive additional solids removal from an auxiliary off-specification DAF unit or be routed to two auxiliary effluent diversion tanks for

additional IAF treatment. The biosolids from the biological treatment are disposed to the sanitary sewer for treatment by the Hyperion Treatment Plant under an Industrial Waste Discharge Permit.

The Refinery currently discharges approximately seven million gallons per day of wastewater during dry weather under a NPDES permit, which imposes discharge characteristic requirements.

The proposed Project is expected to generate effluent water of the same amount and quality from the six replacement coke drums as that of the six existing coke drums. The existing treatment facilities onsite have the capability to treat existing wastewater, which will be approximately equal to the wastewater currently generated by the Refinery, and remain within wastewater permit limits for the Refinery. No modification of the NPDES permit is necessary to implement the proposed Project. Therefore, no impacts on wastewater discharges are expected for the proposed Project.

9. b) and h) Water Supply The Refinery currently consumes approximately 10.7 million gallons of water per day of potable water and reclaimed water combined. Both are supplied by the West Basin Municipal Water District (WBMWD). The WBMWD applies tertiary treatment to the secondary-treated effluent from the City of Los Angeles Hyperion Treatment Plant to provide the reclaimed water. Reclaimed water is used for irrigation of Refinery perimeter landscaping, cooling towers, and as boiler feed water.

As part of the proposed Project, no change in water use will occur as water will continue to be used in the same manner as it is currently used to cool the six coke drums during the coking cycle, as well as to cut solidified coke into smaller pieces for removal from the drums. No new demand on groundwater or potable water will result due to implementation of the proposed Project. The WBMWD will supply reclaimed water for the project consistent with reclaimed water currently supplied for the existing coke drums at the Refinery. Therefore, no impacts on water demand are expected for the proposed Project.

9. c), d), and g) Surface Water The proposed Project will be constructed at an existing Refinery with the demolition and removal of six existing coke drums and the installation of six new replacement coke drums. The Refinery is mostly paved including the area around the Delayed Coker Unit where six existing coke drums currently are located and operated, so minimal grading (i.e., temporary crane and derrick structure foundations) will be required. Ground disturbance will be limited to activities required to install foundations and trenching. The proposed Project is not expected to increase the stormwater runoff from the Chevron Refinery as no new paved surfaces will be required. No new storm drainage facilities, expansion of existing storm facilities, changes to drainage facilities, or changes in the drainage patterns are expected as a result of the proposed Project. Since stormwater discharge or runoff is not expected to change in volume or water quality, no significant adverse stormwater quality or stormwater drainage impacts are expected to result from the operation of the proposed Project.

9. e), and f) Flood Hazards The proposed Project would be constructed at an existing Refinery and does not include the construction of any housing, nor would it require placing 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 flood-related hazards. Thus, no significant adverse impacts associated with flood hazards are expected.

The Refinery is located approximately 900 feet from the ocean at elevations from 45 feet to 174 feet above sea level along the western edge of the Refinery property. The Delayed Coker Unit is located approximately 4,000 feet from the ocean east of the intervening elevated terrain. In the 100 years of operation, the Refinery has not been affected by a seiche or tsunami. Based on the Refinery's distance and elevation in relation to the ocean, the proposed Project is not expected to result in increased risk of seiche or tsunami.

As indicated in the discussions under topic VII Geology and Soils, the nearest faults of concern to the refinery are the Newport-Inglewood fault, approximately five miles from the refinery, and the Palos Verde fault, approximately 3.8 miles from the Refinery. These faults are strike/slip with possible reverse faults¹¹. The recent earthquakes in Japan (March 2011) and ensuing tsunamis resulted from movement of tectonic plates in a subduction zone; where one tectonic plate is pushed under a second tectonic plate. A subduction zone configuration like that off the coast of Japan does not occur off the coast of southern California, so tsunamis resulting from this type of geological structure would not be expected to occur.

The proposed Project site is located in a flat area with no hills or mountains nearby so the potential for significant adverse impacts from mudflows is considered less than significant. Thus, no significant adverse impacts associated with seiches, tsunamis, or mud flows are expected.

Conclusion

Based on the above considerations the potential adverse impacts of the proposed Project on hydrology and water quality resources, wastewater treatment facilities and water supply facilities, are expected to be less than significant and will not be analyzed in the EIR.

¹ A strike-slip fault is a fault in which the dominant sense of motion is horizontal, parallel to the strike of the fault and is also known as a lateral-slip fault. A reverse fault is a fault in which the displacement is predominantly vertical, and the hanging wall moves up with respect to the footwall. The footwall is the side of the fault onto which water would drip if the fault is exposed.(USGS 2011)

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

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

10. a) The proposed Project will be conducted within an existing industrial facility that is zoned and used for heavy manufacturing. No established communities are located on the Refinery property and, consequently, the proposed Project will not physically divide an established community.

10. b) The Refinery is located in the City of El Segundo within Los Angeles County in an urbanized area which includes a substantial amount of industrial development, due to the proximity of LAX. The areas surrounding the Refinery can generally be characterized as a blend of heavy and light industrial, commercial, medium- and high-density residential, and industrial/manufacturing.

Land use at the Refinery and in the surrounding vicinity is consistent with the City of El Segundo General Plan land use designations for the area. The Land Use element of the General Plan currently in force was adopted in December 1992, and no revisions have occurred since that time (City of El Segundo, 2007). The strip of development on the north side of El Segundo Boulevard between Main Street and Richmond Boulevard, northeast of the Refinery’s main office visitor parking lot and approximately one-half mile northwest of the Delayed Coking Unit is part of the Downtown Specific Plan, adopted in August 2000. The Refinery site is zoned by the City of El Segundo as Heavy Industrial (M-2) (City of El Segundo, 2007).

The overall activities and products produced at the Refinery will remain the same. The proposed Project would not conflict with the City of El Segundo General Plan land use designation for the Refinery site nor would there be a conflict with the Downtown Specific Plan for the area north of the Refinery site. The proposed Project would not require Specific Plan, General Plan zoning, or land use changes. The proposed Project would be subject to plan check review by the City of El Segundo during the building permit approval process. Since the proposed Project is consistent with all zoning ordinances and General and Specific Plan policies and goals, no significant adverse land use impacts are expected from the proposed Project.

Conclusion

Based on the above considerations, the proposed Project would not physically divide an established community and it would not conflict with the applicable land use plans, policies, and regulations of the City of El Segundo or create any significant adverse land use impacts. Therefore, no impacts to land use and planning impacts are expected and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would 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.
- The proposed project results 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.

Discussion

11. a) & b) The proposed Project will be constructed on land within an existing industrial site. The El Segundo area has a history of oil production with five existing oil wells within the City (El Segundo, 2011). However, there are no known mineral resources on the Refinery site. Any potential loss of mineral resources from the extraction of the crude oil processed takes place off-site and will continue regardless of the proposed Project. Therefore, the proposed Project will not result in the loss of a known mineral resource that would be of value to the region and residents of the state. Similarly, because there are no known mineral resources on the project site, the project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Conclusion

Based on the above considerations, no significant adverse impacts to mineral resources are expected from the construction and operation of the proposed Project. Therefore, no mineral resources impacts are expected and will not be analyzed in the EIR.

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

Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

12. a), b), and c) Construction activities associated with the proposed Project will generate noise from heavy construction equipment and construction-related traffic. The types of construction equipment that will be used at the Refinery include, but are not limited to,

welding machines, trucks, cranes, compressors, loaders, concrete pumps, graders, and pavers. The estimated noise level during installation of various equipment and drum demolition is expected to average about 80 decibels (dBA) at 50 feet from the center of construction activity. Most of the construction noise sources will be located at or near ground level, so the noise levels may attenuate. Transportation of the coke drums to the Refinery will likely occur during the nighttime hours to avoid traffic impacts. Similarly, during the peak construction period, construction activities would occur at night. Therefore, the potential generation and exposure to construction noise impacts may be significant.

Once constructed, the proposed Project is not expected to add any new noise sources or produce noise in excess of current operations. The proposed Project includes installing the six replacement coke drums for the six existing coke drums, and operate in the same fashion. No operational increases in noise levels or excessive groundborne vibration are expected, therefore, the impacts of noise generation and excessive groundborne vibration as a result of the proposed Project are considered to be less than significant.

12. d) The proposed Project site is not located within an airport land use plan or within the vicinity of a private airstrip. The proposed Project is located within two miles of LAX. The proposed Project would not add residential units to the area. The types of noise expected from the proposed Project is unlikely to significantly interact with noise generated from the airport, since the new equipment would be located about two miles south of the airport, and would generate the same noise as the existing equipment it is replacing. Further, the Refinery is not located within the normal flight pattern of the airport. Thus, the proposed Project would not increase the noise levels to people residing or working in the area, relative to existing noise levels from LAX.

Conclusion

The noise impacts associated with the proposed Project during construction are considered to be potentially significant and will be analyzed in the EIR. The noise impacts during operation of the proposed Project are expected to remain the same and be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing, or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

13. a) and b) Construction of the proposed Project will take place at an existing Refinery located in a highly urbanized and populous area of southern California. At the peak of construction, approximately 150 to 200 temporary construction jobs will be created by the proposed Project. Because of the large size of the construction work force available in the southern California area, all 150 to 200 temporary construction jobs are expected to be filled from the existing regional labor pool. Once construction is completed, no additional staff is expected to be needed at the Refinery for long-term operation of the proposed Project. Thus, the proposed Project will not induce substantial population growth either directly or indirectly.

Because the proposed Project will occur within an existing facility located in a highly urbanized area, no additional housing will be necessary to accommodate the labor force needed during construction and, further, no existing housing or population will be displaced. Substantial housing growth in the area will not occur as a result of the proposed Project. Therefore, no significant adverse population or housing impacts are expected to result from the proposed Project.

Conclusion

Based on the above considerations, no significant adverse impacts on population size, population distribution, or housing are expected to result from the proposed Project construction and operation. Therefore, population and housing impacts are considered to be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 time or other performance objectives.

Discussion

14. a) To respond to emergency situations, the Chevron El Segundo Refinery maintains an on-site fire department. The Refinery fire department adheres to National Fire Protection Association standards and is recognized as a professional functioning fire department by the California State Fire Marshal’s office. The department is staffed with trained and certified fire fighters and emergency medical technicians. The Refinery fire department is capable of responding to petroleum and structure fires, hazardous materials releases, and confined-space rescues on average within three minutes. Due to the local proximity of the Refinery fire department, the response in containing and controlling fire situations is much more effective than if the Refinery depended solely on off-site City Fire Departments.

The Refinery fire department holds regular training sessions and drills in conjunction with local fire departments (e.g., City of El Segundo). Also, the Refinery is active in the Beach Cities Community Awareness and Emergency Response (CAER) organization, where

industry and local government agencies coordinate emergency response activities, and is a sponsor of the Community Alert Network (CAN) telephone call-out system.

The Refinery fire department includes a full-time staff of approximately 18, with a three-person crew on duty at the Refinery at all times. In addition, a Fire Prevention Officer, a Training Officer, a Relief Battalion Chief, and the Fire Chief are on duty Monday through Friday during the day shift. To supplement the Fire Department, an Emergency Response Team consisting of personnel from various Operating Divisions of the Refinery is trained and available to assist with any fire emergencies.

The Refinery is also served by the City of El Segundo Fire Department, which maintains two fire stations within the city less than one mile from the Refinery and, as mentioned above, cooperates in emergency response planning with industrial facilities in the community, such as the Chevron Refinery.

The Refinery notifies the City of El Segundo Fire Department when an incident occurs at the Refinery that might affect the environment or pose a life safety hazard to employees or the public. The Refinery also maintains a mutual aid agreement with other Los Angeles area refineries, under which Chevron can request the assistance of other refineries' resources to assist in managing and controlling a major incident.

The proposed Project during both construction and operation will not substantially change the load on the Refinery's fire fighting and emergency response resources and would not be expected to create the need for additional fire protection services or resources by Chevron or the City of El Segundo. The proposed Project involves the installation of six coke drums to replace six existing coke drums at the Refinery and no new fire hazards will be added to the Refinery. The Refinery will continue to operate the existing on-site fire department with continued close coordination with local fire departments and emergency services. Fire stations in the areas near the Refinery are equipped to handle emergency response incidents at industrial facilities. Therefore, no significant adverse impacts on fire protection are expected.

14. b) The Refinery is an existing facility with a 24-hour security force to protect existing employees and property currently in place. The Refinery is fenced and access provided by security-controlled gates. Because the proposed Project will not significantly change Refinery staffing or substantially expand the existing facilities within the Refinery, there will be no increased need for new or expanded police protection.

14. c), and d) The local workforce is more than adequate to fill the short-term construction positions required for the proposed Project and no additional workers would be needed to operate the new coke drums. Therefore, there will be no increase in the local population and, thus, no impacts are expected to schools or other public facilities.

Conclusion

Based on the above consideration no significant adverse impacts to public services are expected to occur as a result of the proposed Project. No increase in permanent workers is expected at the Refinery. Therefore, public services impacts are considered to be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

15. a) As previously concluded in Section 13, Population and Housing, of this document, implementation of the proposed Project is not expected to increase the local population either directly or indirectly during construction or operation. Therefore, implementation of the proposed Project is not expected to increase the demand for neighborhood or regional parks, or other recreational facilities, and it will not adversely affect existing recreational facilities.

15. b) Implementation of the proposed Project does not include new recreational facilities or require the construction or expansion of existing recreational facilities and, thus, will not have an adverse physical effect on the environment or recreational services.

Conclusion

Based on the above considerations no significant adverse impacts on recreation are expected from the proposed Project. Therefore, recreation impacts are considered to be less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

16. a) and b) Solid waste generation and disposal will increase during construction of the proposed Project. Approximately 110 tons of wastes, consisting of demolition debris including concrete, asphalt, wood, and metal debris, and normal construction debris including cardboard, paper, and plastic, are expected to be generated by the proposed Project. The solid waste generated during construction will be disposed in an appropriately classified disposal facility by a licensed contractor. Construction debris is expected to be disposed of at either the Chiquita Canyon or Sunshine Canyon landfills in northern Los Angeles County. The landfills combined daily throughput is 18,100 tons per day. The Chiquita Canyon and Sunshine Canyon landfills are permitted to operate until November 2019 and December 2037, respectively. The most recently published data show the Chiquita Canyon and Sunshine Canyon landfills remaining capacities of 29,300,000 and 112,300,000 cubic yards, respectively (CDRRR, 2011). Therefore, local landfills have the capacity to accept the waste generated by the proposed Project. Approximately 1,100 tons of metal from the coke drums will be shipped offsite for recycling consistent with the Refinery's waste management program.

Preliminary testing does not indicate the presence of contaminated soils in the areas where foundation work for the crane and derrick structures will be placed. However, if contaminated soils are encountered during the project construction, the established handling procedures for contaminated soil would be followed, which include removing the soil for proper disposal in accordance with SCAQMD Rule 1166 and requirements of other agencies such as the DTSC and RWQCB. Approximately 500 to 1,000 cubic yards of clean soil are

anticipated to be removed from the proposed Project area and used elsewhere onsite. Therefore, no offsite soil disposal is expected as part of the proposed Project.

The proposed Project coke drums will perform the same functions as the existing equipment. Solid or hazardous waste generation rates (i.e., volume and/or frequency of disposal) are not expected to increase as a result of the proposed Project operation. Therefore, potential impacts of project solid and hazardous waste disposal on available waste disposal facilities are expected to be less than significant.

The facility is expected to continue to comply with federal, state, and local statutes and regulations related to solid and hazardous wastes.

Conclusion

Based on the above considerations proposed Project solid/hazardous waste generation does not have the potential for significant adverse impacts on disposal facilities. Therefore, impacts of the proposed Project on solid/hazardous waste are less than significant and will not be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC.				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

Discussion

17. a) and b) Construction of the proposed Project may significantly adversely affect the traffic in the area because of the vehicle trips associated with between 150 and 200 construction workers, construction equipment, and the delivery of construction materials including the replacement coke drums. The impacts of the traffic during the construction phase will be analyzed in the EIR.

Once construction of the proposed Project is completed, the existing work force at the Refinery is not expected to increase as a result of the proposed Project. The receipt and transport of operational materials are not expected to change as a result of this project so operation-related traffic is expected to return to existing traffic levels before start-up of the

proposed Project. Therefore, the impacts on traffic during the operational phase are considered to be less than significant.

17. c) The proposed Project includes installing six new replacement coke drums for the existing coke drums within the existing Refinery. The proposed Project structures will be the same in height and appearance to the existing Refinery structures. Since the proposed replacement coke drums will be the same height and location as the existing structures, no change to air traffic patterns is expected and notification to the Federal Aviation Administration pursuant to Advisory Circular AC 70/7460-2K is not required. Further, since the Refinery is located about two miles south of the nearest airport, LAX, the Refinery is located outside of the normal flight pattern of LAX. In addition, the proposed Project will not involve the delivery of materials via air cargo, so no increase in air traffic is expected.

17. d) and e) The proposed Project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the Refinery. The proposed Project does not include construction of roadways that could include design hazards. Emergency access at the Refinery will not be impacted by the proposed Project and Chevron will continue to maintain the existing emergency access gates to the Refinery. During transport of the coke drums, as required by the Caltrans oversized load variance permit, coordination with local agencies and the California Highway Patrol will ensure that emergency access is maintained.

17. f) The proposed Project will be constructed within the confines of an existing Refinery and is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

Conclusion

The traffic impacts associated with the construction phase of the proposed Project are potentially significant and will be analyzed in the EIR. As explained above, traffic impacts related to the operational phase of the proposed Project are expected to be less than significant because no new employees would be hired to operate the new coke drums and no increase in heavy-duty haul truck deliveries are anticipated. The impacts of the proposed Project on other transportation related areas are expected to be less than significant. Therefore, only construction related traffic will be analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

18. a) The proposed Project does not have the potential to adversely affect the quality of the environment, reduce or eliminate any plant or animal species, or destroy prehistoric records. The proposed Project is located at a site that is part of an existing industrial facility, which has been previously disturbed, graded, and developed, and the proposed project will not extend into environmentally sensitive areas, but will remain within the confines of an existing, operating Refinery. For additional information, see Section IV. – Biological Resources and Section V. – Cultural Resources.

18. b) and c) The areas where there is the potential for cumulative adverse environmental impacts include air quality, noise, and transportation/traffic, which have the potential to impact humans. The proposed Project has the potential to result in an emissions increase,

noise sources, and traffic from the construction of the proposed Project and has the potential to result in cumulative impacts. The potential cumulative impacts will be analyzed, as necessary, in the EIR.

Conclusion

Project-specific impacts to the following environmental areas will be further analyzed in the EIR: air quality, noise, and transportation/traffic during construction. Potential adverse cumulative impacts to these environmental areas will also be evaluated in the EIR.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

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ACRONYMS

ABBREVIATION	DESCRIPTION
AQMP	Air Quality Management Plan
API	American Petroleum Institute
BACT	Best Available Control Technology
CAN	Community Action Network
CAER	Beach Cities Community Awareness and Emergency Response
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
Chevron	Chevron Products Company
CO	carbon monoxide
DAF	dissolved air floatation
DCU	Delayed Coking Unit
EIR	Environmental Impact Report
ERPG	Emergency Response Planning Guide
FCCU	Fluid Catalytic Cracking Unit
IAF	induced air flotation
LAX	Los Angeles International Airport
LOS	level of service
LPG	liquefied petroleum gas
NOP/IS	Notice of Preparation and Initial Study
NOx	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PM2.5	particulate matter less than 2.5 microns in diameter
PM10	particulate matter less than 10 microns in diameter
RWQCB	Regional Water Quality Control Board, Los Angeles Region
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SOx	sulfur oxide
TACs	toxic air contaminants
VOC	volatile organic compounds

GLOSSARY

TERM	DEFINITION
Ambient Noise	The background sound of an environment in relation to which all additional sounds are heard.
Cogeneration	A cogeneration unit is a unit that produces electricity and useful thermal energy for steam or heating processes.
dBA	The decibel (dDB) is one tenth of a bel where one bel represents a difference in noise level between two intensities I_1 , I_0 where one is ten times greater than the other. (A) indicates the measurement is weighted to the human ear.
Delayed Coking	The Delayed Coker is a high temperature cracking unit where large hydrocarbon molecules are broken into small molecules (light hydrocarbons). The light hydrocarbons are sent to other units in the Refinery for the manufacture of products such as gasoline, diesel, and jet fuels. A tail gas stream is produced which is burned as fuel. The remaining material, called petroleum coke, is a solid and sold as a by-product.
Hydrocarbon	Organic compound containing hydrogen and carbon, commonly occurring in petroleum, natural gas, and coal.
L_{50}	Sound level exceeded 50 percent of the time (average or mean level).
Natural Gas	A mixture of hydrocarbon gases that occurs with petroleum deposits, principally methane together with varying quantities of ethane, propane, butane, and other gases. Paleontological Prehistoric life.
Peak Hour	This typically refers to the hour during the morning (typically 7 AM to 9 AM) or the evening (typically 4 PM to 6 PM) in which the greatest number of vehicles trips are generated by a given land use or are traveling on a given roadway.
Residuum	Bottom portion (solids/residue) from fractionation columns that is unable to be refined further.
Seiches	A vibration of the surface of a lake or landlocked sea that varies in period from a few minutes to several hours and which may change in intensity.

COMMENTS AND RESPONSE TO COMMENTS RECEIVED ON THE NOP/IS

**CHEVRON PRODUCTS COMPANY EL SEGUNDO REFINERY
COKE DRUM RELIABILITY PROJECT
RESPONSE TO COMMENTS RECEIVED ON THE NOP/IS**

INTRODUCTION

The NOP/IS was circulated for a 30-day public review and comment period, which started on October 11, 2011, and ended on November 10, 2011.

The NOP/IS included a detailed project description, the environmental setting for each environmental resource, and an analysis of each environmental resource on the California Environmental Quality Act (CEQA) checklist including all potentially significant environmental impacts. The SCAQMD received two comment letters on the NOP/IS during the public comment period. The comments are bracketed and numbered. The related responses are identified with the corresponding number and are included in the following pages.

Comment Letter	Commenter
1	Native American Heritage Commission
2	Ms. Joyce Dillard

Comment Letter No. 1

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 384
SACRAMENTO, CA 95814
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Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net



October 13, 2011

Mr. Jeff Inabinet
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Re: SCH#2011101026 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the "Chevron Products Company El Segundo Coke Drum Reliability Project;" located in the City of El Segundo; Los Angeles County, California

Dear Mr. Inabinet:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites. The NAHC wishes to comment on the proposed project.

1-1

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified within the project area identified. However, the absence of archaeological resources does not preclude their existence.**

1-2

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

1-3

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Special reference is made to the *Tribal Consultation* requirements of the California 2006 Senate Bill 1059: enabling legislation to the federal Energy Policy Act of 2005 (P.L. 109-58), mandates consultation with Native American tribes (both federally recognized and non federally recognized) where electrically transmission lines are proposed. This is codified in the California Public Resources Code, Chapter 4.3 and §25330 to Division 15.

1-4

Furthermore, pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

1-5

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

1-6

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

1-7

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

1-8

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built

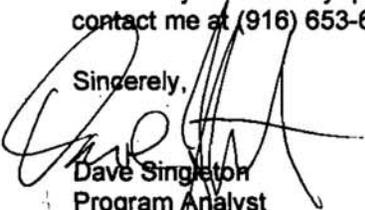
1-9

around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

1-9
(cont'd)

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,



Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

RESONSE TO COMMENTS

California Native American Contacts
Los Angeles County
October 13, 2011

LA City/County Native American Indian Comm
Ron Andrade, Director
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randrade@css.lacounty.gov
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(213) 386-3995 FAX

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
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samdunlap@earthlink.net
Gabrielino Tongva
(909) 262-9351 - cell

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
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calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
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562-761-6417- fax
Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
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310-570-6567

Gabrielino-Tongva Tribe
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Gabrielino

Gabrieleno/Tongva San Gabriel Band of Mission
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Gabrielino Tongva

Gabrielino-Tongva Tribe
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(310) 587-0170 - FAX
760-904-6533-home
Gabrielino

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Sch#2011101028 Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for Chevron Products Company El Segundo Coke Drum Reliability Project; City of El Segundo; Los Angeles County, California.

California Native American Contacts
Los Angeles County
October 13, 2011

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
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Covina , CA 91723
(626) 926-4131
gabrielenoindians@yahoo.
com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Sch#2011101026 Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for Chevron Products Company El Segundo Coke Drum Reliability Project; City of El Segundo; Los Angeles County, California.

Responses to Comment Letter No. 1

Response 1-1

The SCAQMD notes that the Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources.

Response 1-2

The SCAQMD is aware of the statutes and regulations including Public Resources Code §5097.7 and §21000-§21177 as well as all other relevant CEQA requirements. As noted in your comment, no known cultural resources were identified within the proposed Project area. As stated on pages 2-19 through 2-21 of the NOP/IS for the Chevron Products El Segundo Refinery Coke Drum Reliability Project, potential significant adverse impacts on cultural resources were not anticipated. This conclusion is based on the fact that there are no prehistoric or historic cultural resources or paleontological resources within the boundaries of the Refinery.

The entire Refinery site has been previously graded and developed. The larger Refinery structures and equipment are supported on concrete foundations. The remainder of the site is unpaved. Any archaeological or paleontological resources that may have been present prior to development of the Refinery are not expected to be found at the site due to past disturbance. In addition, an August 2005 records search indicated that 14 archaeological investigations have been performed within a 0.5-mile radius of the Refinery, including three surveys of small linear areas within the Refinery boundaries. No prehistoric sites or Native American sacred lands are recorded within the Refinery boundaries or within 0.5-mile radius of the facility. No paleontological resources are known to exist at the facility. Further, the proposed Project will replace existing coke drums with new coke drums at the same location.

If cultural resources were to be encountered unexpectedly during ground disturbance associated with construction of the proposed Project, proper procedures (i.e., contacting professional archaeologist and a Gabrielino/Tongva representative, temporarily halting or redirecting disturbance work in vicinity, etc.) will be taken. Further, as explained above, the Refinery's site does not contain known paleontological resources and, thus, the proposed Project is not expected to adversely affect any sites of paleontological value.

Extensive modifications have occurred at the Refinery over the last two decades and no cultural resources have been discovered during these modifications. As a result, based on historical activities at the site, the proposed Project was determined to not cause a potential "substantial adverse change in the significance of any historical resource" which would require a further evaluation of cultural resources in the draft EIR.

Response 1-3

The SCAQMD is aware of Public Resources Code §§5907.94(a) and 5097.96 and will treat any NAHC "Sacred Sites" as confidential and exempt from the Public Records Act pursuant to

California Government Code §6254(r). For this proposed Project, no known "Sacred Sites" have been identified.

Response 1-4

As noted in Response 1-2, additional archaeological investigation are not required for the proposed Project, so it is not necessary to contact the Native American Heritage Commission. Construction activities for the proposed Project at the Refinery include standard procedures for accidentally encountering any archaeological, Native American or cultural resources on-site. Compliance with all local, state, and federal regulations (and notifications) will occur in the event of an accidental discovery of any cultural or historic resources.

The SCAQMD maintains a comprehensive list of Native American tribes provided by the NAHC for past projects. These contacts receive all notices of availability of SCAQMD CEQA documents. The contacts listed are already on the SCAQMD's Native American Tribes contact list. Notice of availability of the Draft EIR for proposed Project and all other projects where the SCAQMD is the lead agency under CEQA will continue to be sent to the contacts provided by the commentator.

Response 1-5

Native American consulting parties were included in the noticing process for the NOP/IS and will be included in all noticing processes during the CEQA process for the proposed Project. As already noted in Response 1-2, no cultural resources are known to exist at the proposed Project site.

Response 1-6

As noted in Response 1-4 and 1-5, the SCAQMD provides notices of all SCAQMD CEQA documents to a comprehensive list of Native American tribal contacts. Also, as stated in Response 1-2, the proposed Project is currently located within the Refinery in an area which has been previously graded and the existing coke drums are located. As such, no historical resources are expected to be encountered and no significant impacts to historical resources are expected.

Response 1-7

As with "Sacred Site" in Response 1-3, "historic properties of religious and cultural significance" will be considered confidential. However, it should be noted that no known historic properties of religious and cultural significance have been identified within the confines of the Refinery which includes the proposed Project site.

Response 1-8

As stated in the NOP/IS on page 2-21, the likelihood of encountering cultural (and archaeological) resources is low, if such resources were to be encountered unexpectedly during the limited ground disturbance associated with the proposed Project, the protective measures

RESPONSE TO COMMENTS

described on page 2-21 of the NOP/IS are in place and will be followed to minimize impacts to the resource.

Response 1-9

As stated in Response 1-4, an extensive list of Native American contacts is maintained by the SCAQMD and will be included in the noticing process for the proposed Project. SCAQMD staff is available to meeting with any Native American tribes upon request.

Comment Letter No. 2

Ms. Joyce Dillard
November 10, 2011

From: Joyce Dillard [<mailto:dillardjoyce@yahoo.com>]
Sent: Thursday, November 10, 2011 11:56 AM
To: Jeffrey Inabinet
Subject: Comments to Chevron Products Company El Segundo Refinery Coke Drum Reliability Project due 11.10.2011

Water supply increases are not addressed in the regional projections. There is no mention of the Greater Los Angeles Integrated Water Management Plan IRWMP.] 2-1

Is there any effect on the Southern California Bight? How does this affect National Security issues and any Military concerns?] 2-2

Groundwater contamination and Total Daily Maximum Loads TMDLs issues should be addressed as to mitigation and/or restoration.] 2-3

What is the effect on air quality and greenhouse gas emissions of the gases listed especially since the EPA has disallowed parts of the Air Quality Plan. Mitigation and Monitoring Plans need to be addressed. Will there be a necessity for monitoring points to be established near the project.] 2-4

Is there any effect on waste sheds and landfills?] 2-5

Will there be an overweight trucks involved, and if so, what will be the effect to streets, underground pipelines and storage tanks. What capital projects or repairs will be needed to infrastructure?] 2-6

Joyce Dillard
P.O. Box 31377
Los Angeles, CA 90031

Responses to Comment Letter No. 2

Response 2-1

As stated on in paragraph 9. b) and h) on page 2-36 of the initial study, no change in water demand will occur as a result of the proposed Project. Therefore, analysis of potential impacts from the proposed Project on the regional water supply or the Greater Los Angeles Integrated Water Management Plan is not required.

Response 2-2

The Southern California Bight is a region that includes coastal southern California, the Channel Islands and the local portion of the Pacific Ocean. The proposed Project is located at an existing refinery in the City of El Segundo. No increase in water use, wastewater discharge, or storm water discharge would occur as a result of the proposed Project. Transport of the coke drums to King Harbor would occur in an area highly traveled by ocean-going vessels and would not change the area where the offloading would occur. Therefore, the proposed Project would have no direct or indirect impacts to the Southern California Bight. The proposed Project would occur within the confines of the existing Refinery and would consist of replacing existing equipment that is nearing the end of their useful life with new equipment. As such, the proposed Project does not involve any national security or military issues or concerns.

Response 2-3

The proposed Project involves the replacement of six existing coke drums with six new coke drums, which are above ground and do not involve any groundwater management including contamination remediation. Only shallow grading for a temporary crane foundation is proposed, so no groundwater is expected to be encountered during the proposed Project. Therefore, groundwater contamination is not expected to be encountered during implementation of the proposed Project and mitigation would not be required.

Response 2-4

Air quality impacts related to the proposed Project have been analyzed in Section 4.2 of this EIR. Greenhouse gas impacts related to the proposed Project have been analyzed in Section 5.2.2 of this EIR. The air quality analysis determined that the proposed Project would have a significant impact for only NO_x emissions during construction. All other criteria pollutant emissions (i.e., CO, VOC, SO_x, PM₁₀ and PM_{2.5}) and GHG emissions were determined to be less than significant. Because operation of the proposed Project would not result in a significant increase in coke drum emissions compared to the existing coke drum emissions, monitoring is not warranted.

Partial disapproval of the 2007 AQMP has no bearing on the proposed Project. The proposed Project continues to be subject to stringent rules, e.g., Rule 1401 – New Source Review of Toxic Air contaminants, etc., and regulations, e.g., Regulation XIII – New Source Review, etc.

Response 2-5

As discussed in Section 16 of the NOP/IS, no significant impacts on disposal facilities (including landfills) are expected from implementation of the proposed Project, because it would not result in an increase in solid or hazard waste.

Response 2-6

Transportation of the coke drums has been addressed in Section 4.4 of this EIR. The equipment transport vehicle will comply with Caltrans requirements for oversized and heavy loads. Caltrans requirements are designed to protect roadways and underground structures from damage due to travel on roadways. Additionally, obstructions such as street lights and traffic signals will be temporarily removed prior to and immediately replaced following the transport of each coke drum. The temporary removal and replacement will be performed by qualified personnel as part of the proposed Project. As such, no capital infrastructure projects for streets and roadways are necessary to implement the proposed Project because it will not result in an increase in solid or hazardous waste products.

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