AGENDA
CITY OF CARSON
REGULAR MEETING OF THE ENVIRONMENTAL COMMISSION
701 East Carson Street, Carson, CA 90745
EXECUTIVE CONFERENCE ROOM, 2ND FLOOR
Wednesday, October 1, 2014
6:30 p.m.

1. **CALL TO ORDER:**

2. **PLEDGE OF ALLEGIANCE:**

3. **ROLL CALL:** Environmental Commissioners: Burr, Hellerud, Hopson, Jimenez, Love, Mack, Muckey, Perry, Taylor

4. **AGENDA POSTING CERTIFICATION:** In accordance with the Americans with Disabilities Act of 1990, if you require a disability related modification or accommodation to attend or participate in this meeting, including auxiliary aids or services, please call the City Clerk's office at 310-952-1720 at least 48 hours prior to the meeting. (Government Code Section 54954.2)

5. **AGENDA APPROVAL:**

6. **ORAL COMMUNICATIONS:** For items **NOT** on the agenda. Speakers are limited to three minutes.

7. **MINUTES APPROVAL:**
   a. July 2, 2014
   b. August 6, 2014
   c. September 2, 2014

8. **UNFINISHED BUSINESS**
   a. California Cap and Trade Expenditure Plan

9. **NEW BUSINESS**
   a. City of Carson Water Conservation Initiative
   b. Notice of Preparation of a Draft Environmental Impact Report, 4747 Daisy Avenue, Long Beach
   c. Notice of Preparation of a Draft Environmental Impact Report, Tesoro Los Angeles Refinery Integration and Compliance Project
   d. City of Carson Public Health Initiative

10. **WRITTEN COMMUNICATIONS**
    a. N/A

11. **ORAL COMMUNICATIONS**
    a. Audience
    b. Commissioners
    c. Staff
       i. Introduction of new alternate, Marcelo Silva
       ii. Oil Code Update Community Workshop
       iii. Clean energy Vehicles Parking definition
       iv. January 7, 2015 Meeting Cancelation

12. **ADJOURNMENT**
    Upcoming Meetings: November 5, December 3, January 7

CITY OF CARSON

STAFF COMMUNICATION TO
THE ENVIRONMENTAL COMMISSION

UNFINISHED BUSINESS October 1, 2014

SUBJECT: California Cap and Trade Expenditure Plan, Preliminary Draft Affordable Housing and Sustainable Communities Program Guidelines

REQUEST: Review, discuss, provide feedback on Preliminary Draft Affordable Housing and Sustainable Communities Program Guidelines, and initiate strategies to benefit the City of Carson

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I. Introduction

On September 2, 2014, staff presented the California Cap and Trade Expenditure Plan. The 2014-15 California State Budget provides a brief summary of the Program and allocations of the $832 million that are generated by the Program. One of the implementation programs included the Affordable Housing and Sustainable Communities Program. On September 23, 2014 the State of California Strategic Growth Council released a preliminary draft of the Affordable Housing and Sustainable Communities Program Guidelines, refer to Exhibit 1.

II. Background and Analysis

As discussed on the September 2, 2014 meeting, staff will continue to provide updates on this subject to identify strategies to access funds to improve the well-being of the community. Since these guidelines just became available, staff has not had a chance to review them. Staff encourages the Commission to review these guidelines to determine a course of action. Staff will review the guidelines as well and update the Commission on any new information that becomes available.

III. Recommendation

Review, discuss, provide feedback on Preliminary Draft Affordable Housing and Sustainable Communities Program Guidelines, and initiate strategies to benefit the City of Carson

IV. Exhibits

1. Preliminary Draft Affordable Housing and Sustainable Communities Program Guidelines

Prepared by: _____

Saied Naaseh, Associate Planner

AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES PROGRAM

PRELIMINARY DRAFT PROGRAM GUIDELINES

FUNDED BY

GREENHOUSE GAS REDUCTION FUND

STATE OF CALIFORNIA

STRATEGIC GROWTH COUNCIL

Released: September 23, 2014

Please direct comments to:

Affordable Housing and Sustainable Communities Program

Email: AHSC@SGC.CA.GOV

California
Strategic Growth Council

Memorandum

TO: Interested Stakeholders

FROM: Strategic Growth Council

DATE: September 23, 2014

RE: Draft Guidelines for the SGC Affordable Housing & Sustainable Communities (AHSC) Program

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First and foremost, thank you for your interest in this process. The opportunity to implement key land use and transportation strategies to address climate change in California is a responsibility we do not take lightly. Like any good process, we look forward to constructive feedback from diverse stakeholders to help inform the Affordable Housing and Sustainable Communities Program as we move forward.

Following this memo, you will find the Draft Guidelines document for the AHSC Program. Written comments will be accepted on this draft until **Friday, October 31, 2014**. SGC and its partnering agencies and departments will be holding four public workshops across the state to gather feedback to inform the final version of the guidelines that will go to the Council for adoption at its December 11, 2014 meeting. Information on the cities and dates of the workshops is available now in the SGC Workshop Notice, and additional information with exact times and locations will be released by the end of September.

In order to facilitate the most effective engagement, SGC would like to acknowledge several outstanding issues to be resolved prior to Council adoption of the Final Guidelines in December.

Chief among these issues include:

- Coordination and partnership between Metropolitan Planning Organizations/regional agencies and the State to ensure effective implementation of the goals of this Program
- Geographic distribution of funds throughout the state
- ARB Guidance on GHG reductions quantification
- Specific point values for scoring criteria

Again, we would like to acknowledge the complexity of the intersection of land use, affordable housing, transportation and infrastructure needs of the state that this program addresses to reduce greenhouse gas emissions. We appreciate your thoughtful engagement as we navigate multiple perspectives in how to achieve the greatest benefits to our state and its residents.

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Affordable Housing and Sustainable Communities Program
DRAFT Program Guidelines

Article I. General

Section 100. Purpose and Scope

(a) The purpose of these guidelines is to implement Division 44, Part 1 of the Public Resources Code (PRC) (commencing with Section 75200), which establishes the Affordable Housing and Sustainable Communities (AHSC) Program, hereinafter referred to as the AHSC Program.

(b) The purpose of the AHSC Program is to reduce greenhouse gas (GHG) emissions through projects that implement land use, housing, transportation, and agricultural land preservation practices to support infill and compact development, and that support related and coordinated public policy objectives, including the following:

(1) Reducing air pollution.

(2) Improving conditions in disadvantaged communities.

(3) Supporting or improving public health and other co-benefits as defined in Section 39712 of the Health and Safety Code.

(4) Improving connectivity and accessibility to jobs, housing, and services.

(5) Increasing options for mobility, including the implementation of the Active Transportation Program established pursuant to Section 2380 of the Streets and Highway Code.

(6) Increasing transit ridership.

(7) Preserving and developing affordable housing for lower income households, as defined in Section 50079.5 of the Health and Safety Code.

(8) Protecting agricultural lands to support infill development.

Section 101. Program Description and Overview

The AHSC Program is supported by auction proceeds derived from the California Air Resources Board's Cap and Trade Program, and appropriated in the annual State Budget to the Greenhouse Gas Reduction Fund. Accompanying legislation, SB 862, apportions 20 percent of the GGRF's proceeds on an annual basis to the AHSC program beginning in FY 2015-16.

The AHSC Program furthers the regulatory purposes of AB 32 and SB 375 by investing in projects that reduce greenhouse gas emissions by creating more compact, infill development patterns, encouraging active transportation and mass transit usage, and protecting agricultural land from sprawl development. These projects, described in the AB 32 Scoping Plan, will support ongoing climate objectives and contribute substantial public health and safety, economic and environmental co-benefits.

The AHSC Program will provide grants and/or loans to projects that will achieve GHG reductions through one of the following, or a combination of the two:

1) Increasing accessibility of affordable housing, employment centers and key destinations via low-carbon transportation options (walking, biking and transit), resulting in fewer vehicle miles traveled (VMT). Two project prototypes have been identified to implement this strategy: (A) Transit Oriented Development Project Areas (TOD) or (B) Integrated Connectivity Projects (ICP).

2) Protecting agricultural lands from GHG-intensive development (e.g., agricultural land conservation easements), resulting in net increases in GHG sequestration.

The AHSC Program is intended to integrate and leverage existing housing, transportation, and land use programs and resources, including, but not limited to those programs identified within the *Cap and Trade Auction Proceeds Investment Plan: FYs 2013-14 through 2015-16, May 14, 2013* (see Table 7, pg. 106) and the *AB 32 Climate Change Scoping Plan,* adopted May 15, 2014. The AHSC Program implements investment within the "Sustainable Communities and Clean Transportation" category of the Investment Plan and addresses emissions predominantly from the transportation sector, which accounts for the largest sector of GHG emissions.

The AHSC program is administered by the Strategic Growth Council (SGC), and implemented by the Department of Housing and Community Development (herein the "Department"), and the Natural Resources Agency ("Agency"), in consultation with, and pursuant to guidance from the ARB. *(PRC Secs. 75200.1, 75213, 75216)*

The Department will implement the housing, transportation and infrastructure components of this program. The Agency or the California Department of Conservation will implement the Sustainable Agricultural Lands Conservation (SALC) Program. Program guidelines for the SALC Program are available online at www.sgc.ca.gov. SGC staff will coordinate collaborative efforts with Agency and Department staff, working with the Council to

develop program guidelines (including grants and loans), evaluating applications, preparing agreements, monitoring agreement implementation, reporting and amendments.

The Council, Department and Agency will also coordinate with ARB to develop and incorporate consistent guidance in the following areas, which will apply to all GGRF programs:

- Expenditure records to ensure investments further the goals of AB 32;
- SB 535 requirements to maximize benefits to disadvantaged communities (DACs) and determining whether an investment provides a " benefit to" or "is located within" a DAC;
- Consistent methodologies for quantifying greenhouse gas reductions and other economic, environmental and public health co-benefits; and
- Project tracking and reporting.

SB 862, which created the AHSC Program, states "the Council shall coordinate with the Metropolitan Planning Organizations (MPOs) and other regional agencies to identify and recommend projects within their respective jurisdictions that best reflect the goals and objectives of this division."

The Council is soliciting input and advice from MPOs and other regional agencies and developing a framework for thorough, meaningful consultation with these institutions throughout project proposal evaluation. It is expected that these institutions will provide insight and recommendations to support effective implementation of the Program.

The AHSC program generates synergistic support for GHG reduction by increasing accessibility of housing, employment centers and key destinations via low-carbon transportation options (walking, biking and transit), resulting in fewer vehicle miles travelled. The program will accomplish these objectives by providing financial assistance for the development and/or revitalization of mixed use development areas and related infrastructure near public transit stations/stops and along public transit corridors.

Under the program, low-interest loans are available as gap financing for rental housing developments that include affordable units, and as mortgage assistance for homeownership developments. In addition, grants are available for infrastructure improvements necessary for the development of specified housing developments, facilitating connections between these developments and the transit station, and other eligible Capital Use and Program Use activities that reduce greenhouse gas emissions and encourage reduction of vehicle miles traveled.

Funds will be allocated through a competitive process, based on the merits of applications submitted and the proposed use of funds within the identified Project Area. The threshold requirements and application selection criteria focus on the extent to which developments realize the program's objectives of reducing greenhouse gas emissions and addressing co-benefits (e.g. public health and safety, economic and environmental) and traditional concerns of publicly funded programs, such as housing affordability and project readiness.

Table 1 AHSC Program Summary		
	TOD (Corridor, District or Neighborhood) Project Areas	Integrated Connectivity Projects (ICP)
	Qualifying High Quality Transit Areas	Areas with Potential to Improve Transit
Transit Requirements §102	Project Area must include a Major Transit Stop within a ½ mile catchment area with service by at least one of the following: ▪ High Speed Rail ▪ Commuter or light rail ▪ Bus Rapid Transit (BRT) ▪ Express Bus	Projects must include at least one (1) Transit Station or stop with service by at least one of the following: ▪ High Speed Rail ▪ Commuter or light Rail ▪ Bus Rapid Transit (BRT) ▪ Bus ▪ Vanpool/shuttle
Eligible Projects §102	Eligible projects **MUST** include an affordable housing development (residential or mixed-use) **AND** at least one (1) infrastructure-related Capital Use(s) detailed below.	Projects **MUST** include at least TWO Eligible Uses. At least one (1) of the Eligible Uses must include an Infrastructure-Related Capital Use as detailed below.
Housing Development Requirements §103	Housing Developments may be: • New construction or existing development with rehabilitation and/or preservation of affordable housing at-risk of conversion • Housing Developments are not required to be funded by AHSC Program Funds	
Eligible Uses §103	Eligible Capital Uses of Funds (*infrastructure-related): • Housing Developments* • Housing-Related Infrastructure* • Transportation- or Transit-Related Infrastructure* • Green Infrastructure* • Criteria Pollutant Reduction • Planning Implementation Eligible Program Uses of Funds: • Active Transportation Programs • Transit Ridership Programs • Pollutant Reduction Programs	
Funds Available §104	• No less than 40 percent of funds will be allocated to TOD Projects • No less than 30 percent of available funds will be allocated to Integrated Connectivity Projects	
Award Amounts §104	Minimum: $ 1 Million Maximum: $ 15 Million	Minimum: $ 500,000 Maximum: $ 8 Million
Eligible Applicants §105	The Public Agency that has jurisdiction over the Project Area is a required applicant, either by itself or jointly (co-applicant) with any of the following: • JPAs, PHAs, Transit Agency/Operators, School District, facilities district or other special district, developers (profit and/or non-profit)	

Article II. Program Requirements

Section 102. Eligible Projects [Section 75212]

The AHSC Program is designed to implement GHG reduction within the transportation sector, while significantly benefiting disadvantaged communities and providing affordable housing. A primary means of achieving GHG reduction within the transportation sector is through reduction of VMT with fewer and shorter vehicular trips. The AHSC Program is intended to fund integrated land use and transportation projects supporting low carbon transportation options through a mode shift from single occupancy vehicles (SOV).

Promoting mode shift away from SOV will require increasing and improving transit and active transportation options so they can better compete with automobiles as the means of travelling between residential areas, major employment centers and other Key Destinations. Key to this is ensuring that transit and active transportation options are accessible, convenient, reliable, affordable, safe, comfortable, and frequent.

The AHSC Program includes two eligible project types:

1. Transit Oriented Development (TOD) Project Areas, and
2. Integrated Connectivity Projects (ICP)

A Transit Oriented Development (TOD) Project Area must be designed to achieve mode shift within a Metropolitan Area by integrating Qualifying High Quality Transit systems and Key Destinations including residential/mixed-uses, with an emphasis on affordable housing development, within a neighborhood, district or corridor as defined below.

An Integrated Connectivity Project (ICP) must be designed to achieve a reduction in GHG emissions by increasing connectivity between land uses and improved transit access and service, within Non-Metropolitan areas and Metropolitan areas lacking Qualifying High Quality Transit systems. **Project Areas with transit meeting the definition of Qualifying High Quality Transit Service are ineligible to apply as an ICP.**

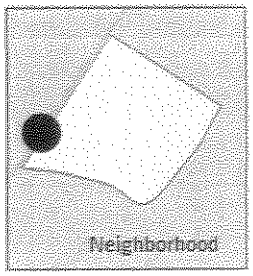
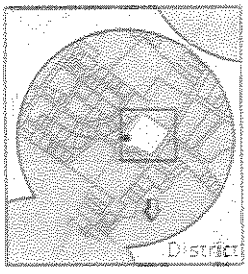
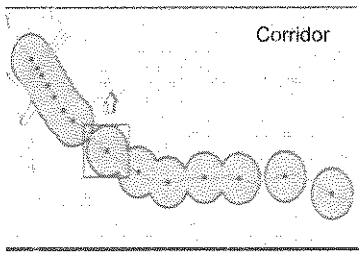
To be eligible for funding, TOD and ICP Projects must meet the requirements detailed below:

(a) **Transit Oriented Development (TOD) Project Areas** demonstrate all of the following:

(1) Meet the criteria of one of the following three eligible TOD Project Area Categories:

(A) TOD Neighborhood
(B) TOD District
(C) TOD Corridor

Table 2
TOD Project Area Categories located within Metropolitan Areas
(Each Category Must Include an Affordable Housing Development)

TOD Neighborhood Area	TOD District Area	Transit Corridor(s) Areas
Focus on projects improving connectivity and accessibility of public transit, active transportation infrastructure and affordable housing and/or mixed-use areas. • Most likely to be located within a predominantly multifamily or moderate-to-high density residential or residential mixed use neighborhood • Projects to improve and promote transit accessibility with improvements to a neighborhood project area with a variety of supportive infrastructure improvements focused on connecting residents and key destinations, including neighborhood schools and neighborhood-scale retail, for example: ✓ active transportation improvements to incentivize walking, rolling, biking ✓ safe and complete street improvements, improving visibility of neighborhood pathways, improvements to transit stations and express bus stops, neighborhood schools and parks, and to transit  	Could consist of similar types of improvements in a TOD Neighborhood of a major Metropolitan Area, but impacting a larger geographic area. • An area with high employment intensity, mixed uses, and either including, or providing accessibility to, areas of high residential density • Improvements supporting a major transit hub or "Major Transit Stop" areas • Would typically include central business districts (CBDs) served by a multi-modal or inter-modal regional transit or mobility hub(s) • Improvements support significant activity nodes within a sub-region or region • Includes "first mile – last mile" improvements to leverage transit access  	Projects focused on improving operation of a transit system relative to activity nodes, improving the capacity to attract and maintain ridership sufficient to achieve and sustain a competitive level of service along a major transit corridor(s), supporting mode shift from SOV. • Projects may include similar types of improvements as in TOD Neighborhood Area or District, but focused on the transit corridor, including operation of transit service • Activity nodes should include high employment intensity, mixed uses, providing accessibility to, areas of high residential density. Priority will be accorded to Major Transit Corridors included in a Corridor System Management Plan (CSMP) which includes provisions for improvement of transit of an inter-city corridor, within a large city, or an inter-regional corridor. Applicable to improving commuter transit. 

(2) Must be no further than one-half (½) mile from a Qualifying Transit Station or bordering a Major Transit Corridor, and may be comprised of more than one contiguous legal parcel.

(3) Be served by at least one (1) Qualifying Transit Station meeting the criteria of a Major Transit Stop with service by at least one of the following modes of Publicly-Sponsored Transit:

(A) High Speed Rail
(B) Commuter Rail
(C) Light Rail
(D) Bus Rapid Transit (BRT)
(E) Express Bus

(4) Be located within an existing transit corridor, or a new transit corridor with a dedicated public right of way and for which funding has already been committed and programmed for the applicable corridor segment, with construction of the transit line underway or scheduled to begin prior to the prospective award date for this project application.

(5) Include at least one (1) or more Affordable Housing Developments in conjunction with at least one (1) other transportation or transit-related infrastructure uses. The Affordable Housing Development may be funded from sources other than the AHSC Program.

(b) **Integrated Connectivity Projects (ICP)** must meet all of the following:

(2) Demonstrate mode shift from SOV use to transit use generating new or significant increase in transit ridership to Key Destinations

(3) Include at least one (1) Transit Station or stop

(4) Be Served by at least one (1) of the following modes of Publicly-Sponsored Transit:

(i) High Speed Rail
(ii) Commuter or Light Rail
(iii) Bus Rapid Transit
(iv) Bus with a qualifying Major Transit Stop
(v) Vanpool/Shuttle

(4) Must be a Project which integrates at least two (2) related Eligible Uses as defined in Section 103(a) and (b). At least one Eligible Use must be an Infrastructure-Related Capital Use (Primary Use).

Section 103. Eligible Uses of Funds and Eligible Costs

Eligible uses of funds may be capital and/or program uses as follows:

Table 3
Eligible Capital Uses
• Housing Developments * • Housing-Related Infrastructure * • Transportation or Transit-Related Infrastructure (includes Active Transportation)* • Green Infrastructure* • Planning Implementation **
Eligible Program Uses
• Active Transportation ** • Transit Ridership ** • Criteria Pollutant Reduction **

** All applications must include at least one of these Primary Capital Uses.*

*** Secondary Capital and Program Uses may be combined with at least one of the identified Primary Capital Uses*

Examples of eligible costs within each category of Capital and Program Uses are identified in Table 5 below. Additional specific criteria related to Eligible Uses are as follows:

(a) Capital Uses

(1) Housing Developments including Housing-Related Infrastructure Capital Uses

(A) Eligible costs include the construction, rehabilitation, demolition, relocation, preservation, acquisition, or other physical improvement.

(B) Eligible costs for Housing Developments are limited to costs for housing development, as specified in 25 CCR Section 7304 (a) and (b).

(C) Program loan and grant funds must be used for reasonable and necessary costs of the Capital Activity. Costs must be reasonable compared to similar capital activities of modest and necessary design.

(D) A Housing Development must:

(i) consist of new construction, Substantial Rehabilitation of residential dwelling units, the conversion of one or more nonresidential structures to residential dwelling units, or preservation of at-risk affordable housing with a total of not less than 100 such units in a Metropolitan Area, or 50 such units in a Non-Metropolitan Area;

(ii) be located within one-half mile (½) from a Qualifying Transit Station, measured from the nearest boarding point of the Qualifying Transit Station to the entrance of the residential structure in the Housing Development furthest from the Transit Station along a walkable route. The walkable route, after completion of the proposed Project, shall be free of negative environmental conditions that deter pedestrian circulation, such as barriers; stretches without sidewalks or walking paths; noisy vehicular tunnels; streets, arterials or highways without regulated crossings that facilitate pedestrian movement; or stretches without lighted streets;

(iii) include at least 20 percent of the total residential units as Restricted Units; and

(iv) have a minimum Net Density, upon completion of the Housing Development, not less than that shown on the following table:

Table 4

Project Location Designation	MINIMUM NET DENSITY REQUIREMENTS	
	Residential only Projects	Mixed-use Project (FAR)
Large City Downtown	60 units per acre	>3.0
Urban Center	40 units per acre	>2.0
All other areas	20 units per acre	>1.5

(E) Housing Developments may:

(i) include residential units that are rental or owner-occupied, or a combination of both;

(ii) consist of scattered sites with different ownership entities, within the boundaries of a discrete Project Area, as long as the sites are developed together as part of a common development scheme adopted, approved or required by a public agency; or

(iii) include nonresidential uses that are compatible.

(F) Eligible costs for Housing-Related Infrastructure uses include:

(i) Capital improvements required by a local governmental entity, transit agency, or special district as a condition to the development of the Housing Development, such as sewer or water system upgrades, streets, construction of drainage basins, parking spaces or structures, bus shelters, utility access, connection or relocation, and noise mitigation;

(ii) Real property acquisition, and associated fees and costs, not including real estate commissions for purchase or acquisition

(iii) Impact fees required by local ordinance are eligible for funding only if used for the identified eligible Capital Activity Project, and the amount does not exceed $200,000

(2) Transportation or Transit-Related Infrastructure Capital Uses may include:

(A) Capital improvements that enhance public transit and/or pedestrian or bicycle access within one-half mile of a Transit Station to one or more housing developments and/or employment centers as identified in Table 5 below.

(B) Impact fees required by local ordinance are eligible for funding only if used for the identified eligible Capital Activity Project, and the amount does not exceed $200,000.

(C) Soft costs such as those incidentally but directly related to construction or acquisition, including, but not limited to, planning, engineering, construction management, architectural, and other design work, environmental impact reports and assessments, required mitigation expenses, appraisals, legal expenses, site acquisitions, and necessary easements.

(D) Costs must be reasonable compared to similar capital activities of modest and necessary design. For example, if the Project includes a pedestrian bridge, tunnel, grade separation or similar feature, the applicant must demonstrate that this feature is cost effective, compared to street-level crossings or other alternatives and considerate of the number of users reasonably expected to use the feature and any documented safety problems that the feature would eliminate.

(E) Activity Delivery Costs that are associated with the implementation of the Capital Uses not to exceed 10 percent of the costs associated with the Capital Use.

(F) Other Capital Use costs required as a condition of local approval for the Capital Use Project, as approved by the Department.

(3) Green Infrastructure

(A) Eligible costs include green infrastructure uses which enhance environmental sustainability of the Project Area as detailed in Table 5 below.

(4) Pre-Development Costs Related to Planning Implementation

(A) Eligible costs include planning-related expenses typically considered "pre-development" costs, or costs associated with improvement or to allow for updates to existing plans.

(b) Program Uses

Program Uses include education, outreach and training programs in the following three Eligible Use categories:

(1) Active Transportation Program Uses

(2) Transit Ridership Program Uses

(3) Pollutant Reduction Program Uses

Eligible costs for Program uses include start-up costs associated with program creation, expansion of existing programs to serve new populations or offer new program service and implementation as detailed in Table 5 below. Eligible Costs do not include ongoing operational costs.

(c) Ineligible costs include all of the following:

(1) Costs are not eligible for funding if there is another feasible, available source of funding for the Capital Use or portion thereof to be funded by the Program or if the cost is incurred prior to Program award.

(2) Parking spaces and structures, except as indicated in Table 5 below.

(3) Costs of site acquisition, grading, foundations and other structural improvements for buildings with parking structures below housing (i.e. podium and below grade).

(4) Projects that eliminate a hazardous condition that was created due to a lack of routine maintenance.

(5) Soft costs related to ineligible costs.

(6) In lieu fees for local inclusionary housing programs.

(7) Ongoing operational cost for Program Uses.

Table 5
Eligible Costs by Eligible Use Category

* All applications must include at least one Primary Infrastructure Related Use	Primary Infrastructure-Related Uses				Secondary Uses			
	Affordable Housing	Housing-Related Infrastructure	Transportation or Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Active Transportation	Transit Ridership	Criteria Pollutant Reduction
Eligible Use of Funds Include, but are not limited to the following:	CAPITAL USES					PROGRAM USES*		
Construction								
Construction, rehabilitation, demolition, relocation, preservation. acquisition or other physical improvement of affordable housing	X							
Site Acquisition related to a Capital Use, including easements and rights of way		X[1]	X	X				
Site Preparation, including required remediation, and demolition		X[1]	X					
Water, sewer, or other utility service improvements and relocation		X[1]	X	X				
Required environmental remediation necessary for the capital activity [2]	X	X[1]	X	X				
Engineering, construction management, architectural and/or design work related to a Capital Use	X	X[1]	X	X				
Drainage basins, storm water detention basins, culverts or similar drainage features. Includes bioswales, and capture/store/infiltration of stormwater		X[1]	X	X				
Parking spaces/structures [3]		X[1]	X					
Relocation costs	X	X[1]	X	X				
Updated infrastructure or project-specific financing analysis					X			
Analysis to update adopted General or Specific/Area Plan, zoning ordinances, etc. which are required to implement a capital project					X			
Implementation of anti-displacement strategies					X			
Complete Streets and Non-Motorized Transportation								
Development and/or improvement of walkways or bikeways that improve mobility, access or safety			X					

Table 5
Eligible Costs by Eligible Use Category

* All applications must include at least one Primary Infrastructure Related Use	Primary Infrastructure-Related Uses				Secondary Uses			
	Affordable Housing	Housing-Related Infrastructure	Transportation or Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Active Transportation	Transit Ridership	Criteria Pollutant Reduction
Eligible Use of Funds Include, but are not limited to the following:	CAPITAL USES				PROGRAM USES*			
Development or improvement of frequent and safe crossing opportunities			X					
Sidewalk or streetscape improvements, including, but not limited to, the reconstruction or resurfacing of sidewalks and streets or the installation of lighting, signage, or other related amenities		X[1]	X					
Street crossing enhancements including installation of accessible pedestrian signals		X[1]	X					
Traffic calming projects including development of curb extensions, roundabouts, median islands, "road diets," lane narrowing projects			X					
Signage and way-finding markers			X					
Installation of traffic control devices to improve safety of pedestrians and bicyclists		X[1]						
Street furniture including benches, shade structures, etc.			X					
Bicycle repair kiosks			X					
Bicycle lanes and paths			X					
Secure bicycle storage or parking			X					
Bicycle carrying structures on public transit			X					
Transit and Station Areas								
Development of special or dedicated bus lanes			X					
Development and/or improvement of transit facilities or stations		X[1]	X					
Necessary relocation of transportation related infrastructure or utilities			X					
Capital purchases of transit related equipment which will increase transit service and/or reliability			X					
Transit Signal Priority technology systems			X					
Real-time arrival/departure information systems			X					

Table 5
Eligible Costs by Eligible Use Category

* All applications must include at least one Primary Infrastructure Related Use	Primary Infrastructure-Related Uses				Secondary Uses			
	Affordable Housing	Housing-Related Infrastructure	Transportation or Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Active Transportation	Transit Ridership	Criteria Pollutant Reduction
Eligible Use of Funds Include, but are not limited to the following:	CAPITAL USES				PROGRAM USES*			
Installation of at-grade boarding infrastructure			X					
Development or improvement of bus and transit shelters or waiting areas		X[1]	X					
Add or improve lighting of station area and pedestrian walkways and bicycle access and storage areas			X					
Transit ticket machine purchase or improvements			X					
Transit passenger amenities - e.g. WiFi access			X					
Station area signage			X					
Noise mitigation projects		X[1]	X					
Removal of access barriers to transit stations			X					
Safety related intersection improvements		X[1]	X					
Required replacement of transit station parking spaces [2]			X					
Facilities that support pedestrian and bicycle transit		X[1]	X					
Urban Greening and Conservation								
Tree Canopy or shade trees along walkable and/or bikeable corridors		X[1]	X	X				
Heat island mitigation measures (e.g. vegetated roofs)	X		X	X				
Community demonstration or outdoor education gardens or orchards				X				
Creation, development or rehabilitation of parks and open space		X[1]		X				
Flow and filtration systems including rain gardens, vegetated swales, bioretention basins, infiltration trenches and integration with riparian buffers		X	X	X				
Rainwater recycling devices including rain barrels and cisterns		X	X	X				
Stormwater planters and filters		X	X	X				

Table 5 Eligible Costs by Eligible Use Category									
* All applications must include at least one Primary Infrastructure Related Use	Primary Infrastructure-Related Uses				Secondary Uses				
	Affordable Housing	Housing-Related Infrastructure	Transportation or Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Active Transportation	Transit Ridership	Criteria Pollutant Reduction	
Eligible Use of Funds Include, but are not limited to the following:	CAPITAL USES					PROGRAM USES*			
Site preparation strategies including soil amendments and permeable surfaces		X	X	X					
Programs									
Pedestrian and bicycle safety education programs						X			
Development and publishing of community walking and biking maps, include school route/travel plans						X			
Development and implementation of "walking School Bus" or "bike train" programs						X			
School crossing guard training programs						X			
Bicycle clinics						X			
Public outreach efforts to increase awareness and understand the needs of active transportation users						X			
Bike sharing programs						X			
Transit subsidy programs							X		
Education and marketing of transit subsidy programs							X		
Transportation Demand Management (TDM) programs							X		
Outreach and marketing of Consolidated Transportation Service Agency (CTSA) programs							X		
E-Mobility programs which include the expansion or development of internet based applications that allow customers, clients and/or the public to conduct transactions online, circumventing vehicle travel								X	

[1] *Where the cost of the remediation does not exceed 50 percent of requested Program grant funds.*

[2] *Must be required by a local governmental entity, transit agency or special district as a condition to the approval of a development of an affordable housing development.*

[3] *Only the minimum residential per unit parking spaces in parking structures as required by local land-use approval, not to exceed one parking space per residential unit and not to exceed $40,000 per permitted space.*

Section 104. Assistance Terms and Limits

(a) The maximum Program loan or grant award, or combination thereof, for a TOD project is $15 million with a minimum award of at least $ 1 million.

(b) The maximum Program award for an ICP project is $8 million with a minimum award of at least $500,000.

(c) The maximum Program award(s) within the geographic boundary of a Locality is limited to $15 million per NOFA funding cycle. A single Project Area cannot receive more than one award. A single developer may receive no more than $15 million per NOFA funding cycle.

(d) Loans for rental Housing Developments, or the rental portions of a Housing Development, are subject to the following terms:

(1) Program funds will be provided as a loan for permanent financing by the Department to the owner of the Housing Development, with the same terms as MHP financing as set forth in 25 CCR 7308.

(2) The maximum loan amount shall be calculated pursuant to 25 CCR Section 7307 based on the number of Restricted Units in the Housing Development, affordability, unit sizes, location, and on the base amount for loan calculation as specified in the Program NOFA.

(e) For homeownership Housing Developments, Program assistance will be provided in the form of a grant from the Department to a Locality, to be used to provide a loan from the Locality to a qualified first-time homebuyer in an identified homeownership Housing Development, in accordance with the provisions of the BEGIN program as set forth in the BEGIN Guidelines issued by the Department, as amended April 21, 2009, except for the requirements for regulatory relief, set forth in Section 106 of those guidelines, and the application selection criteria set forth in Section 119.

(f) Grants shall be subject to the following terms:

(1) The total housing-related infrastructure grant amount is $35,000 per residential unit in the proposed Housing Development, and $50,000 per Restricted Unit.

(2) The total grant amount for Program Uses within a Project Area shall not exceed 10 percent of the funding request for the overall Project.

(3) The applicant must demonstrate that the grant does not result in a profit that exceeds the commercially reasonable range for other developments of similar size and level of risk. The applicant must show that Program funds are

reasonably necessary for Project feasibility and no other source of compatible funding is reasonably available.

(4) Conditions precedent to the first disbursement of Program funds shall include receipt of all required public agency entitlements and all funding commitments for the Housing Development supported by the infrastructure. If the Housing Development includes multiple phases or developments, all entitlements and funding commitments for the first phase must be received.

(5) Funds will be disbursed as progress payments for eligible costs incurred after the Program award of funds.

(6) Rental Housing Developments supported by the Infrastructure Project shall be subject to a recorded covenant ensuring affordability for duration of at least 55 years. Homeownership Housing Developments supported by the Infrastructure Project shall be subject to a recorded covenant with a duration of at least 30 years that includes either a resale restriction or equity sharing upon resale.

(7) Where the Housing Development is receiving low income housing tax credits, the Public Agency may provide Program grant funds to the Developer of the Housing Development in the form of a zero (0) percent, deferred payment loan, with a term of at least 55 years. The loan may be secured by a deed of trust which may be recorded with the local county recorder's office. Provided, however, the beneficiary of the loan shall not under any circumstances exercise any remedy, including, without limitation, foreclosure, under the deed of trust without the prior written consent of the Department, in its sole and absolute discretion. The loan may not be sold, assigned, assumed, conveyed or transferred to any third party without prior written Department approval in its sole and absolute discretion.

(8) For Projects assisted by other Department funding programs, repayment of the loan between the Public Agency and the developer shall be limited to (1) no repayments to the Public Agency until the maturity date or (2) repayment only from "distributions" from the project within the meaning of Title 25, California Code of Regulations Section 8301(h). The Public Agency shall be responsible for all aspects of establishing and servicing the loan. The provisions governing the loan shall be entirely consistent with these Guidelines and all documents required by the Department with respect to the use and disbursement of Program funds. All documents governing the loan between the Public Agency and the developer borrower shall contain all the terms and conditions set forth in this subdivision and shall be subject to the review and approval of the Department prior to making the loan.

(g) The total transportation or transit-related and/or green infrastructure grant amount shall not exceed fifty (50) percent of the total Capital Use Project budget.

Article III. Application Procedures

Section 105. Eligible Applicants and Application Process

(a) Eligible Applicants

(1) Applicants considered eligible for funding under the Program are as follows:

(A) A Public Agency that has jurisdiction over the Project Area is a required applicant, either by itself or jointly with any of the following entities as co-applicant(s): joint powers authority, where the authority encompasses the activities necessary to comply with the requirements of the Program, public housing authority, transit agency and/or operator, school district, facilities district, or any other special district or political subdivision of the State of California, corporation, limited liability company, limited partnership, general partnership, business trust, or joint venture. If awarded funds, all joint applicants for the Project will be considered Co-Recipients and be held jointly and severely liable for the completion of the Project.

(2) Applicant entities for Capital Use projects shall be a Public Agency and may also include a Developer.

(3) Applicant entities for Program Uses shall be a Public Agency and may also include a Program Operator.

(b) Application Process

(1) Pursuant to direction of the Council, the Department shall offer funds through a Notice of Funding Availability (NOFA) in accordance with the procedures for the Department's Multifamily Housing Program (MHP) set forth in 25 CCR 7317 and applications will be reviewed based on the steps detailed below in (2) through (11) and illustrated in Chart 1.

(2) Applications shall be made on forms made available by the Department.

(3) All Applicants must submit a required concept proposal. The concept proposal form is available for online submittal at the following website: ADD WEBLINK ONCE AVAILABLE. The intent of the concept proposal process is three-fold: 1) coordinate with MPOs on SCS implementation, 2) focus expenditures of local resources on the most competitive applications given limited Program funding, and 3) provide targeted technical assistance to potential applicants, with a priority to Disadvantaged Community applicants.

(4) Concept Proposals will be reviewed to assess eligibility based on select Program elements (see Chart 1) to determine whether applicant will be invited to submit a full application. (An invitation to apply does not guarantee project will compete successfully for funding.)

(5) Applicants will be notified whether or not they are invited to participate and submit a full application.

(6) For those applicants which have been invited to submit a full application package, a complete application must be submitted to the Department by the deadline detailed in the NOFA.

(7) The Department shall evaluate applications for compliance with the threshold requirements listed in Section 106, and score them based on the application selection criteria listed in Section 107.

(8) Based upon the evaluation of applications as detailed in (7) above, highest scoring applications may receive site visits from AHSC review committee team members and representatives of SGC member agencies.

(9) The highest scoring applications that meet all threshold requirements shall be recommended to the Council for funding as specified in the NOFA, except that the Council may make adjustments in this procedure to meet the following distribution objectives of each NOFA release:

(A) At least fifty (50) percent of program expenditure for projects benefitting disadvantaged communities (Refer to Appendix B for additional information).

(B) At least fifty (50) percent of the annual proceeds appropriated for the AHSC Program shall be expended for affordable housing, consistent with the provisions of that program.[1]

(C) No less than forty (40) percent of funds available as designated in the NOFA will be allocated to TOD Project Area applications.

(D) No less than thirty (30) percent of funds available as designated in the NOFA will be allocated to ICP applications.

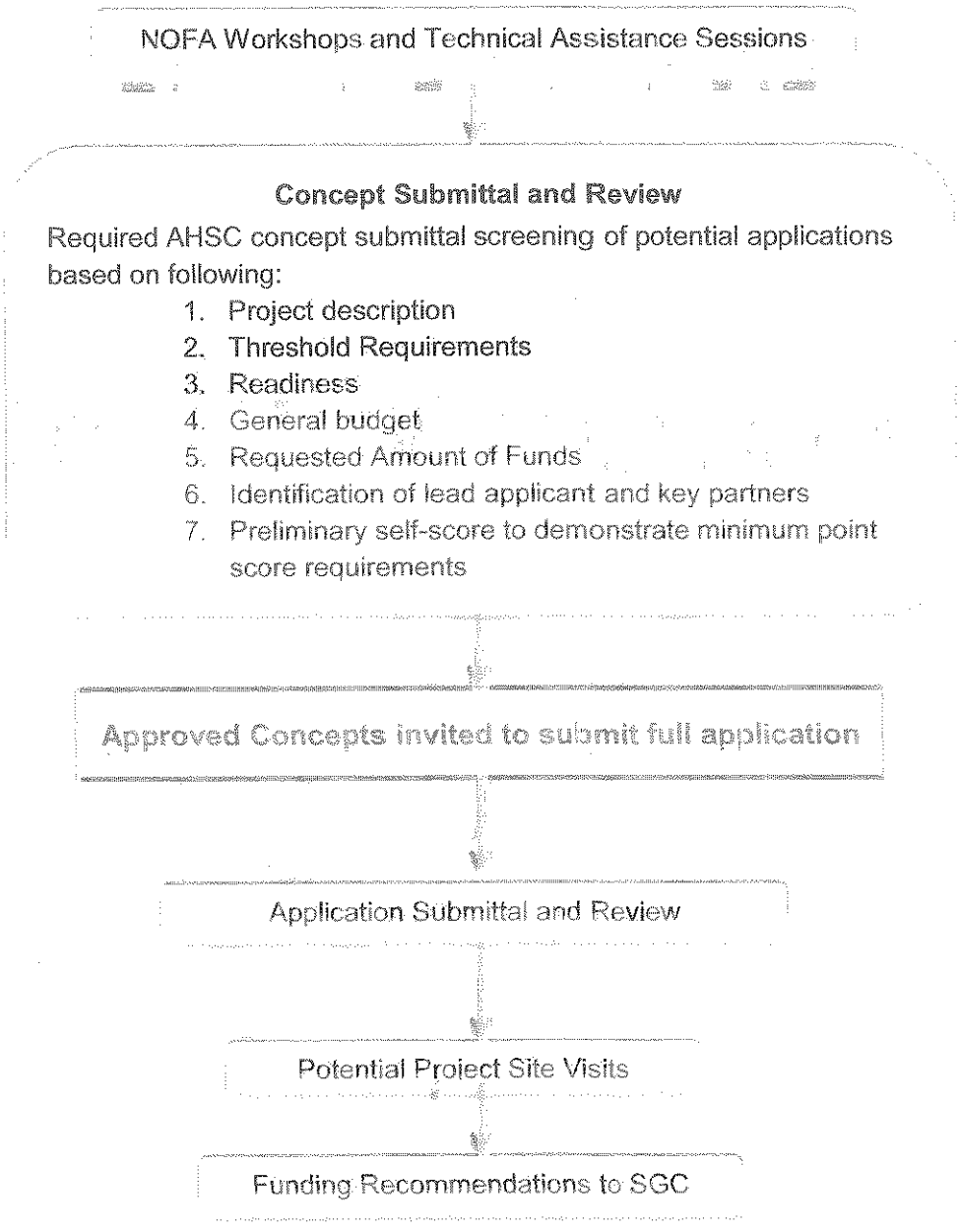
(E) The Council may make adjustments in this procedure in order to more equitably target and distribute investments across California

[1] The requirements detailed in Section 106(b)(9) subsections (A) and (B) are not mutually exclusive.

(10) The Department may elect to not evaluate compliance with some or all threshold requirements for applications that are not within a fundable range, as indicated by a preliminary point scoring. In the event of two or more applications having the same rating and ranking scores, the Department will apply a tie breaking criteria outlined in the NOFA.

(11) Applications selected for funding by the Council shall be approved subject to conditions specified by the Department.

Chart 1
TENTATIVE
AHSC Program Application Submittal Process *



* Previously announced application deadlines and award timeframes are subject to change

Note: The Council is soliciting input and advice from MPOs and other regional agencies and developing a framework for thorough, meaningful consultation with these institutions throughout project proposal evaluation. It is expected that these institutions will provide insight and recommendations to support effective implementation of the Program.

Section 106. Application Threshold Requirements

(a) Application Threshold Requirements

To be eligible for Program funding, an application shall demonstrate to the Department all of the following:

(1) It will achieve a reduction in greenhouse gas emissions through fewer vehicle miles travelled, including mode shift from SOV, pursuant to ARB requirements (PENDING ADDITIONAL INFORMATION FROM ARB).

(2) The proposed Project must be consistent with a plan or strategy contained in a regional Sustainable Communities Strategy (SCS), as confirmed by the MPO, or similar sustainable planning document in non-MPO regions, as allowed by SB 862. The application must be consistent with activities or strategies identified in the regional SCS, or similar planning document, that demonstrate a per capita reduction in VMT and greenhouse gas emissions through travel modeling consistent with California Transportation Commission Regional Transportation Plan Guidelines.

(3) It is consistent with the State planning priorities established pursuant to Section 65041.1 of the Government Code.

(4) The applicant must be eligible pursuant to Section 105.

(5) All proposed uses of Program funds must be eligible pursuant to Sections 102-104.

(6) The application must be sufficiently complete to assess the feasibility of the proposed project and its compliance with Program and application requirements. The applicant must demonstrate that the Project to be developed in the Project Area, as proposed in the application, is financially feasible as evidenced by documentation such as, but not limited to, a market study, project pro-forma, sources and uses statement, or other feasibility documentation that is standard industry practice for the type of proposed housing development. A market study that meets the requirements specified in TCAC Regulations Section 10322(h)(10) will be accepted by the Department.

(7) The Project or Program Use(s) is infeasible without Program funds, and otherwise available or committed funds are not being supplanted by Program funds.

(8) The applicant or developer of the Project must have site control sufficient to ensure the timely commencement of the Project as determined by the Department.

(9) Construction of the Project has not commenced as of the deadline for submittal for the application set forth in the NOFA.

(10) The application must receive the minimum point scores for those application selection criteria requiring minimum scores and the overall application total score shall not be less than XX points for TOD Project Areas and XX for ICP applications.

(11) Applications requesting Program funding for **Housing Developments and Housing-Related Infrastructure Capital Uses** must also demonstrate to the satisfaction of the Department all of the following:

(A) The Project must be defined by the applicant and be contained within the contiguous boundaries of the Project Area.

(B) Rental Housing Developments must meet the underwriting standards in the Uniform Multifamily Regulations, 25 CCR 8308 through 8312. However, the Department may use alternative underwriting standards for Housing Developments receiving 9% tax credits or that have more than twenty (20) percent market-rate, unrestricted units or more than 100 total units.

(C) Owner-occupied Housing Developments must meet the requirements of the BEGIN Program, except for the following:

(i) The requirements for regulatory relief specified in the BEGIN Program Guidelines, including those in Section 106 of these guidelines.
(ii) The requirements of Section 119 of the BEGIN Program Guidelines, on application selection criteria.

(D) If the application involves the demolition or rehabilitation of existing units affordable to lower income households, the Housing Development must include units with equal or greater affordability, equal to or greater than the number of the existing affordable units, except in cases where the rehabilitated units provide amenities such as bathrooms and kitchens not present in existing units in which case, the reduction may not result in more than twenty five (25) percent fewer units upon project completion.

(E) Completion of all necessary environmental clearances including those required under the California Environmental Quality Act and if applicable, the National Environmental Policy Act, and all applicable time periods for filing appeals or lawsuits have lapsed.

(F) Applications must demonstrate that all necessary discretionary local land use approvals, excluding design review have been granted.

(12) Applications requesting program funding for **Infrastructure Capital Uses** that are not housing-related (includes both Transportation or Transit-Related Infrastructure and/or Green Infrastructure Eligible Uses) must also demonstrate to the satisfaction of the Department that the project will satisfy all of the following:

(A) The Project must be defined by the applicant and be contained within the contiguous boundaries of the Project Area.

(B) Where approval by a local public works department, or other responsible local agency, is required for the Project, the application must include a statement from that department indicating that the Infrastructure Project is consistent with all applicable local rules, regulations, codes, policies and plans enforced or implemented by that department.

(C) Completion of all necessary environmental clearances including those required under the California Environmental Quality Act and if applicable, the National Environmental Policy Act, and all applicable time periods for filing appeals or lawsuits have lapsed.

(D) Applications must demonstrate that all necessary discretionary local land use approvals, excluding design review have been granted.

(13) Applications requesting Program funding for **Program Uses** must also demonstrate to the satisfaction of the Department that the application meets the following minimum point scores in the application selection criteria in Section 107:

(A) Readiness - XX Points
(B) Qualifications, Experience and Past Performance - XX Points
(C) Need and Benefit of Program Activities - XX Points
(D) Leveraging of Program Activities - XX Points

(b) Disadvantaged Community Threshold Requirements

If requesting Program Funds to meet the requirements of Section 105(b)(9)(A) to benefit a Disadvantaged Community, the Applicant must evaluate the following criteria detailed in Table 6 below to demonstrate how the Project provides benefit to a Disadvantaged Community or Communities pursuant to Interim Guidance approved and revised pursuant to ARB on September 18, 2014. Table 6 below is subject to revision to be available by September 30, 2014.

Table 6 AHSC Program Disadvantaged Community Threshold Requirements
Located Within: Evaluate the project to see if it meets at least one of the following criteria for being located in a DAC census tract* and provides direct, meaningful and assured benefit to a DAC.
Project must meet the following criteria focused on reducing passenger vehicle miles travelled by DAC residents or in a DAC: • A majority (50%+) of the project is within one or more DACs and reduces vehicle miles travelled, and the project is designed to avoid displacement of DAC residents and businesses.
Provides Benefits To: If the project does not meet the above criteria for "located within," evaluate the project to see if it meets at least one of the following criteria for providing direct, meaningful and assured benefit to a DAC.
Project must meet at least one of the following criteria focused on reducing passenger vehicle miles travelled by DAC residents or in a DAC: • Project is accessible by walking within ½ mile of a DAC and reduces vehicles miles travelled, and is designed to avoid displacement of DAC residents and businesses, or • Project includes recruitment, agreements, policies or other approaches that are consistent with federal and state law and result in at least 25 percent of project work hours performed by residents of a DAC, or • Project includes recruitment, agreements, policies or other approaches that are consistent with federal and state law and result in at least 10 percent of project work hours performed by residents of a DAC participating in job training programs which lead to industry-recognized credentials or certifications.

**For maps of DAC census tracts, refer to http://oehha.ca.gov/ej/ces2.html*

If the Eligible Capital and/or Program Uses are determined to provide benefit to Disadvantaged Community, pursuant to the criteria above, the application must demonstrate, based on ARB's guidance, how the Program funds will provide benefit to a Disadvantaged Community.

Section 107. Application Selection Criteria

Scoring Philosophy and Process

Funds will be allocated through a competitive process, based on the merits of the proposal to support sustainable development that expands and improves transit and provides opportunities to reduce or maintain SOV usage by supporting connectivity between housing, jobs and Key Destinations to bring about reduction of greenhouse gas emissions. While the application selection criteria includes project readiness, underwriting requirements for loans and documentation of the need for grants, points will be assigned based upon the demonstration of reduction of auto trips, energy use and carbon sequestration (pending guidance from ARB) and climate resilience, health and public safety, economic and environmental co-benefits.

The scoring criteria will apply to each proposal, and scoring of the criteria will be reviewed based upon the following three elements, each with specific criteria relative to the proposed eligible use of funds:

1. Feasibility and Readiness
2. Connectivity and Improved Access
3. Community Orientation

Applications meeting all threshold requirements as detailed in Section 106 will be reviewed and scored based upon the criteria detailed below. A total of 16 scoring criteria have been identified, however, not all criteria will apply to each application. Only those criteria which are applicable to the application based use(s) of funds outlined in Table 7 (page 53) will be scored. For example, a TOD Neighborhood application requesting funds for an affordable Housing Development and transportation-related infrastructure use (i.e. new sidewalks and street furniture) would be scored on all criteria identified in the appropriate columns in Table 7. Applications will be scored on the applicable criteria based upon the strength of the entire proposal for the Project Area, including those elements funded by other sources but which are applicable to connectivity between key destinations with particular emphasis on improving access to affordable housing opportunities.

TOD and ICP applications will compete separately. Therefore, TOD Project Area applications will compete only against other TOD Project Area applications and ICP applications will compete only against other ICP applications. The maximum number of points will vary based upon the application submitted (see Table 7). As a result, scoring will be calculated based upon the percentage of maximum eligible points an application received, i.e. if 340 points are possible and an application receives 327 points, that application's final score would be 96.1 percent. Competitive ranking of the application shall be based, in part, on the magnitude of greenhouse gas emission reductions relative to scale and cost of the project. Total GHG emissions reductions shall be calculated by the applicant, using quantification guidance provided by ARB.

Chart 3 (page 32) outlines the application review and scoring process. The following chart shows the approximate weight of the three scoring elements and the criteria which will be evaluated, as applicable, within each of the three elements.

Chart 2
AHSC Scoring Elements and Criteria

Feasibility and Readiness – 35 to 40% of total score

- Readiness of the Housing Development
- Readiness of Non-Housing Infrastructure Project(s)
- Program Readiness, Capacity, Need and Leverage
- Leverage of Other Funds and Prior Planning Efforts

Refer to Table 7 (page 53) for applicable criteria within each Scoring Element by Eligible Use Type

Connectivity and Improved Access – 40 to 45% of total score

- Accessibility to Qualified Employment Areas
- Proximity of Transit Supportive Land Uses
- Extent to which the Project increases public transit ridership and/or reduces vehicle miles travelled
- Parking/Transit Passes/Car Sharing/Electric Vehicle Charging Stations
- Walkable Corridors
- Bicycle Features
- Community Greening and Natural Resource Conservation

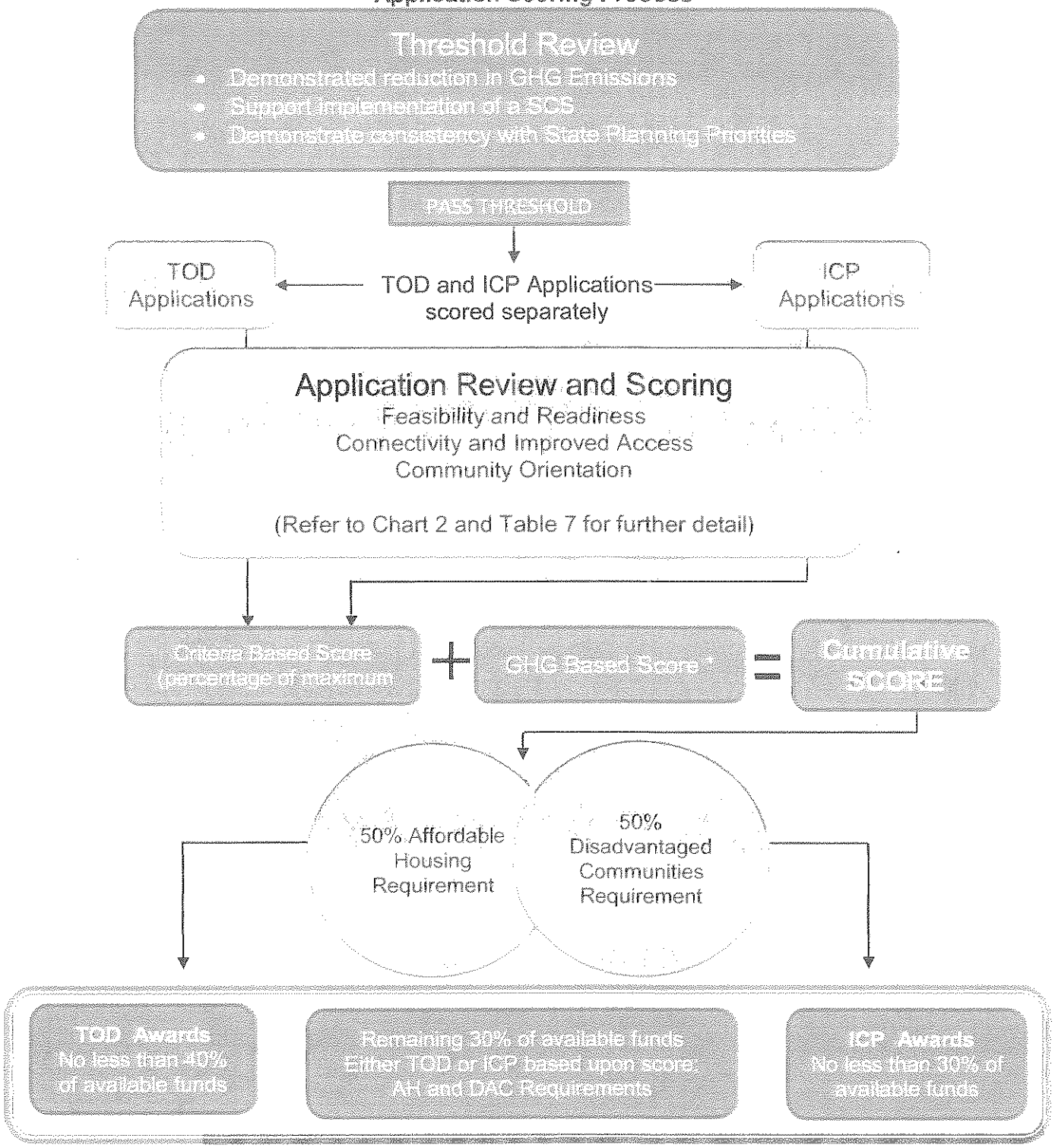
Community Orientation – 15 to 20% of total score

- Extent to which the Housing Development serves lower- and moderate-income households
- Location Affordability Index
- Anti-Displacement Strategies
- Extent to which the Project addresses Co-Benefits
- Community Engagement

Please note, the draft document does not include point values for criteria at this time. Further detail on each of the criteria is included in the following pages. The chart at the beginning of each section (see example below) indicates the applicable Eligible Uses which will be subject to scoring for each criterion (see Table 7 for a complete listing).

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs

Chart 3
Application Scoring Process



*Metrics and Scoring Method to be determined – Pending ARB Guidance

Points within each applicable criteria will be assigned based on the following:

(a) Extent to which the Project will achieve GHG Emissions Reduction (measured in metric tons) – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X	X	X

<< PENDING GUIDANCE FROM ARB>>

(b) Readiness of Housing Development - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X				

Points will be awarded for each of the following at the level indicated:

(1) XX Points for obtaining enforceable funding commitments for all construction period funding for the Housing Development excluding funding provided by another Department program, provided that this funding is awarded prior to or simultaneously with the final rating and ranking of the Program application, tax credit equity, and tax-exempt bonds. A land donation in fee for no other consideration that is supported by an appraisal or purchase/sale agreement ("Land Donation") or a local fee waiver resulting in quantifiable cost savings for the Project where those fees are not otherwise required by federal or state law ("Local Fee Waiver") may be considered a funding commitment. The value of the Land Donation will be the greater of either the original purchase price or the current appraised value as supported by an independent third party appraisal prepared by a MAI-qualified appraiser within one year of the application deadline. A funding commitment in the form of a Local Fee Waiver must be supported by written documentation from the local public agency.

(2) XX Points for Applicants demonstrating any one of the following:

(A) The developer or developers of the Housing Development have fee title ownership of the site, or a long-term leasehold meeting the requirements of Section 8303(b) of the Uniform Multifamily Regulations.

(B) Local design review approval has been obtained, or is not required.

(C) All deferred payment grants and subsidies, in accordance with TCAC requirements, and with the same exceptions as allowed by TCAC, have been committed.

(c) Readiness of non-housing related infrastructure projects – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
		X	X		

(1) XX Points will be awarded for Transportation/Transit-Related and/or Green Infrastructure Projects obtaining enforceable funding commitments for all construction period funding. A land donation in fee for no other consideration that is supported by an appraisal or purchase/sale agreement ("Land Donation") or a local fee waiver resulting in quantifiable cost savings for the Project where those fees are not otherwise required by federal or state law ("Local Fee Waiver") may be considered a funding commitment. The value of the Land Donation will be the greater of either the original purchase price or the current appraised value as supported by an independent third party appraisal prepared by a MAI-qualified appraiser within one year of the application deadline. A funding commitment in the form of a Local Fee Waiver must be supported by written documentation from the local public agency.

(2) XX Points for Applicants demonstrating any one of the following:

(A) The eligible applicant or developer has site control pursuant to Section 8303(b) of the Uniform Multifamily Regulations; or

(B) Right-of-way acquisition/rights have been obtained;

(C) Preparation of plans, specifications and estimates has been completed.

(d) Program readiness, capacity, need and leverage - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
					X

(1) Program Readiness:

(A) XX points will be awarded for a program description and structure for implementation (i.e. staffing needs, administrative structure, program objective(s) and deliverables/outcomes).

(B) XX points will be awarded to Program Operators that can demonstrate site control of the program operation facility and/or office space.

(C) XX points will be awarded for the demonstration of executed memoranda of understanding with key partners necessary to achieve program outcomes.

(2) Capacity/Experience/Past Performance for Program(s):

(A) XX points will be awarded for having sufficient Program Operator staff as demonstrated by an organization chart and program operations flow chart

(B) XX points will be awarded for Program Operator Qualifications demonstrating 3 or more years of experience operating these types of programs.

(C) XX points will be awarded for Program Operators who can demonstrate administrative responsibility operating the same type of program for at least 5 consecutive years

(3) Need and Benefit of Program Activities:

XX points will be awarded for programs demonstrating the extent to which services are addressing the needs and benefits of those to be served by the program activity as identified and documented by a Public Agency.

(4) Leveraging for Program Activities

Applications will receive points based on the percentage of Program funds supporting the overall program operating budget, demonstrating the extent to which other funds are leveraged for the proposed Program Uses

XX points for < 30%
XX points for 30%-50%
XX points for > 50%

(e) Leveraging of Other Funds and Prior Planning Efforts – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X		*

Sub-section (4) - Prior Planning Efforts Only

(1) Project Funds Leveraged

Applications will be scored based on the amount of permanent development funding commitments from sources other than the Program, as a percentage of the requested amount of Program funds. For each full 10-percent increment above 100 percent, 0.75 points will be awarded. For example, an application where other funds equal 140 percent of Program funds will receive 3 points, and a Project where other funds equal 300 percent of program funds will receive the maximum XX points.

In calculating the amount of other funds:

(A) Funds used for the Project will be counted.
(B) Deferred developer fees will not be counted as a source.
(C) Land Donations will be counted and the value of the Land
(D) Donation will be the greater of either the original purchase price or the current appraised value supported by an independent third party appraisal prepared by an MAI-qualified appraiser within one year of the application deadline.
(E) Local Fee Waivers will be counted so long as it is supported by written documentation from the local public agency.

(2) Project Area Public / Private Investment

In addition to (1) above, TOD and ICP Projects will also be scored based on the following:

(A) XX points will be awarded to all TOD Project Area and those ICP applications including Housing Developments where there is coordinated public and private investment in amounts sufficient to transform the area

into a transit-oriented community, as evidenced by both of the following occurring within a half-mile radius of the Qualifying Transit Station:

i. Expenditures or commitments of public and/or private funds during the ten years preceding the application due date on transit-oriented infrastructure or housing in the amount of at least $5 million; and

ii. The construction during the ten years preceding the application due date of privately owned transit supportive uses with a gross floor area of at least 50,000 square feet (including developments under construction).

(B) XX points will be awarded to ICP Projects (without housing) where the applicant demonstrates proposed Capital Use Project will further the implementation action of a publicly identified need for which there has been public and/or private investment of at least $100,000 in the last 5 years.

(3) Leverage of Other GGRF Programs

Many of the GGRF programs support common and interrelated goals. XX points will be provided to applications which demonstrate leverage other GGRF programs that support or complement their AHSC proposal. A list of other GGRF programs, with eligible uses of program funds, is included as Appendix D.

(4) Leverage of Prior Planning Efforts

Points will be awarded to Projects which implement a policy or program of any the following applicable adopted plans as detailed below:

- Local General Plan (e.g. program or policy of the circulation element or site identified in the site inventory of an adopted housing element) - XX Points
- Specific Plan - XX Points
- Community Plan - XX Points
- Redevelopment Plan - XX Points
- Bicycle/Pedestrian Master Plan - XX Points
- Transit Corridor Plan - XX Points
- Station Area Plan - XX Points
- Corridor System Management Plan - XX Points
- Transit Village Plan - XX Points
- Regional Greenprint Plans - XX Points
- Disadvantaged Community Assessment (GC Section 65302) – XX Points

Evidence of implementation of the above plans must be demonstrated by providing relevant sections of the applicable plan or a letter or resolution executed by an officer or an equivalent representative, from the appropriate governing body. Examples of implementation may include an applicable zoning ordinance, development regulations or program.

(f) Accessibility of Qualified Employment Areas - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

Points will be awarded based on the number of employees determined to be in a Qualified Employment Area* that is within a half-mile radius of a Destination Transit Station which is located no more than 30 minutes** from the Qualifying Transit Station that serves the Housing Development, or from another Transit Station not serving a specific Housing Development, via public transit and involves no more than one transfer point:

TOD Project Area Applications		
DENSITY DESIGNATION	NUMBER OF EMPLOYEES	POINTS
Low	2,500-9,999	XX
Medium	10,000-24,999	XX
High	>25,000	XX

ICP Applications		
DENSITY DESIGNATION	NUMBER OF EMPLOYEES	POINTS
Low	Minimum of 200 - 500	XX
Medium	500 - 1500	XX
High	Greater than 1500	XX

**A Qualified Employment Area is determined by utilizing the instructions provided for the mapping and reporting data accessible through the following link: http://onthemap.ces.census.gov/*

***The transit time for accessibility to the Qualified Employment Area from the Qualifying Transit Station or from another Transit Station not serving a specific Housing Development to the Destination Transit Station must be demonstrated with the transit agency's schedule of regular service.*

(g) Proximity to Transit Supportive Land Uses - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

Points will be awarded based on the existing and planned land uses in the TOD Project area or in proximity to the Housing Development funded with Program Funds in a qualifying ICP application.

The following transit-supportive amenities, services and uses within a half-mile of the Qualifying Transit Station should be identified and listed in the application. The term "within half-mile of the Qualifying Transit Station or Transit Station" means that any part of the physical structure or portion of a structure occupied by the use is located within a half-mile of the nearest boundary of the Qualifying Transit Station. The term "amenities, services and uses" includes uses projected for improvements that are either under construction or included as part of the Project.

(1) Applications may identify up to ten (10) different types of transit-supportive amenities based on the following:

(A) XX points for uses in Category 1
(B) XX points for uses in Category 2
(C) XX points for uses in Category 3

At a minimum, applications must include at least 3 uses are identified in Category 1 below.

Transit-Supportive Amenities and Services	
Category 1	
Bank /Credit union	Police / fire station
Licensed child care facility (each such facility will count as two amenities)	Health club, sport court, or active outdoor recreation facility
Grocery Store / Supermarket	Senior care facility
School	Medical /hospital/dental office/healthcare provider
Library	
Category 2	
Hardware store	Bicycle Shop
Park or playground	Community/civic center
Convenience store	Shoe Repair shop
Restaurant	Social service facility
Drugstore/Pharmacy	Farmers Market
Category 3	
Laundry / dry cleaner	Salon/Barber/Hair care
Place of worship	Postal Mailing & Shipping Center
Theater	Delicatessen or bakery
Restaurant/Coffee shop/café	*Other amenities or services that may be approved by the Department

(h) Extent to which the Project will increase public transit ridership and reduce vehicle miles travelled – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

(1) A maximum of XX points shall be assigned to applications which involve implementation of an adopted Transportation Demand Management (TDM) Strategy, Plan or agreement which is managed by a public agency or a public-private partnership. The application must include a copy of the executed TDM Plan or Agreement and its specific applicability to the Project.

(2) A maximum of XX points shall be assigned to TOD Project Area applications in which the best performing mode of transit serving the Qualifying Transit Station has peak period headway frequency of fifteen (15) minutes or less. Scoring for applications which include rail, bus or ferry modes of transit will be determined by the best performing primary mode of transit demonstrating all day, on-time arrival/departure performance as set forth below:

Points	Rail	Bus/ Ferry
XX	≥95%	≥90%
XX	90-94.99%	85-89.99%
XX	85-89.99%	80-84.99%
XX	<85%	<80%

Peak period means the time between 7 a.m. to 10 a.m., inclusive, and 3 p.m. to 7 p.m., inclusive, Monday through Friday or the alternative peak period designated for the transportation corridor by the transit agency.

(3) A maximum of XX points shall be assigned to ICP applications which include employer-sponsored or other shuttle/vanpool modes of transit to a Transit Station according to the criteria below:

Points	Vanpool/Shuttle Performance Measure	Proposed Service Standard
Efficiency and Effectiveness Measures		
XX	Boarding Passengers/ Revenue Hour	Feeder Transit System: 10 passengers/hour Vanpools: 8 passengers/hour
XX	Passengers per Mile	Feeder Transit System: 0.7 passengers/mile Vanpools: 0.6 passengers/mile
Quality and Reliability Measures		
XX	On-Time Performance	Feeder Transit System: 90% on-time performance for all services Vanpools: Should always depart on-time; notice should be provided to riders in unusual weather circumstances
XX	Accidents/ Vehicle Miles Operated	Feeder Transit System: Fewer than 2 accidents/100,000 revenue miles Fewer than 1 preventable accident/100,000 revenue miles Fewer than 1.5 major accidents per million bus miles Vanpool: Fewer than 1 accident/500,000 miles
XX	Maintenance	Feeder Transit System: At least 85% of regular fleet vehicles should be available for operations at all times. The ratio of spare vehicles to regular fleet vehicles should be less than 20% 95% of vehicle inspections shall be completed on time Vanpool: Vehicles should be operable at all times; an inoperable vehicle will be replaced immediately by the vanpool provider Vanpool providers should be able to secure a spare vehicle within one business day

(4) XX points will be assigned to applications where electronic user information services provide information on schedules and real-time predicted arrival times at the transit stop, Housing Development, area businesses or through wireless device access for the best performing primary mode of transit serving the Qualifying Transit Station.

(5) A maximum of XX points will be assigned based on the primary mode of transit serving the Qualifying Transit Station and the population density of the area within a four mile radius of the Qualifying Transit Station, in accordance with the following table. Population density shall be calculated based on the most recent available census data, as more specifically described in the Program application and in the instructions posted on the Department's website.

Density Range (population per square mile of land area)										
Transit Mode	0 – 1,000	1001 - 2,000	2,001 - 3,000	3,001 - 4,000	4,001 – 5,000	5,001 – 6,000	6,001 – 8,000	8,001 – 10,000	10,000 – 13,000	13,001+
Commuter Rail (BART, METRO Red Line)	29	31	33	37	41	44	48	50	53	55
Light Rail/ Bus Rapid Transit	21	22	23	27	31	35	38	42	46	50
Rapid Bus / Express Bus	20	20	20	22	24	26	28	30	33	36
Commuter Rail (High Speed Rail, Capitol Corridor, Caltrain, Metrolink, Surfliner, Coaster), Ferry, Non-Express Bus, Vanpool, or Shuttle Service	19	19	19	20	22	24	26	27	29	30

(i) Parking, Transit Passes, Car Sharing and Electric Vehicle Charging Stations - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			X

For TOD and ICP applications which include a Housing Development, points will be awarded based on the extent to which the pricing, supply, and management of motor vehicle parking serving the Housing Development promotes economic efficiency and minimizes the development of new parking spaces as detailed in subcategories 1-6 below. Housing Developments that do not include parking will

automatically receive the maximum available points under all subcategories. For applications which do not include a Housing Development, points will be awarded based on subcategories 3-6 below:

(1) Parking pricing (XX points). Points will be assigned to applications where the Housing Development parking is priced to cover the full capital and operating costs of the parking, and paid for separately, rather than bundled with the cost of the housing, except for units subsidized under one or more affordable housing funding programs, including low-income housing tax credit programs.

(2) Maximum parking spaces (XX points). Ten points will be assigned to applications for Projects which provide for no more than the following maximum parking spaces excluding park-and-ride and Transit Station replacement parking.

MAXIMUM PARKING SPACES		
Project Location Designation	Bedrooms per Unit	Maximum resident and guest parking spaces per unit
Large City Downtown	0-1	1.0
	2+	1.5
Urban Center	0-1	1.25
	2+	1.75
All Other Areas (Non-Metropolitan Areas)	0-1	1.5
	2+	2.0

(3) Shared parking (XX points). Points will be assigned to applications where the Project provides parking that will be shared between different uses, such as parking that serves housing residents at night and retail customers by day.

(4) Car sharing (XX points). Points will be assigned to applications where the Project provides dedicated parking spaces for shared vehicle only parking.

(5) Electric vehicle charging stations (XX points). Five points will be assigned to applications where the Project provides electric vehicle charging stations.

(6) Transit passes (XX points). Points will be assigned to applications where Projects provide to residents free or discounted transit passes priced at no more than half of retail cost. For Housing Developments, at least one transit pass shall be made available to each Restricted Unit for the term of the Program loan or grant.

(j) The extent to which the Project Incorporates Walkable Corridors – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

Points will be awarded based on the extent to which the application demonstrates the following features exist, will exist upon completion of the Project, or will directly serve the Project Area in the primary walkable corridor. The primary walkable corridor is the route most likely to be taken by pedestrians traveling directly between any of the following:

(1) A Housing Development and the Qualifying Transit Station; or
(2) A Transit Station and an identified Key Destination; or
(3) Residential areas and at least one identified Key Destination

XX points will be awarded for each of the following features:

(A) No more than 25 percent of the street blocks in the walkable corridor exceed 500 feet in length.

(B) The walkable corridor is fully served by continuously-paved, ADA-compliant sidewalks with a minimum width of 4 feet.

(C) The walkable corridor provides for safe pedestrian crossing of any arterials between the point of origin and final destination in (1), (2), or (3) above.

(D) The walkable corridor is adequately lighted to accommodate pedestrian use after dark.

(E) The Qualifying Transit Station or Transit Station has waiting facilities, seating, lighting, and overhead shelter from outdoor elements.

(k) The extent to which the Project Area Incorporates Bicycle Features – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

Points will be awarded based on the extent to which the application demonstrates the following bicycle features exist, will exist upon completion of the Project, or will directly serve the Project Area.

(1) XX points will be awarded for each of the following features:

(A) The Qualifying Transit Station (TOD Project Areas) or Transit Station (ICPs) has bicycle access and provides secure bicycle storage facilities, or the transit service allows bicycle conveyance on-board.

(B) Bike sharing program available that serves the Project Area or is located at a Transit Station.

(C) Bike repair facilities or kiosks available.

(D) The corridor includes a safe bicycle route that shows potential to increase bicycling between the Housing Development and the Qualifying Transit Station or between the Transit Station and identified community amenities such as schools, community centers, employment centers, and other destinations, including residential uses.

(2) Applications will receive points based on the ratio of linear feet of existing and/or planned dedicated bike lanes or paths within the Project Area relative to population density.

XX Points for a Ratio of XXX to XXXX
XX Points for a Ratio of XXX to XXXX
XX Points for a Ratio of XXX to XXXX

(I) Community Greening and Natural Resource Conservation - XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X		

Applications must demonstrate how the proposed urban greening and conservation features of the Project will contribute to the reduction of greenhouse gas emissions and provide multiple benefits.

(1) Urban and Community Greening

Projects incorporating urban greening, forestry or urban tree and vegetation planting will receive points as follows:

XX points for applicants which have an existing urban forest or street tree protection system (i.e. city ordinance, etc.)
XX points for applicants with an existing and current (updated within last 10 years) tree inventory

(2) Construction-related Energy Efficiency

All projects must meet requirements of California's 2013 Building Energy Efficiency Standards Title 24, Part 6.

XX Points will be given to applications with Projects that exceed California's 2013 Building Energy Efficiency Standards Title 24, Part 6 for heating, cooling, fan energy, and water heating

(3) Green Infrastructure and Conservation

XX Points will be given for Projects which exceed mandatory site development requirements per California Green Building Code Standards (Title 24, Part 11), updated with the July 1, 2014 Supplement, demonstrated any one of the following:

(A) Incorporation of native California vegetation or drought tolerant plants and trees.

(B) Projects which incorporate green infrastructure elements including but not limited to any one of the following:
- On-site catchment, filtration and potable water use reduction
- Permeable pavement for walking, parking or patio surfaces

(C) Projects which include any one of a number of low-impact design (LID) elements and materials that support low maintenance and durability, energy efficiency and reduced waste, such as:
- Native vegetation and patterns restored following construction.
- Cool or vegetated roof or walls
- Resilient flooring systems
- Thermal insulation,
- Recycled content,
- Reduced or repurposed on-site construction waste

(D) Projects which provide documentation of application for Leadership in Energy & Environmental Design (LEED) or GreenPoint Rated Multifamily Guidelines.

(E) Projects that demonstrate reuse or repurposing of an existing historic structure (built prior to 1976).

(m) Extent to which the Housing Development serves lower and moderate income households – ~~XX~~ Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X				

Applications will be scored based on the percentage of units in the Housing Development limited to various income levels, in accordance with the following schedule. Applicants may elect to exclude from the calculation of "total units" units which are not utilized in the calculation of leverage points pursuant to subdivision (h) of this Section and which are not utilized in the calculation of the loan amount pursuant to Section 104. Point scores will be rounded to the nearest one hundredth point in this category:

(1) 0.13 points will be awarded for each percent of total units that are owner-occupied and restricted to initial occupancy by households with incomes not exceeding the moderate income limit.

(2) 0.25 points will be awarded for each percent of total units that are owner-occupied and restricted to occupancy by households with incomes not exceeding the moderate income limit at affordable housing costs for not less than 55 years.

(3) 0.30 points will be awarded for each percent of total units that are owner-occupied and restricted to occupancy by households with incomes not exceeding the lower income limit at affordable housing costs for not less than 55 years

(4) 0.13 points will be awarded for each percent of total units that are rental Restricted Units for households with incomes less than or equal to 50 percent of Area Median Income.

(5) 0.7 points will be awarded for each percent of total units that are rental Restricted Units for households with incomes less than or equal to 40 percent of State Median Income, expressed as a percentage of Area Median Income.

(6) 0.9 points will be awarded for each percent of total units that are rental Restricted Units for households with incomes less than or equal to 35 percent of State Median Income, expressed as a percentage of Area Median Income.

(7) 1.3 points will be awarded for each percent of total units that are rental Restricted Units for households with incomes not exceeding 20 percent of State Median Income (adjusted by the Department to avoid exclusion of working CalWORKs recipients and individuals receiving SSI and expressed as a percentage of Area Median Income) for the first 10 percent of total Restricted Units; then 1 point for each subsequent percent of total Restricted Units.

(8) For rental Housing Developments utilizing 9% low income housing tax credits, applicants may elect to have their rental units scored in accordance with the scoring system used for this purpose by TCAC, under the Lowest Income point category. Applicants making this election shall be awarded .577 points for every 1 point they would be eligible to receive using TCAC's system (so that applications eligible for the maximum possible 52 points using the 9% scale receive 30 points in this category for the Program).

(9) For rental Housing Developments, rent limits for initial occupancy and for each subsequent occupancy of Restricted Units pursuant to 25 CCR 7312 of the MHP regulations, shall be based on unit type, applicable income limit, and area in which the Project is located, following the calculation procedures used by TCAC and using the income limits recognized by TCAC for purposes of

application scoring as well as the income limits set forth above. Rents will be further restricted in accordance with rent and income limits submitted by the Applicant in its application for the Program loan, approved by the Department, and set forth in the regulatory agreement. Rents shall not exceed 30 percent of the applicable income eligibility level. The maximum rent shall be 30 percent of 60 percent of Area Median Income for the appropriate unit size.

(n) Location Affordability Index – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X			

Projects will be scored and points allocated based on location affordability index factor as determined by HUD's Location Affordability Index (www.locationaffordability.info) as follows:

(1) XX points for Projects located within an area with a 27% to 44% Affordability Factor
(2) XX points for Projects located within an area with a 45% to 61% Affordability Factor
(3) XX points for Projects located within an area with a 62% to 87% Affordability Factor

All applicants must use the combined (Owner + Renter) and Median Income settings when determining eligibility for this criterion.

(o) Anti-Displacement Strategies – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X		

For Projects located within or benefiting a Disadvantaged Community XX points will be provided for demonstration of policies, strategies or programs designed to avoid the displacement of low-income residents and businesses of the project area and community.

NOTE: The Department recognizes not all Projects "benefiting" or "located within" a Disadvantaged Community may have a need to evaluate displacement risk and/or include anti-displacement strategies. Applicants may provide evidence for Department review demonstrating no displacement risk. Those applications will not be evaluated on the criteria and the points will not be factored into their score.

Examples of strategies include, but are not limited to:

(1) Residential Anti-Displacement Strategies
- Phased construction or rehabilitation, minimizing disruptions for tenants.
- Provision of Housing Choice Voucher (HCV) or other mechanism for affordability, including temporary relocation.
- Assignment of a relocation specialist to develop and implement a relocation plan and work closely with any tenants that temporarily relocate off-site to provide relocation planning, mobility counseling, and assistance (for example, reviews of school options, benefits, re-occupancy plans, and services access).
- Case management support to residents and relocation technical assistance to the local housing authority/department to ensure that all residents are informed about maintenance of lease compliance requirements.
- A HCD-certified housing element of the General Plan.

(2) Business Anti-Displacement Strategies:
- Implementation of an overlay zone designed to protect and assist small businesses.
- Establishment of a small business advocate office and designate a single point of contact for every small businesses.
- Creation and maintenance of a small business alliance.
- Increased visibility of the jurisdiction's small business assistance programs.
- Formal program to ensure that some fraction of a jurisdiction's purchases of goods and services come from local businesses.

(p) Extent to Which the Project Addresses Co-Benefits – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X	X	X

Beyond greenhouse gas reductions, SB 535 indicates that programs funded through the GGRF should provide public health and safety, economic and environmental benefits to communities served by the project.

Applicants to the AHSC program are required to describe and, where possible, quantify the expected co-benefits of the project. Co-benefits should be considered both broadly for the entire community and for low-income populations within the community at large. Eligible co-benefits must fit in one of the three categories as identified in SB 535 (public health and safety, economy, and environmental).

To demonstrate the extent to which the proposed Project addresses co-benefits, all applicants must identify and describe four (4) expected co-benefits from the project where:

(1) At least one must be a public health co-benefit (see Appendix C for examples)

(2) Describe who will benefit (e.g. the community, low-income populations, etc.)

(3) Describe how the co-benefits will be quantified (pending ARB guidance). For those co-benefits that cannot be quantified due to technical or feasibility challenges, applicants must provide an explanation citing published literature which demonstrates rationale for how cited co-benefits will be achieved. See Appendix C for additional co-benefits guidance and resources, including examples of co-benefits related to public health and safety, the economy and the environment as provided below.

Applications will be evaluated based on the following identified co-benefits:

(A) A maximum of XX points may be awarded for each co-benefit that is identified, described, and justified through quantification/evidence based on the following:
  (i) XX points for identifying and describing the co-benefit, including who will benefit
  (ii) XX point for quantification/evidence

(B) Applications requesting Program Funds to benefit a Disadvantaged Community as defined in Section 106(a)(10) may earn an additional XX points in this section by providing three (3) more examples for co-benefits.

(q) Community Engagement – XX Points Maximum

Housing Development	Housing Related Infrastructure	Transportation/ Transit Related Infrastructure	Green Infrastructure	Planning Implementation	Programs
X	X	X	X	X	X

(1) Application describes community outreach on proposed project, in addition to that required by the local government or other government body. The application must demonstrate how the outreach was designed to remove barriers to community participation and provided opportunities for engagement for community members, in particular lower-income households and DAC residents, which the project is proposed to benefit. The application should detail:

- the dates, times and location of meetings
- how community members were engaged (i.e. marketing/noticing of meetings and opportunities for involvement)
- approximate level of attendance at meeting(s)
- identify how feedback received during the process was considered in the design of the proposed Project (XX Points)

(2) Application identifies key stakeholders and/or community organizations which have been engaged in community outreach or in supporting the project (XX Points)

Section 108. Criteria Applicability based on Eligible Use Type and Scoring Summary

Based on the application's Eligible Project Types and Eligible Uses of Funds as defined in Sections 102 and 103 above, Table 7 below indicates the criteria which will be applied and the scored to determine an applicant's final score. The draft document does not identify specific point values for criteria at this time.

Applications will be scored based upon the strength of the entire proposal for the Project Area, including those elements funded by other sources but which are applicable to connectivity between key destinations with particular emphasis on improving access to affordable housing opportunities.

TABLE 7
AHSC Criteria Applicability based on Eligible Uses

Guideline Reference	* Both TODs and ICPs must include at least one Primary Use ** Secondary uses may be combined with any eligible Primary Use	Housing Development	Housing Related Infrastructure	Transportation and Transit-Related Infrastructure (includes Active Transportation)	Green Infrastructure	Planning Implementation	Programs – Active Transportation	Programs – Transit Ridership	Programs – Pollutant Reduction
		Primary Uses*				Secondary Uses**			
		Capital Uses					Program Uses		
GHG Reduction Potential will be factored into all applications based on Pending ARB Guidance									
a	Extent to which the Project will achieve GHG Reduction	X	X	X	X	X	X	X	X
Project / Program Feasibility and Readiness – 35 to 40% of Total Score									
b	Readiness of the Housing Development	X[1]	X						
c	Readiness of Non-Housing Infrastructure Project		X	X	X				
d	Program Readiness, Capacity, Need and Leverage						X	X	X
e	Leverage of Other Funds and Prior Planning Efforts	X	X	X	X				

Guideline Reference	* Both TODs and ICPs must include at least one Primary Use ** Secondary uses may be combined with any eligible Primary Use	Housing Development	Housing Related Infrastructure	Transportation and Transit-Related Infrastructure (includes Active Transportation)	Green Infrastructure	Planning Implementation	Programs – Active Transportation	Programs – Transit Ridership	Programs – Pollutant Reduction
		Primary Uses*				Secondary Uses**			
		Capital Uses				Program Uses			
Connectivity and Improved Access – 40 to 45% of Total Score									
f	Accessibility to Qualified Employment Areas	X	X	X					
g	Proximity of Transit Supportive Land Uses	X	X	X					
h	Extent to which the Project will increase public transit ridership and reduce vehicle miles travelled	X	X	X					
i	Parking / Transit Passes / EV charging	X[1]	X	X					
j	Walkable corridors	X	X	X					
k	Bicycle features	X	X	X					
l	Community Greening and Natural Resources Conservation	X	X	X	X				
Community Orientation – 15 to 20 % of Total Score									
m	The extent to which the Housing Development serves households at lower and moderate income levels	X[1]	X						
n	Location Affordability Index	X	X	X					
o	Anti-Displacement Strategies	X	X	X	X				
p	Extent to which the Project addresses co-benefits	X	X	X	X	X	X	X	X
q	Community Engagement	X	X	X	X	X	X	X	X

[1] *Housing specific criteria will only apply and be scored for applications where an affordable Housing Development and/or Housing-Related Infrastructure is funded through AHSC Program funds.*

Article IV. Program Operations

Section 109. Legal Documents

(a) Rental Housing Developments: Upon the award of Program funds to assist a rental Housing Development, the Department shall enter into one or more agreements with the Applicant, which may be in the form of a conditional commitment letter issued by the Department and accepted by the Applicant, which shall commit funds from the Program in an amount sufficient to fund the approved Program loan amount. The agreement or agreements shall contain the following:

(1) a description of the approved Housing Development and the permitted uses of Program funds;
(2) the amount and terms of the Program loan;
(3) the regulatory restrictions to be applied to the Housing Development through the Regulatory Agreement;
(4) special conditions imposed as part of the Department's approval of the Housing Development;
(5) requirements for the execution and the recordation of the agreements and documents required under the Program;
(6) terms and conditions required by federal or state law;
(7) requirements regarding the establishment of escrow accounts for the deposit of documents and the deposit and disbursement of Program loan proceeds;
(8) the approved schedule of the Housing Development, including land acquisition if any, commencement and completion of construction or rehabilitation work, and occupancy by eligible households;
(9) terms and conditions for the inspection and monitoring of the Project in order to verify compliance with the requirements of the Program;
(10) provisions regarding tenant relocation in accordance with State law;
(11) provisions relating to the placement on or in the vicinity of, the Housing Development site a sign indicating that the Department has provided financing for the Housing Development. The Department may also arrange for publicity of the Program loan in its sole discretion; and
(12) provisions to ensure that the eligible Capital Use and Program Use of funds maintains the required GHG Reduction represented in the application.
(13) Other provisions necessary to ensure compliance with the requirements of the Program.

(b) For rental Housing Developments the Department shall enter into a Regulatory Agreement with the Applicant for not less than the original term of the loan that shall be recorded against the property of the Housing Development prior to the disbursement of funds. The Regulatory Agreement shall include, but not be limited to, the following:

(1) the number, type and income level of Restricted Units;
(2) standards for tenant selection pursuant to 25 CCR 8305;
(3) provisions regulating the terms of the rental agreement pursuant to 25 CCR 8307;
(4) provisions related to a Rent Schedule, including initial rent levels for Restricted Units and non-Restricted Units pursuant to subsections (a) and (b) of 25 CCR 7312;
(5) conditions and procedures for permitting rent increases pursuant to 25 CCR 7312;
(6) provisions for limitations on Distributions pursuant to 25 CCR 8314 and on developer fees pursuant to 25 CCR 8312;
(7) provisions regarding the deposit and withdrawal of funds to and from reserve accounts in accordance with 25 CCR 8308 and 8309;
(8) assurances that the Housing Development will be maintained in a safe and sanitary condition in compliance with state and local housing codes and the management plan, pursuant to 25 CCR 7324;
(9) description of the conditions constituting breach of the Regulatory Agreement and remedies available to the parties thereto;
(10) provisions governing use and operation of non-Restricted Units and common areas to the extent necessary to ensure compliance with Program requirements;
(11) special conditions of loan approval imposed by the Department;
(12) Article 4, Subchapter 4, Chapter 7, Division 1 of Title 25, "Program Operations," Sections 25 CCR 7321 through 7326, shall apply to rental Housing Developments assisted by the Program; and
(13) other provisions necessary to assure compliance with the requirements of the Program.

(c) All Program loans for assistance to rental Housing Developments shall be evidenced by a promissory note payable to the Department in the principal amount of the loan and stating the terms of the loan consistent with the requirements of the Program. The note shall be secured by a deed of trust on the Housing Development property naming the Department as beneficiary or by other security acceptable to the Department; this deed of trust or other security shall be recorded junior only to such liens, encumbrances and other matters of record approved by the Department and shall secure the Department's financial interest in the Housing Development and the performance of Applicant's Program obligations.

(d) Upon the award of Program funds to a Locality for assistance to a homeowner Housing Development, the Department shall enter into a Standard Agreement with the Recipient constituting a conditional commitment of funds. This agreement shall require the Recipient to comply with the requirements and provisions of these Guidelines. The Standard Agreement shall encumber Program funds in an amount sufficient to fund the approved Project, subject to limits established in the NOFA and consistent with the application. The Standard Agreement shall contain, but not be limited to, the following:

(1) a description of the approved local Project and the permitted uses of Program funds;
(2) requirements for the execution and, where appropriate, the recordation of the agreements and documents required under the Program;
(3) the Recipient's responsibilities for completion of the Project, including, but not limited to, number of units to be assisted, marketing, Program loan processing and funding, construction monitoring and disbursement, report submissions, and file documentation;
(4) manner, timing and conditions for disbursement of Program funds to Recipients;
(5) provisions relating to the placement on or in the vicinity of the homeownership Housing Development project site, a sign indicating that the Department has provided financing for the Project. The Department may also arrange for publicity of the Project in its sole discretion;
(6) remedies available to the Department in the event of a violation, breach or default of the standard agreement;
(7) requirements that the Recipient permit the Department or its designated agents and employees the right to inspect the project or local program and all books, records and documents maintained by the Recipient in connection with the local program and the local program individual Program loans;
(8) special conditions imposed on a case-by-case basis as part of Department's approval of the Project;
(9) terms and conditions required by federal or state law; and
(10) provisions to ensure that the eligible Capital Use and Program Use of funds maintains the required GHG Reduction as represented in the application.
(11) other provisions necessary to ensure compliance with the requirements of the Program.

(e) Prior to the disbursement of Program funds for a homeownership Housing Development, the Department shall enter into a monitoring agreement with the Recipient requiring the Recipient to comply with Program requirements. The monitoring agreement shall contain, but not be limited to, the following:

(1) requirements regarding the establishment of a reuse account for the deposit of loan repayments, including interest and principal, and the requirements for disbursement of funds from the reuse account;
(2) the plan for servicing of the Program loans as prepared by the Recipient to be reviewed for approval by the Department
(3) the plan for the reuse of Program funds as prepared by the Recipient to be reviewed for approval by the Department;
(4) requirements for submittal of an annual report on a form provided by the Department;
(5) remedies available to the Department in the event of a violation, breach or default of the monitoring agreement;
(6) requirements that the Recipient permit the Department or its designated

agents and employees the right to inspect the Program and Project books, and all records and documents maintained by the Recipient in connection with the reuse account and long term loan servicing; and

(7) other provisions necessary to ensure compliance with the requirements of the Program.

(f) All homebuyer Program loans originated by a Recipient for a homeowner Housing Development shall be evidenced by the following documents and provisions, models of which may be provided by the Department:

(1) A promissory note evidencing the Program loan, payable by the homebuyer to the Recipient in the principal amount of the Program loan and stating the terms and rate of interest of the Program loan consistent with the requirements of the Program. The Recipient is and shall be prohibited from assigning their beneficial interest under the note.

(2) The note shall be secured by a deed of trust, or other appropriate security instrument acceptable to the Department, on the homebuyer property naming the Recipient as beneficiary. This deed of trust or other appropriate security instrument shall be recorded in the official records of the county in which the unit is located and shall secure the Recipient's financial interest in the project.

(g) Grants for infrastructure Projects shall be governed by a standard agreement or other agreement with the Recipient in a form prescribed by the Department. The agreement shall ensure that the provisions of Section 105 of these Guidelines are applicable to the Project covered by the agreement and enforceable by the Department. The agreement will contain such other provisions as the Department determines are necessary to meet the requirements and goals of the Program, including but not limited to the following:

(1) A description and sources and uses of the approved Project and the permitted uses of Program funds;

(2) Provisions governing the amount, terms and conditions of the Program grant;

(3) Provisions governing the construction work and, as applicable, the acquisition and preparation of the site of the Project, and the manner, timing and conditions of the disbursement of grant funds;

(4) a schedule for completion of the Project and a series of milestones for progress toward Project completion together with the remedies available to the Department in the event of the failure to meet such milestones;

(5) provisions for the payment of prevailing wages if and as required by state or federal law;

(6) requirements for periodic reports from the Recipient on the construction and use of the Project and provisions for monitoring of the Project by the Department;

(7) The Recipient's responsibilities for the development of the approved Project, including, but not limited to, construction management, maintaining of files, accounts and other records, and report requirements;
(8) Provisions relating to the development, construction, affordability and occupancy of the Housing Development supported by the Project, if applicable;
(9) Provisions relating to the placement on, or in the vicinity of, the Project site, a sign indicating that the Department has provided financing for the Project. The Department may also arrange for publicity of the Department grant in its sole discretion;
(10) Remedies available to the Department in the event of a violation, breach or default of the Standard Agreement;
(11) Requirements that the Recipient permit the Department or its designated agents and employees the right to inspect the Project and all books, records and documents maintained by the Recipient in connection with the Program grant;
(12) Special conditions imposed as part of Department approval of the project;
(13) Terms and conditions required by federal or state law;
(14) Provisions to ensure that the eligible Capital Use and Program Use of funds maintains the required GHG Reduction as represented in the application; and
(15) Other provisions necessary to ensure compliance with the requirements of the Program.

Section 110. Reporting Requirements

(a) During the term of the Standard Agreement and according to the annual deadline identified in the Standard Agreement, the Recipient shall submit, upon request of the Department and the Council, an annual performance report that demonstrates satisfaction of all Program requirements which includes, but is not limited to, GHG reduction, the construction of the Project and where applicable, the development, construction, affordability and occupancy of housing designated in the application, pursuant to ARB's Interim Guidance to Agencies Administering GRRF Monies: Expenditure Record and Fiscal Procedures. The reports will be filed on forms provided by the Department.

(b) At any time during the term of the Standard Agreement, the Department may perform or cause to be performed a financial audit of any and all phases of the Recipient's Project. At the Department's request, the Recipient shall provide, at its own expense, a financial audit prepared by a certified public accountant.

Section 111. Performance Requirements

(a) Recipients shall begin construction of the housing units to be developed in the Project and the housing designated in the application within the time set forth in the Standard Agreement but not more than two (2) years from the date of the Program grant award.

(b) The housing units to be developed in the Project and the housing designated in the application must be completed, as evidenced by receipt of a certificate of occupancy, within the period of time set forth in the Standard Agreement, but not more than five (5) years from the date of the award of the Program grant.

(c) Program funds must be disbursed in accordance with deadlines specified in the Standard Agreement, and in no event later than the following disbursement deadlines. The Department may approve a disbursement extension deadline request up to the applicable Maximum Disbursement Extension Deadline (as shown below) if the Recipient demonstrates, to the satisfaction of the Department, that it has complied with the following performance milestones related to the Notice of Funding Availability (NOFA) round in which the Department made its award to the Recipient:

Table 8
Performance Milestone Dates

NOFA Date	Current Disbursement Deadline	Standard Agreement Executed	Disbursement Agreement Executed
January, 2015	February 1, 2019	June, 2016	June, 2016

(d) Recipients will be required to repay disbursed Program grant funds where construction of residential units used as the basis for calculating the grant amount pursuant to Section 104 has not received building permits within two (2) years from the date of the Program grant award. The amount to be repaid shall be the same proportion to the total grant amount as the number of residential units where construction has not timely commenced to the total number of designated residential units.

(e) Recipients may only reapply for Program funds in a subsequent NOFA if the Recipient has disbursed at least fifty (50) percent of the funds allocated to Program Uses from prior awards.

(f) Notwithstanding anything to the contrary herein, the Department will not consider, nor will it approve, a disbursement extension deadline request for any and all awards that are provided pursuant to the NOFA. As such there shall not be a Maximum Disbursement Extension Deadline for said award, no extension will be available.

Section 112. Defaults and Cancellations

(a) In the event of a breach or violation by the Recipient of any of the provisions of the Standard Agreement, the Department may give written notice to the Recipient to cure the breach or violation within a period of not less than 15 days. If the breach or violation is not cured to the satisfaction of the Department within the specified time period, the Department, at its option, may declare a default under the Standard Agreement and may seek legal remedies for the default including the following:

(1) The Department may seek, in a court of competent jurisdiction, an order for specific performance of the defaulted obligation or the appointment of a receiver to complete the Project in accordance with Program requirements.

(2) The Department may seek such other remedies as may be available under the relevant agreement or any law.

(b) Funding commitments and Standard Agreements may be canceled by the Department under any of the following conditions:

(1) The objectives and requirements of the Program cannot be met by continuing the commitment or Standard Agreement;

(2) Construction of the Project or implementation of the Program Uses cannot proceed in a timely fashion in accordance with the timeframes established in the Standard Agreement; or

(3) Funding conditions have not been or cannot be fulfilled within required time periods.

(c) Upon receipt of a notice of intent to cancel the grant from the Department, the Recipient shall have the right to appeal to the Director of the Department.

Section 113. Prevailing Wages

For the purposes of the State Prevailing Wage Law (Labor Code Sections 1720 – 1781), a grant under the Program shall be considered public funding for the construction, rehabilitation, demolition, relocation, preservation, or other physical improvement of the Capital Use subject to the provisions of the State Prevailing Wage Law. Program funding of a Project shall not necessarily, in and of itself, be considered public funding of a Project unless such funding is considered public funding under the State Prevailing Wage Law. It is not the intent of the Department in these regulations to subject Projects to the State Prevailing Wage Law by reason of Program funding of the Project in those circumstances where such public funding would not otherwise make the Project subject to the State Prevailing Wage Law. Although the use of Program funds does not require compliance with federal Davis Bacon wages, other funding sources may require compliance with federal Davis Bacon wages.

APPENDICIES

Appendix A. Definitions

**Note some definitions below are placeholders (identified in red front) for terms to be defined through pending ARB guidance.

(a) "Active Transportation" means infrastructure and non-infrastructure projects that encourage increased use of active modes of transportation, but does not include funding program operations. The project types include but are not limited to:

(1) Infrastructure Projects: Capital improvements (construction) that will encourage increased use of active modes of transportation, such as biking and walking

(2) Non-infrastructure Projects: Education, encouragement, enforcement, and planning activities must encourage increased use of active modes of transportation, such as biking and walking.

(b) "Active Transportation Program" means non-infrastructure related programs which instill safe pedestrian, bicyclist and motorist behaviors to make safe active transportation possible. Non-infrastructure activities can stand-alone or be conducted with infrastructure projects (fixed facilities or permanent structural changes) to increase effectiveness.

(c) "Activity Delivery Costs" means staff costs incurred by the Public Agency that are directly related to implementing specific Capital Uses and Program Uses. They may include costs such as project document preparation, project underwriting, construction management, inspections, or reporting to the Department.

(d) "Affordable Housing Development" means a housing development in which at least 20 percent of the total units are Affordable Units.

(e) Affordable Unit" means a unit that is made available at an affordable rent, as defined in Section 50053 of the Health & Safety Code, to a household earning no more than 80 percent of the Area Median Income or at an affordable housing cost, as defined in Section 50052.5 of the Health & Safety Code, to a household earning no more than 120 percent of the Area Median Income. Rental units shall be subject to a recorded covenant ensuring affordability for a duration of at least 55 years. Ownership units shall be sold to and occupied by an income-qualified household, and subject to a recorded covenant with a duration of at least 30 years that includes either a resale restriction or equity sharing upon resale. Rent and income limits for rental Affordable Units shall be those established by TCAC. Those units will be restricted to the targeted income levels with rents not to exceed 30 percent of the income level in accordance with TCAC procedures.

(f) "Agency" means California Natural Resources Agency.

(g) "ARB" means the California Air Resources Board.

(h) "Area Median Income" means the most recent applicable county median family income published by the California Tax Credit Allocation Committee.

(i) "Baseline Emissions" means a measurement, calculation, or time used as a basis for comparison. Baseline emissions are the level of emissions that would occur without policy intervention or without implementation of a project. Baseline estimates are needed to determine the effectiveness of emission reduction programs (also called mitigation strategies).

(j) "Bus Hub" means an intersection of three or more bus routes, where one route or a combination of routes has a minimum scheduled headway of 10 minutes or at least six buses per hour during peak hours. Peak hours means the time between 7 a.m. to 10 a.m., inclusive, and 3 p.m. to 7 p.m., inclusive, Monday through Friday or the alternative, peak hours designated for the transportation corridor by the transit agency.

(k) "Bus Rapid Transit" (BRT) means a rubber-tired form of rapid transit in an integrated system of facilities, equipment, services, and amenities that exceed the speed and reliability of bus transit. Major components include the following: (1) use of exclusive right-of way, including busways, exclusive lanes, and bypass/queue jumping lanes for buses at congested intersections to reduce vehicle running time; (2) use of more limited-stop service including express service and skip-stopping; (3) application of intelligent transportation systems (ITS) technology such as signal priority, automatic vehicle location systems, system security, and customer information.

(l) "Bus Transfer Station" means an arrival, departure, or transfer point for the area's intercity, intraregional, or interregional bus service having permanent investment in multiple bus docking facilities, ticketing services, and passenger shelters.

(m) "Capital Use" means the construction, rehabilitation, demolition, relocation, preservation, acquisition, or other physical improvement that is an integral part of, or is necessary for the development of a Project.

(n) "CCR" means the California Code of Regulations.

(o) "Carbon Sequestration" means the capture of CO2 from the atmosphere and its long term storage in oceans (oceanic carbon sequestration), in biomass and soils (terrestrial carbon sequestration) or in underground reservoirs (geologic carbon sequestration). Sequestration enhances carbon storage in trees and soils, preserves existing tree and soil carbon and reduces emissions of CO_2, methane (CH_4) and nitrous oxide (N_2O).

(p) "Compact Development" means a land use and design concept which promotes relatively high residential development with mixed land uses and based on an efficient public transport system and has an urban layout which encourages active transportation, low energy consumption and reduced pollution.

(q) "Complete Streets" means streets designed and operated to ensure safe access by all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete streets projects include, but are not limited to:

(1) Development of new bikeways and walkways that improve safe access of pedestrians and cyclists to local amenities.

(2) Development of special bus lanes and dedicated bus lanes.

(3) Development of comfortable and accessible public transportation stops and amenities.

(4) Development or improvement of frequent and safe crossing opportunities.

(5) Installation of accessible pedestrian signals.

(6) Development of curb extensions, roundabouts, median islands, "road diets", lane narrowing projects, or other traffic calming mechanisms with the intent of improving safety and accessibility for non-motorized users.

(r) "Consolidated Transportation Service Agency (CSTA)" means Transportation for people with disabilities, elderly and low- income travelers. Providers include transit agencies, city and county social services, senior centers, faith-based organizations, independent living centers, health care centers, and for profit paratransit companies. Varying needs require flexible services and expose barriers to coordination of intermodal transportation. The CTSA consolidates coordination among providers, including fixed-route, dial-a-ride and shuttle services.

(s) "Corridor System Management Plan" (CSMP) means a strategy focused on congestion reduction and optimizing system performance of designated transportation corridors. A CSMP is implemented by a partnership of state, regional and local transportation planning agencies (may also include federal agencies). The CSMP implementation involves corridor performance and system management strategies within the context of a long-range planning vision for the role of the corridor within the transportation system.

(t) "Criteria Air Pollutants" means an air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The U.S. EPA and CARB periodically review new scientific data and may propose revisions to the standards as a result.

(u) "Department" means the Department of Housing and Community Development of the State of California.

(v) "Destination Transit Station" means a Transit Station located not more than thirty (30) minutes from the Qualifying Transit Station that serves the Housing Development or Key Destination via public transit and involves no more than one transfer point.

(w) "Disadvantaged Community" means Areas designated by the California Environmental Protection Agency pursuant to Health and Safety Code Section 39711, based on either of the following:

(1) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.

(2) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment.

(x) "FAR" (Floor Area Ratio) means the square footage of the floor area of a building divided by the site square footage, excluding therefrom dedicated streets, sidewalks, parks and open space. The floor area of a building is the sum of the gross area of each floor of the building, excluding mechanical space, cellar space, floor space in open balconies, enclosed parking and elevators or stair bulkheads. Multiplying the FAR by the area of the site produces the minimum amount of floor area required in a building on the lot. For example, on a 10,000 square-foot site in a district with a minimum FAR of 1.5, the floor area of a building must be at least 15,000 square feet.

(y) "Feeder Transit System" means a service that picks up and delivers passengers to a Transit Station, Bus Rapid Transit stop, or terminal such as that served by an urban circulator.

(z) "First Mile - Last Mile Strategy" means a plan to coordinate infrastructure investments in transit station areas to extend the reach of transit, with the ultimate goal of increasing ridership. It identifies projects and programs that would bridge the access gap between home and the transit station (first mile), and between the transit station and work (last mile).

(aa) "GHG Reduction" means Greenhouse Gas Reduction as provided in ARB metrics.

(bb) "Green infrastructure" means using vegetation, soils, and natural processes (through evaporation, filtration, sequestration, reuse, runoff) to help create healthier urban environments through land and water management. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to low impact design and stormwater management systems that mimic nature by soaking up and storing water.

(cc) "Greenhouse gas" means any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrochlorofluorocarbons (HCFCs), ozone (O3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). (UNFCC)

(dd) "Greenhouse Gas Effect" means the trapping and build-up of heat in the atmosphere (troposphere) near the earth's surface. Some of the heat flowing back toward space from the earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase. (UNFCC).

(ee) "Green Streets" means a sustainable stormwater strategy that meets regulatory compliance and resource protection goals by using a natural systems approach to manage stormwater, reduce flows, improve water quality and enhance watershed health.

(ff) "Housing Choice Voucher" means the federal government's program for assisting very low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing in the private market. Since housing assistance is provided on behalf of the family or individual, participants are able to find their own housing, including single-family homes, townhouses and apartments.

(gg) "Housing Development" means a residential development or the residential portion of a mixed-use development.

(hh) "Infill Development" means a residential, mixed-use development, or integrated connectivity project designated in the program application that is located in an Urbanized Area and has any of the following:

(1) At least 75 percent of the area included within the Project Area must be previously improved (including areas where improvements have been demolished) or used for any use other than open space, agriculture, forestry, or mining waste storage; or

(2) At least 75 percent of the perimeter of the Project Area adjoining parcels are developed with Urban Uses, or is separated from parcels that are developed with Urban Uses only by an improved public right-of-way. In calculating this percentage, perimeters bordering navigable bodies of water and improved parks shall not be included; or

(3) The combination of at least 50 percent of the area included within the Project Area as previously improved (including areas where improvements have been demolished) or used for any use other than open space, agriculture, forestry or mining waste storage, and at least 50 percent of the perimeter of the Project Area adjoining parcels that are developed with Urban Uses, or is separated from parcels that are developed with Urban Uses only by an improved public right-of-way. In calculating this percentage, perimeters bordering navigable bodies of water and improved parks shall not be included.

(ii) "Integrated Connectivity Project" means a combination of two or more eligible activities as defined in Section 104.

(jj) "Intelligent Transportation Systems" means electronics, communications, or information technology, used singly or in combination, to improve the efficiency, accessibility or safety of the surface transportation system.

(kk) "Intermodal" means transportation by more than one means of conveyance during a single journey, as by rail, vanpool, circulator and bike.

(ll) "Key Destination" means one or more community amenities such as schools, community centers, employment centers, retail, services, parks and other destinations, including residential uses.

(mm) "Large City Downtown" means an area in one of the following cities: Anaheim, Long Beach, Los Angeles, Oakland, Sacramento, San Diego, San Francisco, San Jose, and Santa Ana which is designated as a downtown, central business district, or core area in local planning documents.

(nn) "Locality" means a California city, county or city and county.

(oo) "Location Efficiency" means the deliberate placement of homes, jobs, shopping, entertainment, parks and other amenities close to transit stations to promote walking, biking and transit use.

(pp) "Low Impact Design" means land development (or re-development) that works with nature to manage stormwater as close to its source as possible, such as minimizing impervious surfaces and treating stormwater as a resource rather than a waste product. Practices include bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements, maintenance or restoration of a watershed's hydrologic and ecological functions.

(qq) "Lower income" has the meaning set forth in Health and Safety Code Section 50079.5.

(rr) "Major Transit Corridor" means a transportation corridor which meets all of the following criteria:

(1) Accommodates either a dedicated public right of way and a fixed guideway system or a public roadway which accommodates high frequency public transit, and

(2) Has been the subject of analysis, planning and environmental mitigation, and designation for investment within the regional transportation plan of a metropolitan planning organization or regional transportation planning agency, or within a long range transportation plan of a transit agency.

(ss) "Major Transit Stop" means a bus, ferry or rail stop served by either:

(1) one (1) route departing nine (9) or more times for a Metropolitan Area, and six (6) or more times for a Non-Metropolitan Area between both 7:00 a.m. to 10:00 a.m., inclusive, and 3:00 p.m. to 7:00 p.m., inclusive, Monday through Friday or the alternative peak hours designated for the transportation corridor by the transit agency; or

(2) two (2) or more routes departing twelve (12) or more times for a Metropolitan Area, and eight (8) or more times for a Non-Metropolitan Area between both 7:00 a.m. to 10:00 a.m., inclusive, and 3:00 p.m. to 7:00 p.m., inclusive, Monday through Friday or the alternative peak hours designated for the transportation corridor by the transit agency; or

(3) one (1) route departing four (4) or more times for a stop located in a Metropolitan Area, or two (2) or more times for a stop located in a Non-Metropolitan Area, between both 7:00 a.m. to 10:00 a.m., inclusive, and 3:00 p.m. to 7:00 p.m., inclusive, Monday through Friday or the alternative peak hours designated for the transportation corridor by the transit agency; or

(4) two (2) or more routes departing six (6) or more times for a stop located in a Metropolitan Area, or four (4) or more times for a stop located in a Non-Metropolitan Area, between both 7:00 a.m. to 10:00 a.m., inclusive, and 3:00 p.m. to 7:00 p.m., inclusive, Monday through Friday or the alternative peak hours designated for the transportation corridor by the transit agency.

(tt) "Metropolitan Area" means an area which contains a core urban area of 50,000 or more population typically consisting of one or more counties, includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.

(uu) "Mixed Use Development" means a building, combination of buildings, or building complex, designed to functionally and physically integrate non-residential uses such as retail, commercial, institutional, recreational, or community uses with residential uses, in a complementary manner.

(vv) "Moderate income" has the meaning set forth in Health and Safety Code Section 50093.

(ww) "MHP" shall mean the Multifamily Housing Program authorized and governed by Sections 50675 through 50675.14 of the Health and Safety Code and the regulations promulgated there under in 25 CCR 7300, *et seq.*

(xx) "Net Density" means the total number of dwelling units per acre of land to be developed for residential or mixed use, excluding allowed deductible areas. Allowed deductible areas are public dedications of land which are for public streets, public sidewalks, public open space, and public drainage facilities. Non-allowed deductible areas include utility easements, setbacks, private drives and walkways, landscaping, common areas and facilities, off street parking, and drainage facilities exclusive to a development project. Mitigations required for development will not be included in the allowed deductible areas.

(yy) "Net GHG Emissions Reduction" means the calculation of reduction of greenhouse gas (GHG) emissions as defined under single occupancy vehicle (SOV) usage and vehicle miles traveled (VMT), relative to an established GHG emissions baseline, by employing ARB-source guidance; including but not limited to metrics based upon # of trips, length of trips, first mile/last mile single occupancy vehicle usage - per capita, per day, per source - taking into account performance standards for multimodal and/or alternative transport systems; as well as calculation of reduction in GHG emissions relative to business as usual (BAU) performance standards, by employing ARB-source guidance specific to energy efficiency and carbon sequestration performance metrics limited to those activities as defined under Energy Efficiency and Carbon Sequestration.

(zz) "New Starts Program" means fixed Guideway Capital Investment Grants available from the US Federal Transit Administration (FTA), pursuant to 49 U.S.C. Section 5309 / MAP-21 Section 20008 Section 5309. Funds are available to improve transportation options in key corridors, including for new fixed-guideways or extensions/improvements, or expansion of core capacity, to existing fixed guideways, bus rapid transit (BRT) projects operating in mixed traffic that represent a substantial investment in the corridor. The program involves a multi-step, multi-year process. http://www.fta.dot.gov/documents/MAP-21_Fact_Sheet_-_Fixed_Guideway_Capital_Investment_Grants.pdf

(aaa) "NOFA" means a Notice of Funding Availability issued by the Department.

(bbb) "Non-Metropolitan Area" means an area which contains an urban core of at least 10,000 (but less than 50,000) population. A Non-Metropolitan area may consist of one or more counties and include counties containing the urban core area as well as any adjacent counties that have a high degree of social and economic integration with the urban core as measured by commuting to work.

(ccc) "Performance measures" means indicators of transit regarding data indicators such as accessibility, mobility choices and ridership.

(ddd) "Program" means the AHSC Program as implemented by these Guidelines.

(eee) "Program Operator" means the organization that administers the day-to-day operational responsibilities for the funded program(s).

(fff) "Preservation of Housing Affordability" means preservation of housing or housing opportunities within the Project Area, through application of equitable access and anti-displacement strategies, including directly funding or implementing policies to maintain or construct or renovate housing development available and affordable to buyers or renters with 80% or less of the annual median income by household size for the county in which the Project Area is located.

(ggg) "Primary Uses" means those Eligible Capital Uses of Funds which are infrastructure-related in nature, i.e. Housing Development, Housing-Related Infrastructure, Transportation and Transit-Related Infrastructure and Green Infrastructure. Both TOD Project Area and ICP applications requirement incorporation of at least one Primary Use.

(hhh) "Program Uses" means costs associated with transit ridership support (e.g. transit passes), non-infrastructure related active transportation projects (safe routes to schools) and programs designed to reduce GHG and vehicle-related Criteria Air Pollutants as defined in Section 104. Programs may not include operating costs.

(iii) "Project" means a Housing Development, a Mixed Use Development, or an Infrastructure Project or a combination of these. A Project may consist of a portion or phase of a larger development. The provisions of these Guidelines shall apply only to the Project as designated by the applicant in the application for Program funds.

(jjj) "Project Area" means the area encompassing transit, housing and Key Destinations used as the boundary within which GHG reductions are projected.

(kkk) "Public Agency" means a California city, county, city and county, council of governments, transit agency, redevelopment successor agencies, or a joint powers authority comprised of any of the preceding.

(lll) "Publicly Subsidized Transit" means transit service which is either:

(1) Directly operated by a public entity;

(2) Operated by a public entity via a contract for purchased transportation service with a private provider;

(3) Operated by a private entity as a grant recipient or sub-recipient from a public entity; or

(4) Operated by an independent private entity with the approval from a public entity that certifies that the vanpool/shuttle service is helping to meet the overall transportation needs of the local urbanized area.

(mmm) "Qualified Employment Area" means that area that contains at least 2,500 employees and is within a half-mile radius of a Destination Transit Station. A Qualified Employment Area is determined by utilizing the instructions provided for the mapping and reporting data accessible through the following link: http://onthemap.ces.census.gov/

(nnn) "Qualifying High Quality Transit" means transit with peak period headway frequency of 15 minutes or less.

(ooo) "Qualifying Transit Station" means a Transit Station where the transit serving the Transit Station provides weekday, evening, and weekend service consistent with the criteria of a Major Transit Stop (for TOD Project Areas) or a Transit Station (for ICPs), as defined.

(ppp) "Quantifiable Emissions Reductions" means the amount of the emission reductions which can be measured with reasonable certainty. Quantification requires that: a baseline set of conditions can be defined; the emissions associated with the baseline conditions can be measured; the alternative set of conditions that will exist due to the project can be defined; and the emissions associated with the alternative set of conditions can be measured. The emission reduction is the change in emissions from the baseline to the new conditions caused by the emission reduction project.

(qqq) "Recipient" means the eligible applicant receiving a commitment of Program funds.

(rrr) "Recurrent Congestion" means a condition lasting 15 minutes or longer where travel demand exceeds freeway design capacity, as evident by vehicular speeds of 35 mph or less occurring during peak commute periods on a typical incident-free weekday. Recurrent Congestion is documented in the 2008 State Highway Congestion Monitoring Program (HICOMP) Report, published by Caltrans in 2009.

(sss) "Restricted Units" mean residential units restricted by an enforceable covenant or agreement with the Department or other public agency to occupancy by low- or very low-income households, with affordable rents pursuant to 25 CCR 7312 of the MHP regulations or affordable housing costs pursuant to the BEGIN Program for at least 55 years. Restricted Units must be substantially equivalent in size and number of bedrooms to the balance of units in the Housing Development. Restricted Units may consist of units designated for any housing tenure, rental or owner-occupied, within the Housing Development.

(ttt) "Secondary Uses" means those Eligible Uses, including Capital Uses related to Pollutant Reduction and Planning Implementation as well as Program Uses, which may be funded through AHSC funds if included as part of an integrated application which includes at least one Primary Use.

(uuu) "Site Control" means the applicant or developer has control of property through one or more of the following:

(1) fee title;
(2) a leasehold interest on the property with provisions that enable the lessee to make improvements on and encumber the property provided that the terms and conditions of any proposed lease shall permit, prior to grant funding, compliance with all program requirements;
(3) an enforceable option to purchase or lease which shall extend through the anticipated date of the Program award as specified in the Notice of Funding Availability;

(4) an executed disposition and development agreement, right of way, or irrevocable offer of dedication to a public agency;
(5) an executed encroachment permit for construction of improvements or facilities within the public right of way or on public land;
(6) an executed agreement with a public agency that gives the applicant exclusive rights to negotiate with the agency for the acquisition of the site; provided that the major terms of the acquisition have been agreed to by all parties;
(7) a land sales contract or other enforceable agreement for acquisition of the property; or
(8) other forms of site control that give the Department equivalent assurance that the applicant or developer will be able to complete the Project and all housing designated in the application in a timely manner and in accordance with all the requirements of the Program.

(vvv) "Strategic Growth Council" means the California Strategic Growth Council, established pursuant to PRC Section 75121.

(www) "Substantial Rehabilitation" means a Housing Development with reasonable rehabilitation construction contract costs of at least $35,000 per residential unit. Rehabilitation projects must fully and efficiently address all of the physical needs of the Project for the term of the project loan and therefore merely meeting the minimum threshold cost amount of $35,000 per residential unit may not, in and of itself, be sufficient to be considered Substantial Rehabilitation for purposes of the project loan.

(xxx) "TCAC" means the California Tax Credit Allocation Committee.

(yyy) "Terrestrial Carbon Sequestration" means the process through which carbon dioxide (CO2) from the atmosphere is absorbed by trees, plants and crops through photosynthesis, and stored as carbon in biomass (tree trunks, branches, foliage and roots) and soils. The term "sinks" is also used to refer to forests, croplands, and grazing lands, and their ability to sequester carbon. Agriculture and forestry activities can also release CO2 to the atmosphere. Therefore, a carbon sink occurs when carbon sequestration is greater than carbon releases over some time period.

(zzz) "Transit" means a conveyance of persons or goods from one place to another via local transportation especially of people by public conveyance; or specifically the vehicles or a system engaged in such transportation.

(aaaa) "Transit Signal Priority (TSP)" means an operational strategy that facilitates the movement of transit vehicles through traffic-signal controlled intersections. Objectives of TSP include meeting on time schedule performance and improved transit travel time efficiency while minimizing impacts to normal traffic operations. TSP is made up of four components: (1) a detection system that lets the TSP system know where the vehicle requesting signal priority is located. The detection system communicates with a (2) priority request generator that alerts the traffic control system that the vehicle would like to receive priority. (3) Priority control strategies; and 4) System management software collecting data and generating reports.

(bbbb) "Transit Station" means a high-speed rail, commuter rail or light-rail station, ferry terminal, Bus Hub, Bus Transfer Station, bus stop, or a shuttle service or vanpool stop. Included in this definition are planned transit stations otherwise meeting this definition, whose construction is programmed into a Regional or State Transportation Improvement Program to be completed prior to the scheduled completion but in no case more than five years from the application due date.

(cccc) "Transportation Demand Management" (TDM) means strategies that increase transportation system efficiency by encouraging shifting from single-occupant vehicle (SOV) trips to non-SOV transportation modes, or shifting SOV trips off peak travel periods. Effective TDM strategies result in reduction of vehicle miles traveled (VMT) by increasing travel options, providing incentives and information to incentivize individuals and employers to modify their travel behavior to support these objectives, and/or by reducing the need to travel or reduing travel distance via location efficient development patterns. TDM strategies encourage travel by transit, bike, walking or in shared vehicles.

(dddd) "Urban Center" means an area other than a Large City Downtown as defined above and which is served by more than one mode of transit.

(eeee) "Urban Greening" means projects that provide multiple benefits including: reducing greenhouse gas emissions, decreasing air and water pollution, reducing consumption of natural resources and energy, increasing reliability of local water supplies, and increasing adaptability to climate change.

(ffff) "Urbanized Area" means an incorporated city, or an urbanized area or urban cluster as defined by the United States Census Bureau, or an unincorporated area within an urban service area that is designated in the local general plan for urban development and is served by public sewer and water.

(gggg) "Urban Uses" mean any residential, commercial, industrial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses. Urban Uses do not include lands used for agricultural uses or parcels in excess of 15,000 square feet in size and containing only one single family residence.

(hhhh) "Vanpool" means publically subsidized mass transportation, including Consolidated Transportation Service Agencies, which meets all of the following criteria:
(1) Is open to the public and where any vans/shuttles that are restricted to a particular employer in the public ride-matching service of a vanpool are excluded from the National Transportation Database report;
(2) Is actively engaged in advertising the vanpool service to the public and in matching interested members of the public to vans/shuttles with available seats;
(3) Is operated in compliance with the American with Disabilities Act of 1990 and implements regulation at 49 CFR 37.31; and
(4) Has a record-keeping system in place to meet all NTD reporting requirements, consistent with other modes, including collecting and reporting full allocated operating and capital costs for the service.

(iiii) "Very-low income" has the meaning set forth in Health and Safety Code Section 50105.

(jjjj) "Walkable Corridor" means the primary walkable route most likely to be taken by pedestrians travelling between two Key Destinations.

Appendix B. Disadvantaged Communities

Per the 2014-15 fiscal year Greenhouse Gas Reduction Fund (GGRF) Appropriations, the AHSC Program is expected to reach the goal of 50 percent of available funds to benefit Disadvantaged Communities.

Per SB 535, the California Air Resources Board will provide guidance for the State and local agencies charged with the expenditure of the auction proceeds. This guidance is designed to address two core considerations:

1) How to maximize the benefits of investments to disadvantaged communities, while still meeting all of the related statutory requirements.

2) How to determine whether proposed projects that achieve the goals of AB 32 would also benefit disadvantaged communities.

Each agency receiving auction proceeds for investment is responsible for administering its own program(s), consistent with statutory direction and applicable ARB guidance. The decisions about how to design programs, select projects for funding, and implement projects rest with each agency, directed by its executive priorities and supported by its staff expertise.

ARBs Interim Guidance on Disadvantaged Communities is available online at http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/workshops/arb-sb-535-interim-guidance-08-22-2014.pdf

Disadvantaged Communities across all GGRF investment categories are identified by the California Environmental Protection Agency (CalEPA). To serve this purpose, the Office of Environmental Health Hazard Assessment (OEHHA) within CalEPA has developed a tool called CalEnviroScreen. To learn more about CalEnviroScreen and to view the maps of Disadvantaged Communities, please visit OEHHA's webpage: http://oehha.ca.gov/ej/ces2.html

Appendix C. Co-Benefits

The table below is excerpted from ARB's Interim Guidance on Disadvantaged Communities (Table 3, page 19).

Illustrative Examples of Common Needs of Disadvantaged Communities (as Identified by Community Advocates)
Public Health and Safety Co-Benefits: 1. Reduce health harms (e.g., asthma) suffered disproportionately by low-income residents/communities due to air pollutants 2. Reduce health harms (e.g., obesity) suffered disproportionately by low-income residents/communities due to the built environment (e.g., by providing active transportation opportunities, parks) 3. Increase community safety 4. Reduce heat-related illnesses and increase thermal comfort (e.g., weatherization and solar energy can provide more efficient and affordable air conditioning; urban forestry can reduce heat-island effect)
Economic Co-Benefits: 1. Create quality jobs and increase family income (e.g., targeted hiring for living wage jobs that provide access to health insurance and retirement benefits with long-term job retention) 2. Increase job readiness and career opportunities (e.g., workforce development programs, on-the-job training, industry-recognized certifications) 3. Revitalize local economies (e.g., increased use of local businesses/small businesses) 4. Reduce housing costs (e.g., affordable housing) 5. Reduce transportation costs (e.g., free or reduced cost transit passes) and improve access to public transportation (e.g., new services in under-served urban and rural communities) 6. Reduce energy costs (e.g., weatherization, solar, etc.) 7. Improve transit service levels and reliability on systems/routes that have high use by low-income riders 8. Bring jobs and housing closer together (e.g., affordable housing in transit-oriented development, and in healthy, high-opportunity neighborhoods)
Environmental Co-Benefits: 1. Reduce exposure to local toxic air contaminants (e.g., provide a buffer between bike/walk paths and corridors with high levels of transportation pollution) 2. Prioritize zero-emission vehicle projects for areas with high diesel air pollution

Appendix D. GGRF Programs

Category	Department	Program	2014-15
Sustainable Communities and Clean Transportation	High-Speed Rail Authority	High-Speed Rail Project	$250 m
	State Control Office/ Caltrans	Low Carbon Transit Operations Program	$25 m
	Transportation Agency/ Caltrans	Transit and Intercity Rail Capital Program	$25 m
	Strategic Growth Council	*Affordable Housing and Sustainable Communities (AHSC) Program*	*$130 m*
	Air Resources Board	Low Carbon Transportation	$200 m
Energy Efficiency and Clean Energy	Dept. of Community Services and Development	Energy Efficiency Upgrades/Weatherization	$75 m
	Energy Commission	Energy Efficiency for Public Buildings	$20 m
	Dept. of Food and Agriculture	Agricultural Energy and Operational Efficiency	$15 m
Natural Resources and Waste Diversion	Dept. of Fish and Wildlife	Wetlands and Watershed Restoration	$25 m
	Dept. of Forestry and Fire Protection	Fire Prevention and Urban Forestry Projects	$42 m
	Cal Recycle	Waste Diversion	$25 m
		TOTAL	**$832 m**

Examples of AHSC Leverage Opportunities

Transit and Intercity Rail Capital Program	Eligible Uses: Rail capital Projects that expand, enhance and improve existing rail systems and connectivity to existing and future rail systems, including high speed rail
Low Carbon Transit Operations Program	Eligible Uses: expenditures supporting new or expanded bus or rail services, including operations expenses; expanded intermodal transit facilities and other costs to operate services and facilities.

CITY OF CARSON

STAFF COMMUNICATION TO
THE ENVIRONMENTAL COMMISSION

NEW BUSINESS October 1, 2014

SUBJECT: City of Carson Water Conservation Initiative

REQUEST: Discuss and provide feedback on the City of Carson Water Conservation Initiative

---

I. Introduction

Water Management is a tool to help meet the demands society places on a finite supply of water. Saving water is not simply the result of water conservation implementation, but is also the outcome of water management influences related to history, custom, culture. As such, conserving water is not only an activity involving irrigation efficiency, low-flush toilets, and xeriscaping, but an idea regulating growth, development, and environmental mitigation

II. Background and Analysis

On January 17, 2014, Governor Jerry Brown issued a drought "state of emergency" declaration in response to record-low water levels in California's rivers and reservoirs, as well an abnormally low snowpack. The declaration calls on public agencies to implement a variety of measures.

Water conservation ideas will help to manage the supplied potable water to the city in the short and long term, and to avoid or minimize the effects of drought and shortage within the city. Such a program is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare of current and future generations.

III. Recommendation

Discuss and provide feedback on the City of Carson Water Conservation Initiative

IV. Exhibits

1. None

Prepared by: _____

Julio Gonzalez, Acting Manager, Storm Water Quality Programs
Saied Naaseh, Associate Planner

CITY OF CARSON

STAFF COMMUNICATION TO
THE ENVIRONMENTAL COMMISSION

NEW BUSINESS October 1, 2014

SUBJECT: **Notice of Preparation of a Draft Environmental Impact Report, 4747 Daisy Avenue, Long Beach**

REQUEST: **Review, discuss, and provide feedback on the Notice of Preparation of a Draft Environmental Impact Report, 4747 Daisy Avenue, Long Beach**

I. Introduction

The City of Long Beach has released the NOP for the Riverwalk Residential development project located at 4747 Daisy Avenue, refer to Exhibit 1. The site is located just outside the City Limits east of the confluence of Compton Creek and Los Angeles River, refer to Exhibit 2. The 10.56 acre site is proposed to be developed as a gated community with 131 detached single family units with minimum 2,400 square-foot lots.

II. Background and Recommendation

The site is located in close proximity to Carson; however LA River and I-710 act as barriers and the impacts on the city are minimal.

III. Recommendation

Review, discuss, and provide feedback on the Notice of Preparation of a Draft Environmental Impact Report, 4747 Daisy Avenue, Long Beach

IV. Exhibits

1. Notice of Preparation
2. Location Map

Prepared by: _____

Saied Naaseh, Associate Planner

CITY OF LONG BEACH
DEPARTMENT OF DEVELOPMENT SERVICES
333 W. Ocean Blvd. Long Beach, CA 90802 (562) 570-6458 - FAX (562) 570-6068

NOTICE OF PREPARATION

TO: Agencies, Organizations and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

AGENCIES: The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach requests input on environmental information germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

ORGANIZATIONS AND INTERESTED PARTIES: The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

PROJECT TITLE: Riverwalk Residential Development Project

PROJECT LOCATION: 4747 Daisy Avenue, south of 48th Street, north of the Virginia Country Club and east of the Los Angeles River. (Los Angeles County Assessor's ID Number of 7133-016-005)

PROJECT DESCRIPTION: The proposed Riverwalk Residential Development Project site is 10.56 acres. The project site was formerly the Will J. Reid Boy Scout Camp, but is no longer used by the Boy Scouts and is currently vacant. Site preparation for the proposed project would include removal of all remaining vegetation, trees, and structures on the site, including an amphitheater, deck, five buildings, two tool sheds, an old mobile home, and a parking lot, after which 30,000-40,000 cubic yards of imported fill would be placed on the site.

The proposed project would involve subdividing the project site and developing it into a gated residential community containing 131 detached single family homes on lots with a minimum square footage of 2,400 square feet. The proposed homes would be a mixture of 2 and 3-story homes with a maximum height of 35'6". The proposed subdivision would be served by internal, privately maintained streets connected to the existing neighborhood by Daisy Avenue. A connection to Oregon Avenue would be available in case of emergencies, but would otherwise remain blocked off under normal circumstances. The proposed subdivision would include 262 private garage parking spaces and 40 on-street guest parking spaces located along the develop-

ment's internal streets. It would also include a private recreation center, a small pocket park, and private access to the pedestrian/bicycle path along the Los Angeles River. All of these amenities would be managed by the future homeowners association.

The proposed project would require a General Plan Amendment to change the project site's land use designation from Open Space and Park (LUD No. 11) to Townhomes (LUD 3A), and a change in the site's zoning from Institutional (I) to a new Planned Unit Development (PUD) zoning district to be created as part of this entitlement. As a condition of the Development Agreement for the Riverwalk project, the City is also requiring the applicant to fund the final design, engineering, and construction of a park (under the working name Oregon Park) at the southwest corner of Oregon Avenue and Del Amo Boulevard. This park is a separate project that has already undergone its own environmental review and entitlement process with the City.

PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT: Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors: **Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Hazards & Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Population/Housing, Public Services, Recreation, Transportation/Traffic, and Utilities/Service Systems.**

Scoping Meeting. The City of Long Beach, in its role as Lead Agency, will hold a public scoping meeting to provide an opportunity for the public and representatives of public agencies to address the scope of the Environmental Impact Report. The Scoping Meeting for the project is scheduled for **Wednesday, September 24, 2014, 7:00 pm** at the following location:

Scherer Park Activity Room
4600 Long Beach Blvd
(Parking located just north of the Pasadena Ave/46th St intersection)
Long Beach, CA

PUBLIC REVIEW PERIOD: This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project **begins Thursday, September 4, 2014 and ends Friday, October 3, 2014 at 4:30 pm.**

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 5th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: www.lbds.info/planning/environmental_planning/environmental_reports.asp

RESPONSES AND COMMENTS: Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

Craig Chalfant
Planning Bureau, Development Services-Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Or via email to: craig.chalfant@longbeach.gov

SALAMEDA ST
E DEL AMO BLVD
SITE

CITY OF CARSON

STAFF COMMUNICATION TO
THE ENVIRONMENTAL COMMISSION

NEW BUSINESS October 1, 2014

SUBJECT: **Notice of Preparation of a Draft Environmental Impact Report, Tesoro Los Angeles Refinery Integration and Compliance Project**

REQUEST: **Review, discuss, and provide feedback on the Notice of Preparation of a Draft Environmental Impact Report, Tesoro Los Angeles Refinery Integration and Compliance Project**

I. Introduction

AQMD has issued a Notice of Preparation (NOP) of a DEIR for the Los Angeles Refinery Integration and Compliance project owned and operated by the Tesoro refining and marketing company, LLC. The NOP comment period ends on October 10, 2014.

II. Background

The Tesoro Los Angeles Refinery consists to two adjacent facilities, Carson Operations and Wilmington Operations, that operate as one refinery. These facilities produce a variety of petroleum products such as unleaded gasoline, jet fuel, diesel fuel, fuel oil, petroleum gases, petroleum coke, and sulfur. The Carson Operations is larger than the Wilmington Operations with three crude, two vacuum, and two coker units whereas the Wilmington operations only has one crude, one vacuum, and one coker unit. The project includes measures that would reduce greenhouse gas emissions, sulfur oxide, nitrogen oxide, carbon monoxide, and particulate matter emissions. It would also make the two facilities operate more efficiently including construction of new storage tanks and pipelines, refer to exhibit 1 for a complete project description.

III. Analysis

The City has approval authority for the following components of the project:

- Construction of six (6) new tanks for a total of 3,000,000 barrels. Carson CMC requires the City's approval for a Conditional Use Permit (CUP) for petroleum storage tanks over 2,500 barrels. The City is required to hold public hearings for the CUP and consider the environmental impacts from this construction including cumulative impacts.

- Construction of new pipelines and new electrical conduits that cross major streets such as Sepulveda Boulevard and Alameda Street. The City must approve an encroachment permit to allow this construction. The City will review these encroachment permits to ensure there are no adverse impacts to these City facilities, the resulting hazards, and other environmental impacts.

In addition, the impacts to air quality and greenhouse gas emission, hazards and hazardous materials, noise, soil and hazardous waste, and transportation as well as cumulative impacts need to be discussed in the DEIR

IV. Recommendation

Review, discuss, and provide feedback on the Notice of Preparation of a Draft Environmental Impact Report, Tesoro Los Angeles Refinery Integration and Compliance Project.

V. Exhibits

1. Notice of Preparation

Prepared by: _____

Saied Naaseh, Associate Planner

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: **TESORO REFINING & MARKETING COMPANY, LLC LOS ANGELES REFINERY INTEGRATION AND COMPLIANCE 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 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 letter, the attached 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.

Copies of the NOP and Initial Study (NOP/IS), references, and other supporting material can be obtained at the SCAQMD's Public Information Center located at SCAQMD Headquarters: 21865 Copley Drive, Diamond Bar, CA 91765. Copies of these documents can also be obtained by calling (909) 396-2039. The NOP/IS is available by accessing the SCAQMD's CEQA website at http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2014. Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mike Krause at the address shown above, or sent by FAX to (909) 396-3324 or by email to mkrause@aqmd.gov. Comments must be received no later than 5:00 p.m. on October 10, 2014. In any written correspondence, please include the name, email address, and phone number of the contact person for your organization.

Project Applicant: Tesoro Refining & Marketing Company, LLC

Date: September 9, 2014 **Signature:** Michael Krause

Michael Krause
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:
Tesoro Los Angeles Refinery Integration and Compliance Project

Project Location:
Wilmington Operations - 2101 East Pacific Coast Highway, Wilmington, Los Angeles County, California, 90744.
Carson Operations – 2350 East 223rd Street, Carson, California, 90749

Description of Nature, Purpose, and Beneficiaries of Project:
Tesoro proposes to integrate the Tesoro Wilmington Operations with the Tesoro Carson Operations (former BP Refinery). The proposed project includes the following modifications to the Wilmington Operations: (1) modifications to the existing Hydrocracker Unit; (2) a new Propane Sales Treating Unit; (3) modifications to the existing Catalytic Reformer Unit 3; (4) modifications to the existing Hydrotreater Units 1, 2, and 4; (5) a new Ammonium Thiosulfate Plant; (6) a new Sulfuric Acid Regeneration Plant; (7) replacement of two existing 80,000 barrel crude tanks with two new 300,000 barrel crude storage tanks; (8) connecting an existing tank to the vapor recovery system; and (9) increasing the throughput of two existing tanks. The proposed project includes the following modifications to the Carson Operations: (1) modifications to the existing Coker Unit to comply with SCAQMD Rule 1114 – Coker Venting; (2) modifications to the existing No. 2 Coker; (3) modifications to the existing Vacuum Units Nos. 51 and 52; (4) modifications to the existing Fluid Catalytic Cracking Unit; (5) new Wet Jet Treater; (6) modifications to the existing Hydrocracker Unit; (7) modifications to the existing Light Hydrotreating Unit; (8) modifications to the existing Naphtha Hydrodesulfurization Unit; (9) modifications to the Naphtha Isomerization Unit; (10) modifications to the existing Alkylation Unit; (11) modifications to the Mid Barrel Distillate Treater; (12) modifications to the existing steam system; and (13) six new 500,000 barrel crude storage tanks. The proposed project also includes the following modifications to equipment that supports operations at both locations: (1) modifications to existing storage tanks at both locations; (2) new interconnecting pipelines between the Wilmington and Carson Operations; and (3) new electrical connections from the Watson Cogen facility located at the Carson Operations to the Wilmington Operations. In addition, modifications to existing Liquid Petroleum Gas Rail Unloading facilities at the Carson Operations are also proposed. The proposed project will be designed to comply with the federally mandated Tier 3 gasoline specifications and with State and local regulations mandating emission reductions. The proposed project is expected to substantially reduce emissions of greenhouse gases, sulfur oxide, nitrogen oxide, carbon monoxide, and particulate matter emissions by shutting down the Fluid Catalytic Cracking Unit (FCCU) at the Wilmington Operations and relinquishing all relevant air quality permits for this equipment to the South Coast Air Quality Management District (SCAQMD). All new and modified sources will be required to comply with Best Available Control Technology (BACT) requirements in SCAQMD Rule 1303 – Requirements.

Lead Agency:	**Division:**
South Coast Air Quality Management District	Planning, Rule Development and Area Sources

Notice of Preparation and Initial Study, References, and all Supporting Documentation are Available at:

SCAQMD Headquarters	Or by Calling:
21865 Copley Drive	(909) 396-2039
Diamond Bar, CA 91765	

Notice of Preparation and Initial Study are also available by accessing:
http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2014

Scheduled Scoping Meeting Date:
A CEQA scoping meeting will be held for the proposed project on September 24, 2014, at the Carson Community Center from 5:30 to 8:30 pm. The Carson Community Center is located at 801 E Carson St, Carson, CA 90745

The Notice of Preparation is provided through the following:

☑ Los Angeles Times and Daily Breeze (September 10, 2014)		☑ SCAQMD Website
☑ SCAQMD Public Information Center	☑ Interested Parties	☑ SCAQMD Mailing List

NOP/IS 30-day Public Review Period: September 10, 2014 through October 10, 2014

CEQA Contact Person:	**Phone Number:**	**E-Mail Address**
Michael Krause	(909) 396-2706	mkrause@aqmd.gov

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study for:
Tesoro Los Angeles Refinery
Integration and Compliance Project

September 2014

Executive Officer
Barry Wallerstein, D. Env.

Deputy Executive Officer,
Planning, Rule Development, and Area Sources
Elaine Chang, DrPH

Assistant Deputy Executive Officer,
Planning, Rule Development, and Area Sources
Philip Fine, Ph.D.

Director of Strategic Initiatives
Planning, Rule Development, and Area Sources
Susan Nakamura

Submitted to:
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Prepared by:
ENVIRONMENTAL AUDIT, INC.

Reviewed by: **Michael Krause – Program Supervisor**
Rafik Beshai – Air Quality Engineer II
Sawsan Andrawis – Air Quality Engineer II
Barbara Baird – Chief Deputy Counsel
Veera Tyagi – Senior Deputy District Counsel
Cal Enviro Metrics, LLC

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

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Governor's Appointee

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Cities of Los Angeles County – Western Region Representative

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Supervisor, Fourth District
County of Orange Representative

DR. CLARK E. PARKER, Sr.
Senate Rules Committee Appointee

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities of Orange County Representative

EXECUTIVE OFFICER

BARRY WALLERSTEIN, D. Env.

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CHAPTER 1

PROJECT DESCRIPTION

Introduction
Agency Authority
Project Location
Project Description
Project Construction Schedule

1.0 INTRODUCTION

The Tesoro Refining & Marketing Company LLC (Tesoro) is proposing the Los Angeles Refinery Integration and Compliance Project (proposed project). In June 2013, Tesoro purchased the adjacent BP West Coast Products LLC (BP) Carson Refinery, which, as part of the proposed project will be more fully integrated with the Tesoro Los Angeles Refinery – Wilmington Operations to form the Tesoro Los Angeles Refinery (Refinery). The Refinery includes: (1) the Wilmington Operations located at 2101 East Pacific Coast Highway in the Wilmington District of the City of Los Angeles; and (2) the Carson Operations, which is the former BP Carson Refinery located at 2350 East 223rd Street in the City of Carson. The proposed project will be designed to better integrate the Wilmington Operations and Carson Operations. In addition, the proposed project will be designed to comply with the federally mandated Tier 3 gasoline specifications and with State and local regulations mandating emission reductions. The Los Angeles Refinery Integration and Compliance Project is expected to substantially reduce greenhouse gases (GHG), sulfur oxide (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM) emissions by shutting down the Fluid Catalytic Cracking Unit (FCCU) at the Wilmington Operations and relinquishing all relevant FCCU permits to the South Coast Air Quality Management District (SCAQMD), and by reconfiguring the combined Refinery complex, which is expected to improve the gasoline to distillate (G/D) production ratio from the integrated Refinery in order to more expeditiously respond and adjust to ongoing changes in market demand for various types of petroleum products. Additionally, heat recovery will be optimized by installing new heat exchangers and modifying specified units to further minimize GHG and other emissions. All new and modified sources will be required to comply with Best Available Control Technology (BACT) requirements in SCAQMD Rule 1303.

The proposed project will not have an impact on crude oil and feedstock throughput and the crude oil and feedstock will not be changed as part of the proposed project. Crude oil and oil feedstocks are obtained from a variety of sources based on factors such as product availability and market conditions. Feedstocks include, but are not limited to, intermediate gas oil, transmix (a mixture of pipeline products; such as gasoline, jet and diesel) and internally recycled oil. Modifications will be made to recover diesel and jet fuel boiling point range material, also known as distillate, from gas oil that is currently fed to the FCCUs at both Wilmington and Carson Operations. In addition, facilities will be added to remove impurities such as sulfur, nitrogen compounds, and organic acids from distillates. The modifications will be designed so that the combined Refinery operates within the existing capacity of the Sulfur Recovery Plants (SRPs). There will be no modifications at any of the marine terminals associated with the Tesoro Los Angeles Refinery.

On April 23, 2014, the SCAQMD release a Notice of intent to adopt a Draft Negative Declaration for the Tesoro Storage Tank Replacement and Modification project. The tank replacement modification project was considered to be a separate project from the Tesoro Refinery Integration and Compliance Project because it could go forward with or without the currently proposed project, that is, neither project relies on the other project

to be implemented. However, because of the timing of construction and implementation of the two projects, it was decided to incorporate the Tesoro Storage Tank Replacement and Modification project into the currently proposed project to provide a cohesive analysis of all environmental impacts from the two projects. As a result, the ND for the Tesoro Storage Tank Replacement and Modification project has been withdrawn and incorporated into the currently proposed project (see project description subsection 1.3.1.9). Therefore, no responses to comments will be provided on the Tesoro Storage Tank Replacement and Modification project.

1.1 AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code §21000 et seq., requires that the environmental impacts of proposed "projects" be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The proposed modifications constitute a "project" as defined by CEQA. To fulfill the purpose and intent of CEQA, the SCAQMD is the "lead agency" for this proposed project and has prepared a Notice of Preparation of an Environmental Impact Report (EIR) and Initial Study (NOP/IS) to address the potential environmental impacts associated with the proposed project at the Tesoro Los Angeles Refinery.

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

1.2 PROJECT LOCATION

The proposed project will occur at both the Wilmington and Carson Operations of the Tesoro Los Angeles Refinery. Tesoro will integrate the recently purchased adjacent BP Carson Refinery (referred to as the Carson Operations) with the existing Wilmington Operations, to become a single entity owned and operated by Tesoro. The Refinery will be comprised of approximately 950 contiguous acres in size and operate within the Cities of Los Angeles (Wilmington District) and Carson.

The Wilmington Operations are located within Wilmington, a community under the jurisdiction of the City of Los Angeles, at 2101 East Pacific Coast Highway, Wilmington, Los Angeles County, California 90744. The Carson Operations are located at 2350 East 223rd Street, Carson, California, 90745. Figure 1-1 depicts the regional location of the Refinery and Figure 1-2 provides a detailed Site Location Map. Both new and modified equipment, as well as connecting piping, will be located within portions of the Refinery under both the City of Carson jurisdiction and the City of Los Angeles jurisdiction.

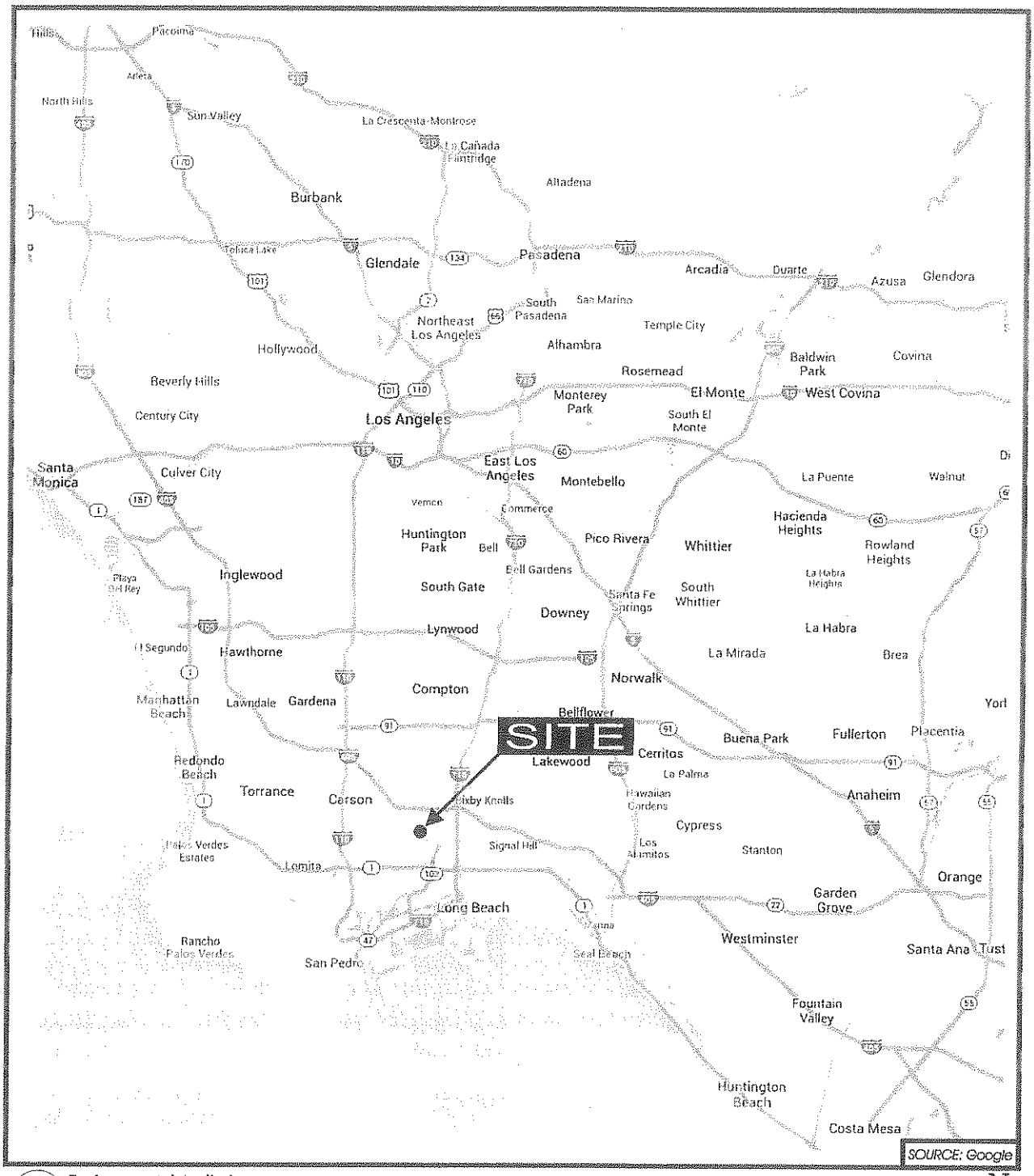

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FIGURE 1-1
REGIONAL MAP
TESORO LOS ANGELES REFINERY

Project No. 2844
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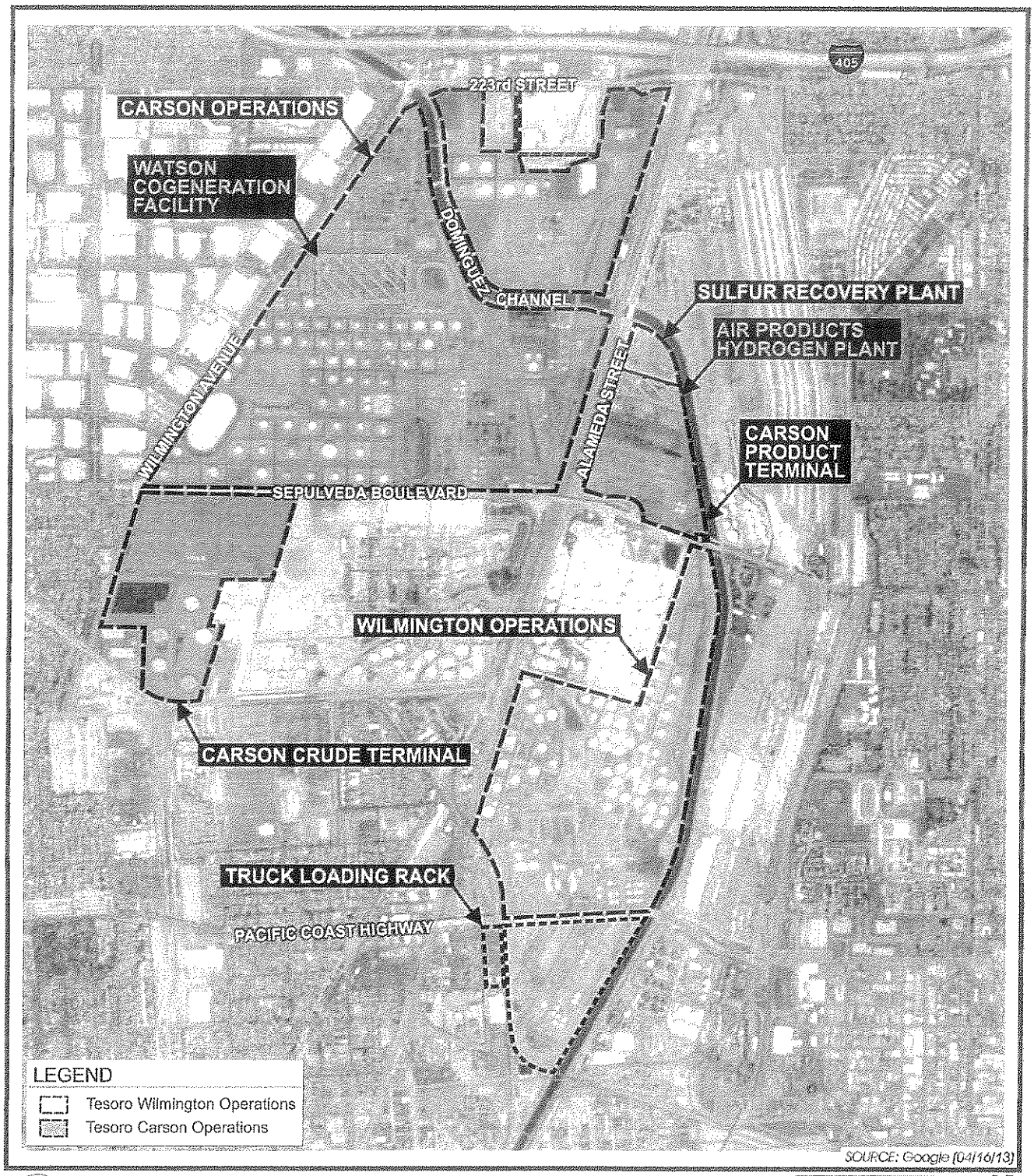

FIGURE 1-2
SITE LOCATION MAP
TESORO LOS ANGELES REFINERY

Project No. 2844
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The Wilmington Operations are bounded to the north by Sepulveda Boulevard (as well as other tank farms and refinery activities), to the west by Alameda Street (as well as the Alameda Corridor and other tank farms), to the south by railroad tracks (as well as tank farms and metal recycling/scrap yards), and to the east by the Dominguez Channel (as well as other tank farms and rail yard activities) (see Figure 1-2). The Wilmington Operations are bisected by Pacific Coast Highway, with the larger portion of the Wilmington Operations to the north of Pacific Coast Highway and the smaller portion to the south. The closest residential area to the Wilmington Operations is about 200 feet southwest of the Truck Loading Rack (see Figure 1-2).

The main operating portions of the Wilmington Operations are located within the Wilmington-Harbor City Planning Area (City of Los Angeles), which permits heavy industrial uses including petroleum refining on the Tesoro property (City of Los Angeles, 1999). The Wilmington-Harbor City Plan places no additional restrictions on refineries, and specifically allows for construction without regard to height limitations. The Refinery and all adjacent areas are zoned for heavy industrial use (M3-1).

The Carson Operations are bounded by Wilmington Avenue to the west, 223rd Avenue to the north, Alameda Street to the east, and Sepulveda Boulevard to the south. The Dominguez Channel flows through the Carson Operations, dividing the property into two sections: Northeastern and Southern. Several industrial/commercial facilities and the 405 Freeway border the Carson Operations to the north. The Alameda Corridor and other industrial facilities, including the Tesoro Coke Barn, the Air Products Hydrogen Plant, and the Tesoro Sulfur Recovery Plant, are located to the east of the Carson Operations. Commercial and residential areas are located to the west of the Carson Operations. The Phillips 66 Refinery and tank farms occupy the area located to the south of the Carson Operations.

The Carson Operations and all adjacent facilities and properties are zoned manufacturing heavy (MH) according to the City of Carson's Land Use element of its General Plan. The closest residential area to the Carson Operations is approximately 250 feet southwest of the Refinery on the southwest corner of the Sepulveda Boulevard/Wilmington Avenue intersection.

Additionally, the SRP (considered to be a portion of the Wilmington Operations) is located at 23208 South Alameda Street in the City of Carson (see Figure 1-2). The SRP is zoned MH according to the City of Carson's Land Use element of its General Plan. Adjacent land uses to the SRP also are heavy industrial and include other refineries, a hydrogen plant, undeveloped lots, and container storage areas.

1.3 OVERVIEW OF CURRENT OPERATIONS

Currently, the Wilmington and Carson Operations function as two separate and distinct facilities with some limited integration. A block flow diagram of the current operations of the facilities is provided in Figure 1-3.

1.3.1 CARSON OPERATIONS HISTORY AND CRUDE SUPPLY

Petroleum operations began at the Carson Operations in 1923. Tesoro acquired the Refinery in 2013. Crude oil for Carson Operations is unloaded from tankers at Berth 121 or T-2 Terminals located in the Port of Long Beach and then transferred via pipeline and stored at Port of Long Beach Terminals or the Carson Crude Terminal. No crude oil is transported to the Carson Operations via rail. Crude oil is sent via pipeline from the terminals to Carson Operations for further storage in any of nine Refinery crude storage tanks and then processed in the Crude Units. Crude oil, including California crude oil, can also be delivered via pipeline from other onshore locations. The Carson Operations storage tanks that store crude oil range from 80,000 to 460,000 barrel (bbl) capacity, and the crude oil is transferred from the Carson Operations storage tanks to the Crude Units. Crude oil is processed in Crude Units #1, #2 and #4 where it is heated and distilled into various hydrocarbon components which are further processed in downstream Carson Operations units. The Carson Operations also receive, process, and transport other petroleum products (crude oil not included) to and from the Carson Operations by ship, truck, and railcar. These petroleum products include residuum, gas oil, diesel, gasoline, naphtha, and LPG. Additionally, the Carson Operations has the Watson Cogeneration Plant that currently produces excess power, beyond the Carson Operations needs, and sells the excess power to Southern California Edison.

1.3.2 WILMINGTON OPERATIONS HISTORY AND CRUDE SUPPLY

Petroleum operations began at the Wilmington Operations in 1923. Tesoro acquired the Wilmington Operations in 2007. Crude oil for the Wilmington Operations is delivered via ship using the pipeline from the Tesoro Marine Terminal at the Port of Long Beach Berths 84A and 86. Crude oil, including California crude oils, can also be delievered via pipeline from other onshore locations. No crude oil is transported to the Wilmington Operations via rail. The Wilmington Operations currently utilize 20 storage tanks to store crude oil and other heavy petroleum liquids (18 have a capacity of 80,000 barrel (bbl) and two have a capacity of 125,000 bbl). Crude oil is processed in the Crude Unit where it is heated and distilled into various hydrocarbon components, which are further processed in downstream Wilmington Operations units. The Wilmington Operations also receive, process, and transport other petroleum products (crude oil not included) to and from the Wilmington Operations by ship, truck, and railcar. These petroleum products include residuum, gas oil, diesel, gasoline, naphtha, and LPG.

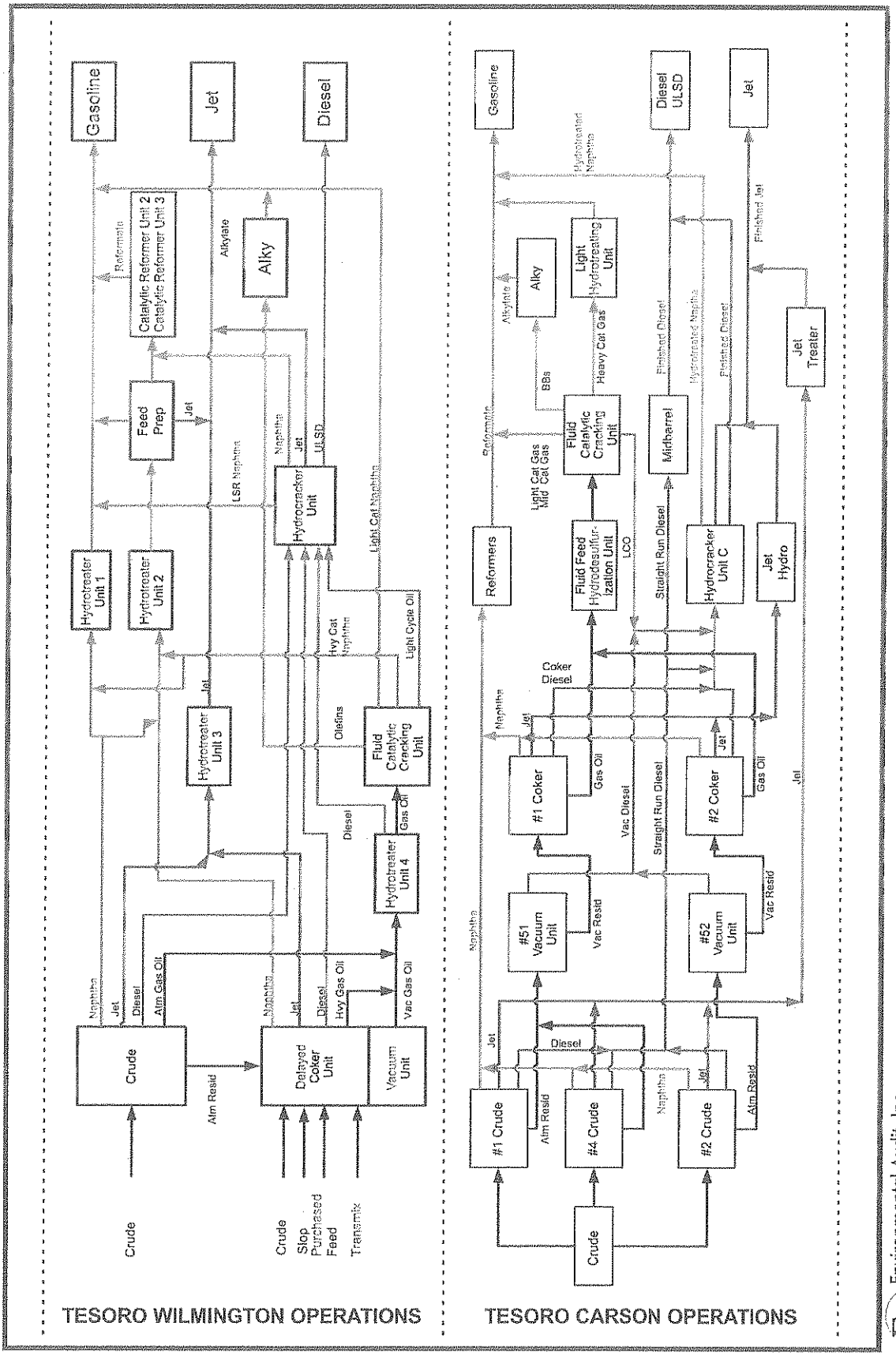

FIGURE 1-3
EXISTING BLOCK FLOW DIAGRAM

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Project No. 2844
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1.3.3 TESORO LOS ANGELES REFINERY

The Tesoro Los Angeles Refinery consists of two adjacent facilities, Carson Operations and Wilmington Operations, that operate as one refinery. The Carson and Wilmington Operations have in the past and continue to produce a variety of products including unleaded gasoline, jet fuel, diesel fuel, fuel oil, petroleum gases, petroleum coke and sulfur. The Carson Operations also produces polypropylene and calcined coke. Elemental sulfur and petroleum coke are produced as by-products of the refining process. Major processing units at both the Carson and Wilmington Operations include the Crude Units, the Vacuum Units, the Delayed Coking Units, hydrotreating units, reforming units, the FCC Units, the Alkylation Unit, hydrogen plants, the Sulfur Recovery Plants, and the Cogeneration Plants. The major differences between the Carson and Wilmington Operations is that the Carson Operations is a larger operation with three crude, two vacuum and two coker units whereas the Wilmington Operations only has one crude, one vacuum, and one coker unit.

1.3.4 CURRENT LOS ANGELES REFINERY INTEGRATION

Currently Carson and Wilmington Operations are connected via Tesoro and third party pipelines that enable the transfer of intermediate and finished products between the two facilities. The Refinery optimizes crude oil and other refinery feedstock processing to produce the mixture of refined products that are marketed from the Los Angeles Refinery. Unit turnarounds are aligned between the Carson and Wilmington Operations to minimize economic and local area impacts from shutdowns. Hydrogen use is balanced and managed across the Los Angeles Refinery for hydrotreating purposes and output of clean fuel products. Crude oil, intermediate feedstocks and products are transferred between Carson and Wilmington Operations via pipeline, as required, to optimize Refinery production to meet market demand. The staffs of the Carson and Wilmington Operations have been merged and contractors staff have been integrated to serve the combined operations.

1.4 PROJECT DESCRIPTION

The crude oil and feedstock processing capability at the integrated Refinery will not change as a result of the proposed project. In order to increase the crude throughput of the Refinery, there would need to be debottlenecking modifications to the units that initially process the crude, such as the Crude Units or the Delayed Coking Unit and no such modifications are included as part of the proposed project. The Carson and Wilmington Operations currently obtain crude oil and feedstock from a variety of world-wide sources; in general, these sources are not expected to change as a result of the proposed project. Feedstocks include, but are not limited to, intermediate gas oil, transmix (a mixture of pipeline products; such as gasoline, jet, and diesel) and internally recycled oil. Modifications will be made to recover diesel and jet fuel boiling point range material, also known as distillate, from gas oil that is currently fed to the FCCUs at both Wilmington and Carson Operations. In addition, facilities will be added to remove impurities such as sulfur, nitrogen compounds, and organic acids from distillates in order

to make on-specification products. The modifications will be designed so that the combined Refinery operates within the existing capacity of the SRPs. Following project completion, the FCCU at the Wilmington Refinery will be shut down and the Refinery will be integrated as one operating Refinery. Figure 1-4 shows a block flow diagram of the integrated Refinery operations following the proposed project. The following subsections describe in more detail proposed project modifications and new equipment at both the Wilmington and Carson Operations. It is possible that some minor engineering design changes to the proposed project may occur between the circulation of the NOP/IS and circulation of the Draft Environmental Impact report. Any changes are expected to reduce the scope of the project and, therefore, would continue to be within the scope of the preliminary environmental analysis in Chapter 2 of this NOP/IS and will be fully analyzed in the Draft EIR.

1.4.1 WILMINGTON OPERATIONS

The Tesoro Los Angeles Refinery Integration and Compliance Project is expected to substantially reduce emissions at the integrated Refinery by shutting down the FCCU at the Wilmington Operations. Reconfiguring the combined Refinery complex is expected to improve the Gasoline to Distillate (G/D) production ratio and is anticipated to result in minor increases in air pollutant emissions. However, the net effect on overall emissions from the proposed project is expected to be emissions reductions, primarily associated with the shutdown of the FCCU, as well as shutdown of other equipment at the Refinery. Additionally, equipment production efficiency and heat recovery will be optimized for new and modified units, as specified in the following discussions, to further reduce overall emissions and optimize energy utilization. Proposed new equipment and modifications to existing equipment for the Wilmington Operations are shown in Figure 1-5 and are described further in the following subsections.

1.4.1.1 FCCU Shutdown

An FCCU cracks or converts heavy hydrocarbons into lighter, gasoline range hydrocarbons in the presence of fine particles of catalyst that are circulated throughout the process. Following project completion, the Wilmington FCCU will be shut down, the equipment will be permanently removed from service, and Tesoro will relinquish all relevant FCCU permits to the SCAQMD. Substantial emissions reductions will be realized from shutting down the following emissions sources that constitute the entire FCCU totaling 559.3 million British Thermal Units per hour (MMBtu/Hr):

- FCCU regenerator (FCCU coke burn)
- CO Boiler (300 MMBtu/Hr)
- H-2 Steam Superheater (37.4 MMBtu/Hr)
- H-3 Fresh Feed Heater (94.7 MMBtu/Hr)

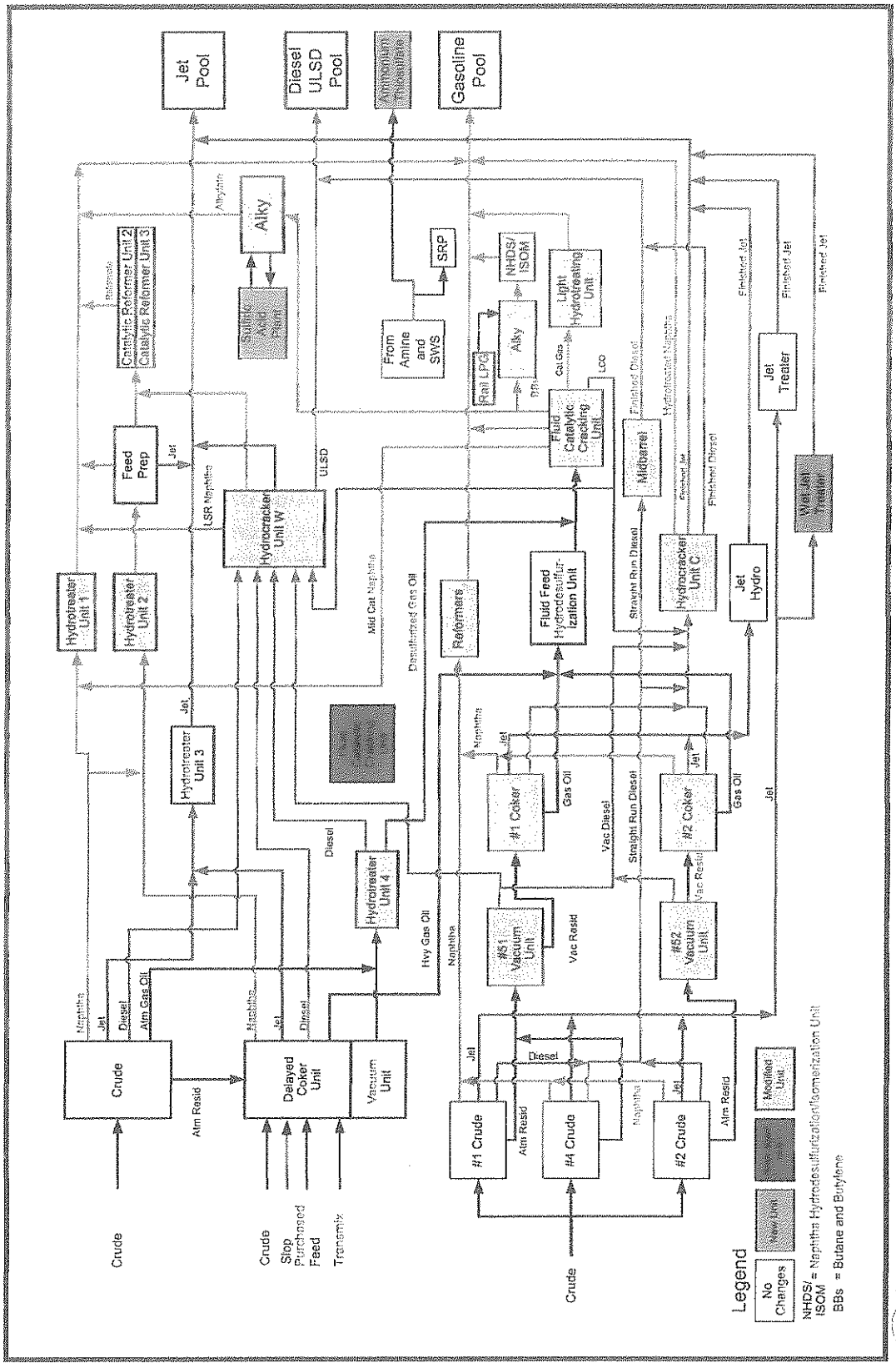

FIGURE 1-4
POST-PROJECT BLOCK FLOW DIAGRAM
TESORO LOS ANGELES REFINERY

Project No. 2844
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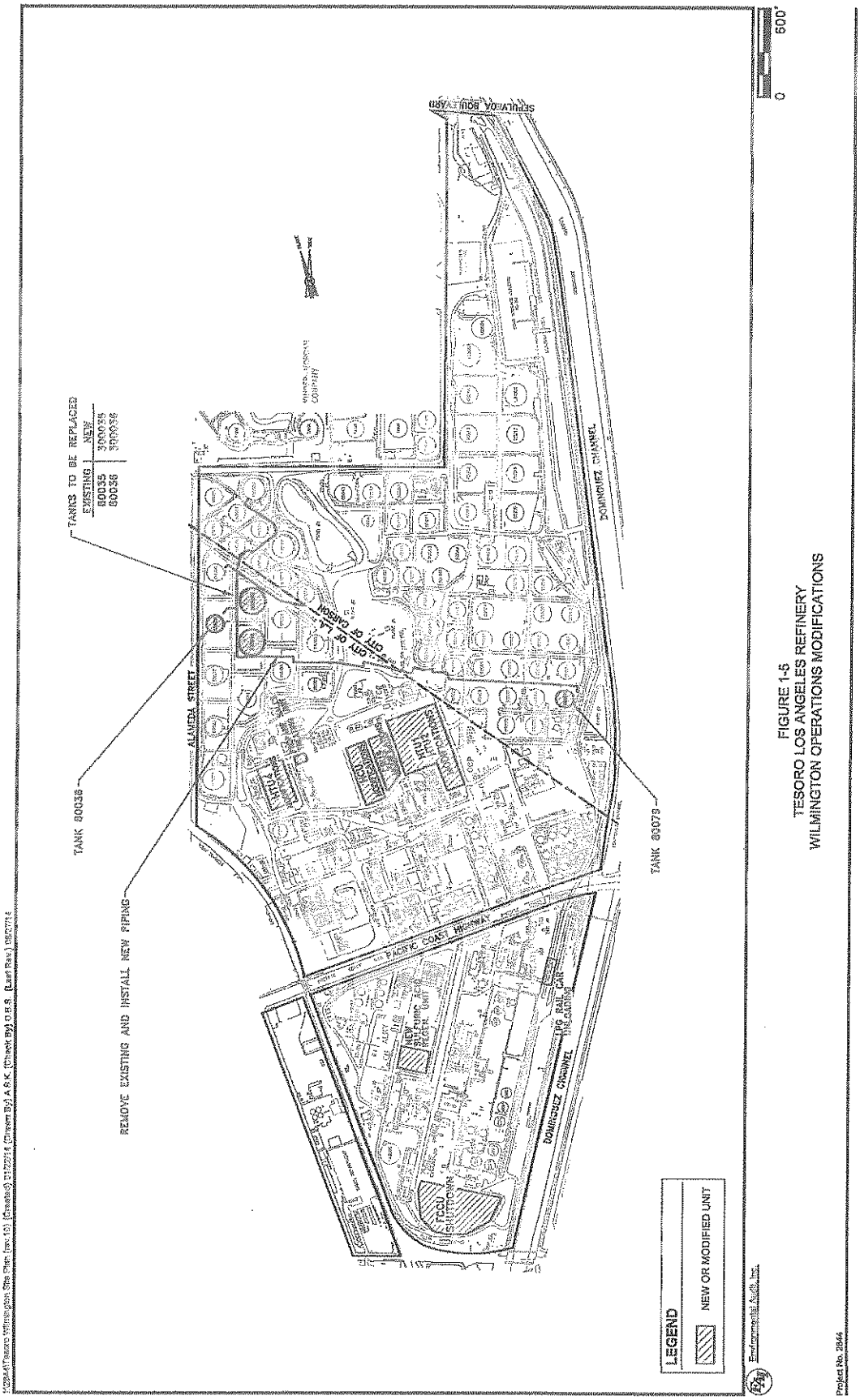

FIGURE 1-5
TESORO LOS ANGELES REFINERY
WILMINGTON OPERATIONS MODIFICATIONS

- H-4 Hot Oil Loop Reboiler (127.2 MMBtu/Hr)
- H-5 Fresh Feed Heater (44 MMBtu/Hr)
- B-1 Startup Heater (84 MMBtu/Hr)
- All FCCU fugitive emission components

1.4.1.2 HCU Modification

The Wilmington Hydrocracker Unit (HCU (W)) cracks or converts mid-distillate and heavy hydrocarbons to lighter gasoline, jet, and diesel range material in the presence of catalyst, heat, and hydrogen. The process incorporates a hydrotreater which reduces the sulfur content of the diesel. While the HCU (W) capacity would be increased approximately 15 percent, the overall integrated Refinery capacity would remain unchanged. The reactor and fractionation sections will be modified to increase the production of ultra-low sulfur diesel and gasoline. The HCU (W) modification will include installing or modifying as many as five heat exchangers to provide improved heat integration, installing three new electrically driven pumps, and associated piping and instrumentation. The proposed project currently includes increasing the permitted firing duty of up to three heaters by a total of 50 million Btu/Hr.

To recover propane for the Propane Sales Treating Unit (PSTU) described below, the HCU (W) fractionation section will also be modified by installing two new water cooled exchangers, one knockout drum, and associated piping and instrumentation. An existing reflux pump and five heat exchangers in the fractionation section will be removed.

1.4.1.3 CRU-3 Modification

The Wilmington Operations Catalytic Reformer Unit 3 (CRU-3) converts low octane hydrocarbons into higher octane gasoline blending components using catalyst and heat. The CRU-3 fractionation section will be modified to enable recovery of Hydrocracker propane from the refinery fuel gas system. The modifications to CRU-3 will include installing one new depropanizer tower that is larger than the existing tower, as many as three heat exchangers, as many as four electrically driven pumps, and associated piping and instrumentation.

1.4.1.4 Propane Sales Treating Unit (PSTU)

A new PSTU will be constructed at the Wilmington Operations. The PSTU conditions liquid propane for sale using absorbers and dryers to meet sales specifications. The PSTU will treat up to approximately 2,000 BPD and will include eight vessels and four pumps that will be installed to purify recovered propane from the HCU (W) and CRU-3. The PSTU will be located east of HTU-4.

1.4.1.5 HTU-1 and 2 Modifications

The Wilmington Operations Hydrotreater Units 1 (HTU)-1 and HTU-2 Naphtha Hydrotreaters are process units that reduce impurities such as sulfur from various naphtha product streams. The HTU-1 will be modified to hydrotreat approximately 20,000 BPD of FCCU gasoline to comply with the federally mandated Tier 3 gasoline specifications and to hydrotreat jet range components. The modifications to HTU-1 will include modifying or installing as many as five heat exchangers, adding a pump and associated piping and instrumentation. Because the HTU-2 will continue to produce the same types of feedstock that it currently produces, its feedstock will be separated from HTU-1's feedstock. The HTU-2 feed separation modifications will include repurposing an existing diesel salt dryer to be used as a feed surge drum, installing as many as two electrically driven pumps, and associated piping and instrumentation.

The proposed modifications to HTU-1 will also allow it to switch into jet hydrotreater service, treating approximately 12,000 BPD of jet fuel to remove sulfur impurities. The modifications will include installing one new stripping steam nozzle on the stabilizer, one coalescer, one salt dryer, and condensate pot, and associated piping and instrumentation.

1.4.1.6 HTU-4 Modification

The Wilmington Operations Hydrotreater Unit No. 4 (HTU-4) HTU-4 is a process unit that uses catalyst and hydrogen to reduce aromatic compounds and impurities such as sulfur in the FCC feed. HTU-4 will be modified to fully utilize the existing hydrotreating capacity to produce ultra-low sulfur diesel. There will also be modifications to recover jet fuel, and added heat integration equipment to reduce energy consumption by producing steam, reboiling two strippers and preheating boiler feed water. HTU-4 will process either gas oil or high sulfur diesel. The proposed modification to the HTU-4 will allow the Refinery to minimize motor fuels production disruptions during both planned and unplanned outages. Other modifications to HTU-4 include adding new nozzles on the fractionator, installing a new surge drum, a salt dryer, a coalescer, as many as four new electrically driven pumps and nine heat exchangers, and associated piping and instrumentation.

1.4.1.7 New Ammonium Thiosulfate Plant

A new Ammonium Thiosulfate Plant will be constructed at the Wilmington Operations SRP (see Figure 1-6) and will reduce the sulfur and ammonia content of the sour water stripper overhead vapors. Although permitted as a separate facility, the SRP is and has been a part of the Wilmington Operations. It is physically located in the City of Carson so the location of the new Ammonium Thiosulfate Plant is shown on the site plan for the Carson Operations (see Figure 1-6). The new Ammonium Thiosulfate Plant will be sized for approximately 250 tons/day of 60 percent ammonium thiosulfate (a fertilizer) and will convert hydrogen sulfide and ammonia from sour water stripper overhead gas streams into liquid fertilizer. The ammonia and hydrogen sulfide are currently stripped from the sour water in the existing sour water strippers and sent to the Sulfur Recovery Plants. Instead of sending this ammonia and sulfur to the sour water strippers, it will be sent to

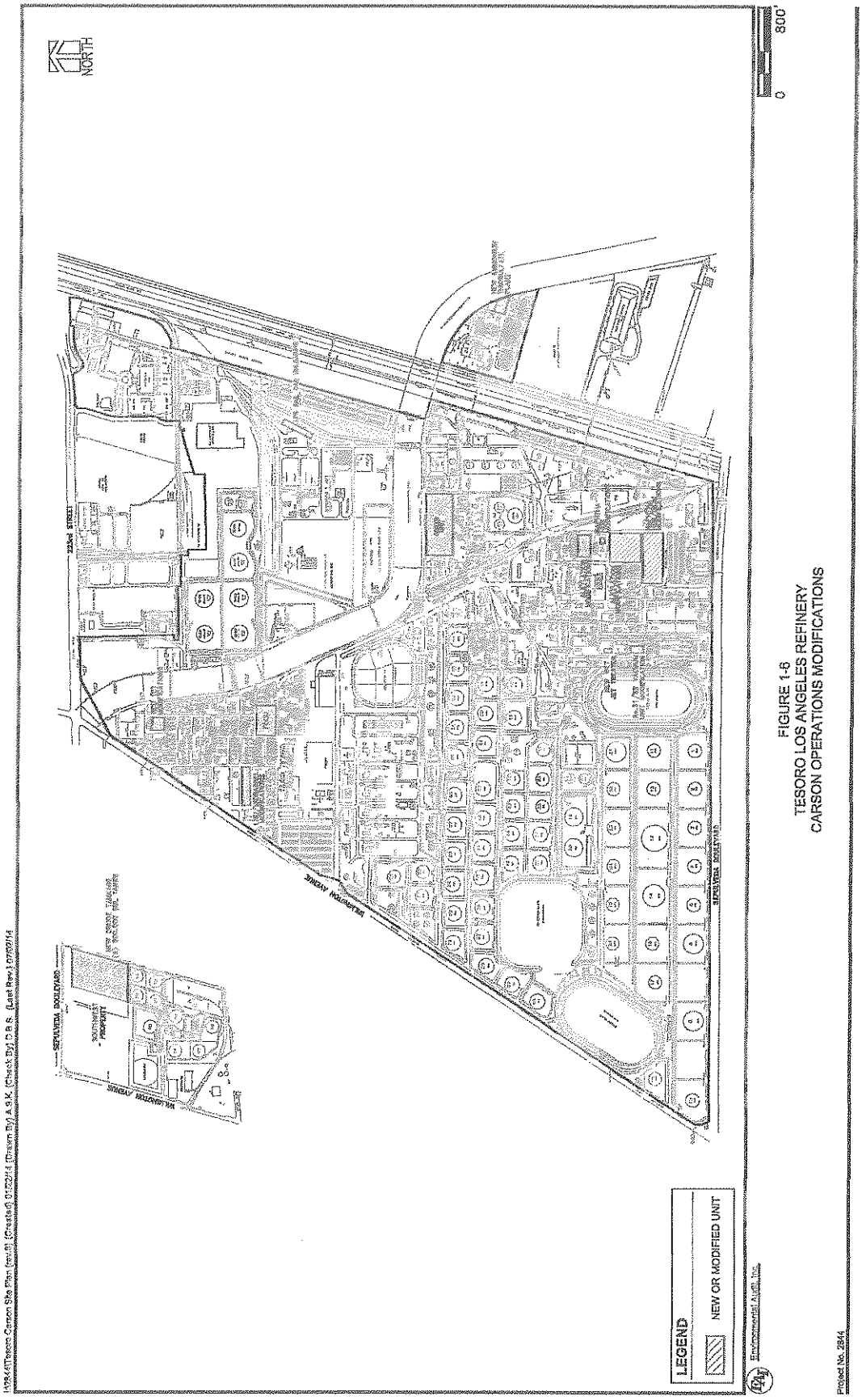

FIGURE 1-6
TESORO LOS ANGELES REFINERY
CARSON OPERATIONS MODIFICATIONS

the new Ammonium Thiosulfate Plant to produce fertilizer as a new product from the Refinery. The new Ammonium Thiosulfate Plant will include one air cooler, storage tanks, two drums, two filters, three scrubbers, a natural gas fired furnace, three heat exchangers, ten electrically driven pumps, one air blower, and associated piping and instrumentation.

1.4.1.8 New Sulfuric Acid Regeneration Plant

The proposed new Sulfuric Acid Regeneration Plant (SARP) will be constructed in Wilmington and will remove impurities from and recycle the Wilmington and Carson Operations spent sulfuric acid to produce fresh sulfuric acid. The SARP is sized for an approximate throughput of 400 tons/day of sulfuric acid production and will include three tanks, as many as eight electrically driven pumps, a natural gas fired 42 MM Btu/Hr Decomposition furnace, a 5 MM Btu/Hr Converter heater, a natural gas fired 20 MM Btu/Hr Process Air Heater, a waste heat steam generator, as many as four blowers, as many as eight heat exchangers, four towers, one reactor, one stripper, three scrubbers, one electrically driven compressor, three drums, and associated piping and instrumentation. The fresh sulfuric acid will be sent back to Wilmington and Carson Operations for reuse. Spent sulfuric acid is currently transported off-site for recycling at the Rhodia Sulfuric Acid Plant located at 20720 S. Wilmington Avenue in Carson, California. Installing the Sulfuric Acid Regeneration Plant will eliminate approximately 6,000 acid transport truck miles per month from public roadways compared to current operations. Instead of routing trucks to and from the Wilmington Operations to Rhodia, the trucks will be routed to and from the Carson Operations to the Wilmington Operations, a much shorter trip.

1.4.1.9 Wilmington Replacement Crude Tanks

Two new 300,000 barrel internal floating roof storage tanks (Tanks 300035 and 300036) will replace two existing 80,000 barrel fixed-roof storage tanks (Tanks 80035 and 80036) in the north tank area of Wilmington Operations. The two existing tanks currently store light and heavy crude oils as well as light and heavy gas oils. The new larger tanks will allow marine vessels to unload without undue delay, thereby reducing the time vessels are required to wait at anchorage until sufficient tankage is available for vessel discharge. This project will reduce the amount of time that vessels spend within the port and increase the amount of crude oil that can be stored, but will not increase annual Refinery crude oil throughput. In order to increase the crude oil throughput at the Refinery, there would need to be a modification to the units that initially process the crude oil, such as the Crude Units or the Delayed Coking Unit and no such modifications are included as part of the proposed project. This proposed project does not require any modifications to the Wilmington Operations Marine Terminal in the Port of Long Beach. The two new tanks are proposed to store light and heavy crude oils as well as light and heavy gas oils, in support of continuous operations. The scope of this part of the proposed project will include demolishing two existing storage tanks, installing two new larger tanks in the same location as the tanks being removed, replacing 5,000 feet of 12-inch diameter piping with 24-inch diameter piping at Wilmington, and modifying one existing tank (Tank 80038) by connecting it to a vapor recovery system. Tank 80038 and one

additional tank (Tank 80079) will require change of service permit modifications and annual throughput increases for each tank. The increase in annual throughput for each tank has no effect on the annual Refinery crude oil throughput.

1.4.2 CARSON OPERATIONS

In addition to the modifications at the Wilmington Operations, the proposed Tesoro Los Angeles Refinery Integration and Compliance Project also includes modifications at the Carson operations, resulting in a combined Refinery complex and improving the G/D production ratio. Additionally, equipment energy efficiency and heat recovery will be optimized for new or modified units, resulting in lower overall emissions. Proposed new equipment and modifications to existing equipment at the Carson Operations are shown in Figure 1-6 and described in the following subsections.

1.4.2.1 SCAQMD Rule 1114 Compliance – Coker Venting

The coker thermally cracks hydrocarbons in an insulated vessel, referred to as a coke drum. The cracked lighter product rises to the top of the coke drum and is drawn off. The heavier product remains and forms petroleum coke, a solid coal-like substance. Coke builds up in the coker and is removed by using a high pressure water jet. SCAQMD Rule 1114 requires the coke drum pressure to be reduced below two pounds per square inch gauge (psig) before opening the drum to the atmosphere. The proposed project includes modifying both No. 1 and No. 2 Cokers at the Carson Operations to comply with SCAQMD Rule 1114 by the required compliance deadlines. Compliance with Rule 1114 will require installation of additional equipment, such as vapor eductors and associated piping and instrumentation changes, to vent coke drum vapors to existing vapor recovery systems. This will enable the Refinery to comply with the Rule 1114 requirements and to keep the overall coke drum cycle time unchanged.

1.4.2.2 Nos. 1 and 2 Coker Bottom Head Modifications

Currently, the bottom heads of the coke drums in Nos. 1 and 2 Cokers are opened manually to remove the petroleum coke, requiring a worker to physically open the valves. The bottom heads of the coke drums will be upgraded with remotely operated valves. This is a safety project that will allow remote operation of the valves to enhance safety during the de-heading process to remove coke at the end of the coking cycle.

1.4.2.3 No. 51 Vacuum Unit Modifications

The Vacuum Unit is a separation process that uses distillation conducted under vacuum (less than atmospheric pressure) to lower the boiling temperature of a liquid and allow removal of light hydrocarbons without thermal cracking. The No. 51 Vacuum Unit will be modified to allow increased diesel production by reducing vacuum gas oil production by up to 8,000 BPD. The No. 51 Vacuum Unit modifications will include modifying the feed heater's Title V described duty from 300 to 360 MMBtu/Hr, installing one new ten-inch nozzle on the vacuum tower, as many as four new exchangers, two coalescers, two strainers, as many as two new electrically driven pumps, and associated piping and

instrumentation. No substantial heater modifications are required to achieve a firing rate of 360 MMBtu/Hr; however, burner tips may be replaced with a different design.

1.4.2.4 No. 52 Vacuum Unit Modifications

Similar to No. 51 Vacuum Unit, No. 52 Vacuum Unit is a separation process that uses distillation conducted under vacuum to lower the boiling temperature of a liquid and allow removal of light hydrocarbons without thermal cracking. The No. 52 Vacuum Unit will be modified, which will allow an increase in light gas oil production by decreasing vacuum gas oil production by approximately 2,000 BPD. The No. 52 Vacuum Unit modifications will include installing one new six-inch nozzle on the vacuum tower, as many as two new heat exchangers, two strainers, as many as two new electrically driven pumps, and associated piping and instrumentation.

1.4.2.5 FCCU Modifications

The FCCU cracks or converts heavy hydrocarbons into lighter, gasoline range hydrocarbons in the presence of fine particles of catalyst that are circulated throughout the process. Because of the shutdown of the FCCU at Wilmington Operations, the Carson Operations' FCCU will be modified to accept a portion of the Wilmington gas oil feed. The throughput capability of the Carson FCCU will remain unchanged. A new feed surge drum will be installed upstream of the Carson Operations' FCCU No. 2 Depropanizer tower to smooth out feed rate swings. No. 2 Depropanizer is part of the refinery overhead gas recovery system. Modification to the Carson Operations' FCCU will enable recovery of approximately 800 BPD of propane from a stream that is currently sent to the fuel gas system. The FCCU modifications will include installing a feed surge drum, as many as two pumps and two heat exchangers, and associated piping and instrumentation. New piping will be routed between the Wilmington Operations and the Carson Operations' FCCU.

1.4.2.6 New Wet Jet Treater

One new 50,000 BPD Wet Jet Treater will be installed at Carson Operations to remove mercaptans and to reduce the total acid number (TAN), or organic acid content, in jet fuel. The Wet Jet Treater sweetens jet fuel by converting mercaptans to disulfides, and reacting organic acid with caustic making naphthenic salts which are removed to reduce TAN. The Wet Jet Treater includes one mercaptan removal reactor, one TAN removal reactor, two product separators, one spent caustic loading facility, and as many as six associated electrically driven pumps, two salt dryers, two clay filters, and associated piping and instrumentation. Feed and fresh caustic will be routed to the new Wet Jet Treater and spent caustic and treated jet fuel will be routed to existing storage tanks. The spent caustic flow rate will be approximately three gallons per minute (gpm). Approximately one additional railcar load per week of spent caustic will be generated and recycled within the Carson Operations or shipped to the Gulf Coast for recycling. A decision on the final recycling location of caustic will be evaluated in the EIR.

1.4.2.7 HCU Modification

The HCU capacity will be increased by approximately 10 to 20 percent. The existing Carson Operations Hydrocracker (HCU (C)) cracks or converts mid-distillate and heavy hydrocarbons to lighter gasoline, jet, and diesel range material in the presence of catalyst, heat, and hydrogen. The process incorporates a hydrotreater which reduces the sulfur content. The HCU (C) will be modified to enable it to process the distillate recovered from the Nos. 51 and 52 Vacuum Units described above in Subsections 1.4.2.3 and 1.4.2.4, respectively. The existing reactor feed heater will be modified with new ultra-low NOx burners to reduce NOx emissions. The new burners will not increase the existing heater duty. The existing reactor heater outlet piping will be upgraded with higher alloy metallurgy.

Processing the recovered distillate feed will require increased hydrogen gas usage to comply with existing low sulfur diesel product specifications. The increased hydrogen gas capacity will be provided by increasing the recycle gas compressor speed. This portion of the proposed project will not result in an overall increase in hydrogen demand because hydrogen that is currently used by the FCCU (W) would no longer be required due to the shutdown of the FCCU (W), which eliminates the need to hydrotreat associated FCCU (W) products. Therefore, this portion of the proposed project will not require changes to hydrogen generation equipment at either of the refineries or by an offsite supplier.

The HCU (C) energy utilization efficiency will be improved by installing steam generators. The HCU (C) modification will include installing as many as two steam generators, an air cooler, as many as two electrically driven pumps, and associated piping and instrumentation.

1.4.2.8 LHU Modifications

The existing Carson Operations Light Hydrotreating Unit (LHU) is a process unit that removes impurities such as sulfur in various naphtha product streams. The LHU will be modified to more effectively remove sulfur from FCCU gasoline to comply with the federally mandated Tier 3 gasoline sulfur specifications. The LHU will process a higher sulfur feed material derived from existing fractionation equipment. The proposed modifications will include installing one new stripping steam nozzle on the stabilizer, as many as five new heat exchangers, one coalescer, one salt dryer, a condensate pot, and associated piping and instrumentation.

1.4.2.9 Naphtha HDS Unit Modification

The existing Carson Operations Naphtha Hydrodesulfurization (HDS) Unit is a process unit that reduces impurities such as sulfur in various naphtha product streams. The (HDS) will be modified with the installation of new equipment to allow removal of contaminants from unit feed and sulfur from pentanes. The existing Reactor Feed Heater will be retrofitted with new ultra-low NOx burners to reduce emissions. The new burners will not increase the existing heater duty. The modifications will include installing the

following new equipment: a reactor, a tower, a caustic scrubber, 2 knockout drums, a product coalescer, an air cooler, an accumulator, a condensate pot, as many as 11 new heat exchangers, four electrically driven pumps, and associated piping and instrumentation.

1.4.2.10 Naphtha Isomerization Unit Modifications

The existing Carson Operations Naphtha Isomerization Unit upgrades a pentane/hexane rich stream to make a higher value blending component for gasoline. The Naphtha Isomerization Unit will be modified to recover propane and heavier material from the Unit off-gas. The Naphtha Isomerization Unit modifications include addition of an off gas treater, a sponge tower, two reactor effluent flash drums, a heat exchanger, a pump and associated piping and instrumentation.

1.4.2.11 Alkylation Modification

The existing Carson Operations Alkylation Unit is a process unit that converts propylene (C3 olefins), butylenes (C4 olefins) into gasoline boiling range blendstock. Amylenes (C5 olefins) will be recovered from FCCU gasoline in an existing fractionation tower and converted to low vapor pressure gasoline in the modified Alkylation Unit. Unit capacity will remain unchanged. The modifications to process amlyenes will include repurposing the Depentanizer column, replacing one existing four inch nozzle with an eight-inch nozzle on the olefin feed surge drum, installing as many as six heat exchangers, one filter/coalescer, one truck loading rack, two electrically driven pumps, and associated piping and instrumentation. The modifications to process propylene and butylene will include the installation of a propylene chiller and associated piping and instrumentation.

1.4.2.12 Mid Barrel Distillate Treater

The existing Mid Barrel Unit incorporates a hydrotreater to remove sulfur from straight run diesel and converts it to ultra-low sulfur diesel. The Mid Barrel Unit will be modified to enable it to desulfurize heavy FCCU naphtha. Interconnecting piping to/from the LHU and Mid Barrel Distillate Treater will be installed. New bypass piping around a heater and the feed effluent heat exchanger will be installed.

1.4.2.13 Steam System Balance Modification

The Carson Operations steam system demand will increase due to compliance with federally mandated Tier 3 gasoline specifications and amylene alkylation. The increased steam demand will be met by a combination of: installing waste heat steam generators, generating more steam from the existing Cogen Units, and reducing steam demand from existing steam turbines.

1.4.2.14 New Crude Tankage

Up to six new 500,000 barrel floating roof crude oil storage tanks will be constructed adjacent to the Carson Crude Terminal. The new tanks will allow marine vessels to

unload crude oil without undue delay, thereby reducing the time vessels are required to wait at anchorage until sufficient tankage is available for vessel discharge. This project will reduce the amount of time marine vessels spend within the port, but will not increase Refinery crude oil throughput. This portion of the proposed project does not require any modifications to Marine Terminals in the Port of Long Beach. The scope of the work will include installing up to six new tanks, pipelines, as many as five electrically driven transfer pumps, and associated piping and instrumentation.

1.4.3 MODIFICATIONS TO SUPPORTING EQUIPMENT

1.4.3.1 Tankage

The proposed project will require modifications to the intermediate and product storage to facilitate the transfers between Carson and Wilmington Operations and better integrate the Tesoro Los Angeles Refinery. The scope of the work will include installing as many as nine pipelines and twelve electrically driven transfer pumps. Up to ten storage tanks total at both Caron and Wilmington Operations may require change of service permit modifications and/or annual throughput increases. Change of service permit modifications that may be required include changing descriptions of commodities in tanks from specific LPG or blend stocks (e.g., propane, reformate, heavy cracked naphtha, alkylate, etc.) to more generic terms such as LPG and gasoline blend stocks. Additionally, tank throughputs will be evaluated to determine if increased throughput will be required to accommodate any of the transfers between the Carson and Wilmington Operations. The tank permit modifications will require all affected tanks to comply with current BACT standards for fugitive emissions.

1.4.3.2 Interconnecting Piping

The proposed project will require interconnecting pipelines between the Wilmington and Carson Operations. The pipelines will be comprised of a pipe bundle of seven to 15 pipelines ranging from four inches to 12 inches in diameter. The pipelines are proposed to exit the Carson Operations and be routed underneath South Alameda Street exiting near the Carson Operations Coke Barn where the pipes would then be routed above ground. The pipelines would then be routed underneath East Sepulveda Boulevard to connect to the Wilmington Operations. The pipes would then be routed above ground on pipe racks or ground level pipe support into the respective product and supply manifolds within the Refinery. The bundle will require a 54-inch bore using horizontal direction drilling (HDD) and HDD would be used to bore underneath (approximately 80 feet in depth) South Alameda Street and East Sepulveda Boulevard. The approximate locations of the pipelines are shown on Figure 1-7.

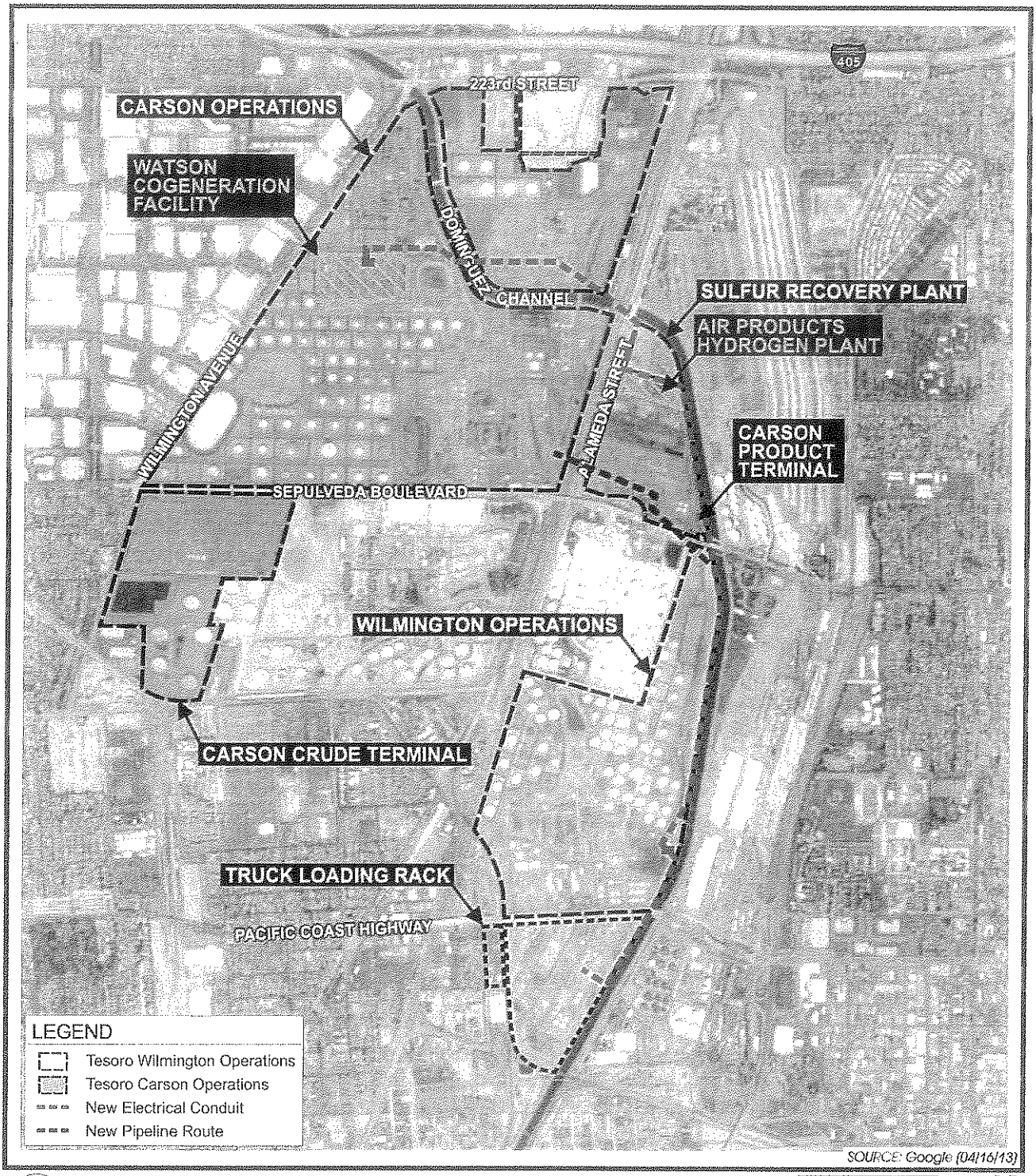

FIGURE 1-7
PROPOSED ELECTRICAL CONDUIT AND PIPELINE ROUTE
TESORO LOS ANGELES REFINERY

Project No. 2844
N:\2844\Interconnections (rev.2).cdr

1.4.3.3 Electrical Intertie Connection to Wilmington

Up to six new 69 kilovolt (Kv) electrical cables and 13.8 Kv cables will be routed underground and overhead from the Carson Watson Cogen facility located at the Carson Operations to the Sulfur Recovery Plant (see Figure 1-7) and Wilmington Operations. One new 69 Kv substation, and at least two new transformers with associated cabling, are proposed to be installed at the Watson Cogen facility. One new main substation with at least two transformers and associated switch gear and wiring will be installed in Wilmington. Containment dikes will be provided at all transformers within the Refinery. This portion of the proposed project will allow electricity generated at Carson Operations to be used at the Wilmington Operations.

1.4.3.4 Liquid Petroleum Gas (LPG) Rail Unloading

LPG Rail Car Unloading facilities will be modified at either Carson or Wilmington Operations to allow increased deliveries of approximately 4,000 BPD of Alkylation Unit feedstocks (LPG including propane, propylene, butane, butylene, etc.). LPG Rail Unloading facilities will be used to transfer LPG to the Refinery to supplement a portion of the Alkylation Unit feed lost by the closure of the FCCU at the Wilmington Operations. The LPG Rail Unloading facilities are restricted by SCAQMD-permit to only receive LPG. The FCCU provides feed to the alkylation unit and feedstocks to the alkylation unit are important in the production of CARB-compliant gasoline. Therefore, Tesoro will replace a portion of the alkylation feed through delivery of appropriate feedstocks. A determination of the actual location of the LPG Rail Car Unloading facilities will be made prior to the release of the Draft Environmental Impact Report for the proposed project, which will also include as part of the overall analysis potential adverse environmental impacts from this portion of the proposed project. LPG handling at the Refinery may increase by approximately ten railcars per day. Increased production of alkylate is critical for blending clean-burning gasoline due to its properties, such as low benzene and sulfur content and high octane content. The scope of work will include installing as many as four electrically driven transfer pumps, as many as six railcar unloading arms, and associated piping and instrumentation.

Butane is currently received from rail cars into pressurized tanks for use in the refining process. In the past, during the high Reid Vapor Pressure (RVP) gasoline season, during winter months, October through February, the Refinery has imported up to 11,000 BPD of butane. The LPG rail loading modifications will allow the Refinery to import up to about 15,000 BPD of LPG, resulting in the increase of about 10 railcars per day at the Refinery. It is expected that these additional railcars would be added onto existing trains that visit the Refinery. Therefore, no increase in the number of rail trips is expected, but there would be an increase in the number of railcars transferred to/from the Refinery.

1.5 PROJECT CONSTRUCTION SCHEDULE

Construction activities for the proposed project are expected to begin in the July 2015 and are expected to be completed by March 2017, based on preliminary project engineering. As shown in Figure 1-8, the preliminary construction schedule for each component of the

proposed project varies. The construction activities for most of the components are expected to overlap from about December 2015 to March 2017. Construction work shifts are expected to last about ten hours per day during most portions of the construction schedule. During normal construction periods, one work shift per day is expected. During Refinery turnaround periods (when the Refinery is shutdown), two work shifts are expected and work may be conducted 24 hours per day. The preliminary project schedule will be refined as more detailed engineering is completed.

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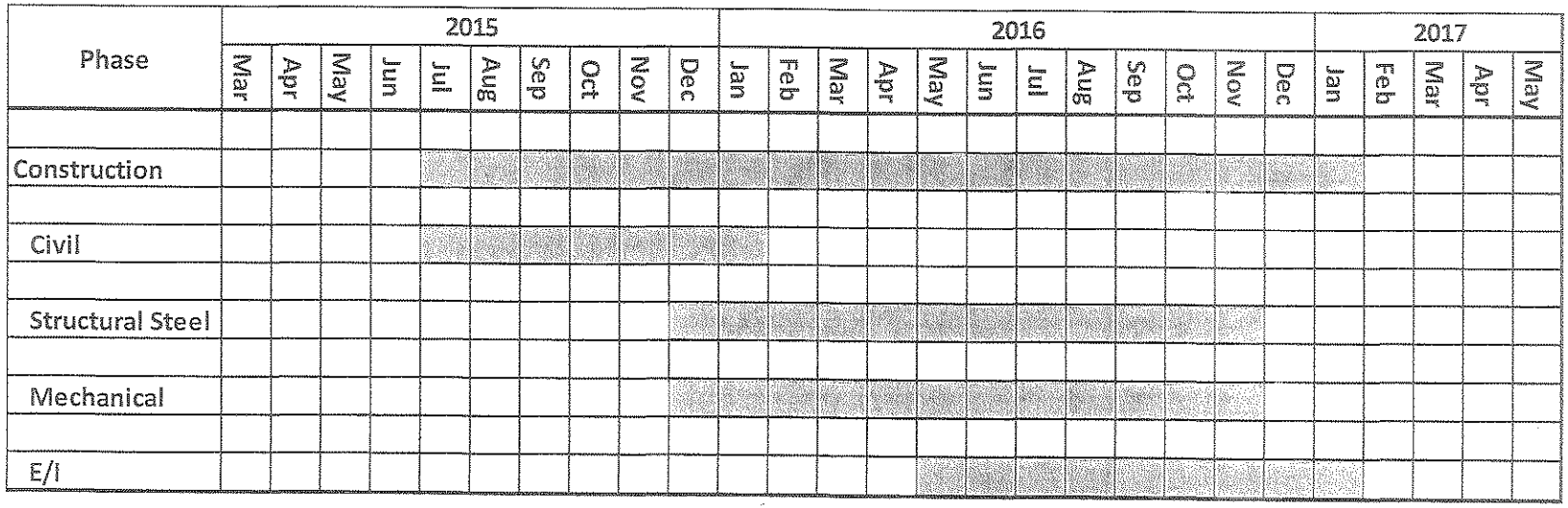
FIGURE 1-8
Tesoro Los Angeles Refinery Integration and Compliance Project
Preliminary Construction Schedule



2.1 INTRODUCTION

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

2.2 GENERAL INFORMATION

Project Title:	Tesoro Los Angeles Refinery Integration and Compliance Project
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
Lead Agency Contact Person and Phone Number:	Michael Krause, Program Supervisor (909) 396-2706
Project Sponsor's Name:	Tesoro Refining & Marketing Company, LLC
Project Sponsor's Address:	2350 E. 223rd Street Carson, CA 90810
Project Sponsor's Contact Person and Phone Number:	June Christman, Staff Engineer, Major Capital Synergy Project (310) 847-3631
General Plan Designation:	Heavy Industrial Uses; heavy manufacturing
Zoning:	M3-1 (Heavy Industrial); MH (heavy manufacturing)
Description of Project:	Tesoro is proposing the Los Angeles Refinery Integration and Compliance Project to better integrate the Tesoro Wilmington Operations with the Carson Operations (formerly BP Refinery). The proposed project is also designed to comply with the federally mandated Tier 3 gasoline specifications, and with State and local regulations mandating pollution reductions. The proposed project is expected to substantially reduce greenhouse gases, sulfur oxide, nitrogen oxide, carbon monoxide, and particulate matter emissions primarily by shutting down the Fluid Catalytic Cracking Unit at the Wilmington Operations and relinquishing relevant permits to the South Coast Air Quality Management District and also by reconfiguring the combined refinery complex, which is expected to improve the gasoline to distillate production ratio. Additionally, energy equipment efficiency and heater recovery will be optimized for new and modified units to minimize emission increases. While certain changes will increase emissions, they are expected to be offset by emission decreases occurring at the Refinery as part of the proposed project.
Surrounding Land Uses and Setting:	Land uses in the vicinity of the Refinery include oil production facilities, refineries, hydrogen plants, coke handling facilities, automobile wrecking/dismantling facilities, and other industrial operations. The Wilmington Operations are bounded to the north by Sepulveda Boulevard, to the west by Alameda Street; to the south by railroad tracks and to the east by the Dominguez Channel. The Wilmington Operations are bisected by Pacific Coast Highway. The Carson Operations are bounded to the north by E. 223rd Street, to the west by Wilmington Avenue, to the east by the Dominguez Channel and Alameda Street, to the south by the Sepulveda Boulevard.
Other Public Agencies Whose Approval is Required:	City of Los Angeles City of Carson U.S. EPA Alameda Corridor Transportation Authority

2.3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

CHAPTER 2

ENVIRONMENTAL CHECKLIST

2.4 DETERMINATION

On the basis of this initial evaluation:

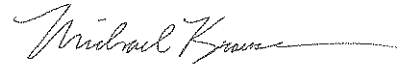
☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☑ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT (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: September 5, 2014 **Signature:** 

Michael Krause
Program Supervisor, CEQA
Planning, Rules, and Area Sources
Telephone: (909) 396-2706

2.5 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?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

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

I. a) and b) The nearest officially designated Scenic Highway to the Tesoro Los Angeles Refinery Integration and Compliance Project would be Route 2 (Angeles Crest Scenic Byway) near La Canada/Flintridge, in the northeastern portion of Los Angeles County (Caltrans, 2013). It is approximately 24 miles north from the Wilmington and Carson Operations to the most southern portion of Route 2. Therefore, the Refinery is not visible from Route 2 due to the distance as well as the presence of numerous large buildings of downtown Los Angeles, and the intervening topography (hills and mountains) between downtown Los Angeles and the beginning of Route 2 near La Canada/Flintridge.

The nearest roadway, which is eligible for State Scenic Highway Designation, to the Wilmington and Carson Operations is Route 1 (Pacific Coast Highway at State Route 19 – Lakewood

Boulevard, in Long Beach) in the southernmost portion of Los Angeles County. It is approximately five miles from the Refinery to the intersection of State Route 19, where Route 1 becomes eligible to become a State Scenic Highway. The Wilmington and Carson Operations are not visible from Route 1 at State Route 19 due to the distance, numerous structures, and topography between the two locations. There are no officially designated Scenic Highways or highways eligible for State Scenic Highway Designation in the vicinity of the Wilmington and Carson Operations. Because of the substantial distance between the proposed project and the aforementioned scenic highways, no significant adverse impacts to scenic highways are expected. In addition, there are no other scenic resources, such as trees, rock outcroppings, and historic buildings within the vicinity of the proposed project so no impacts to these resources would occur.

I. c) Construction activities at the Wilmington and Carson Operations are not expected to adversely impact views or other aesthetics resources since most of the construction activities, which include the operation of heavy equipment, are expected to occur in the operating portions of the existing refinery and industrial facilities, all within the existing boundaries of the Wilmington and Carson Operations. As a result, construction activities for the proposed project are not expected to be visible to most areas outside the facility, although some construction activities may be visible to the adjacent industrial areas, e.g., other refineries, railroad operations, truck terminal. Cranes would be required for equipment installation, some of which are expected to be about 150 feet tall and would be visible to surrounding properties. However, the cranes would be temporary, would be similar to the hundreds of other tall structures within the refinery, and would be removed after construction activities. No significant adverse aesthetic impacts during construction activities are expected.

The proposed project includes modifications and new equipment associated with the HCUs, CRU3, PSTU, HTU-1, HTU-2, HTU-4, Ammonium Thiosulfate Plant, Sulfuric Acid Regeneration Plant, LPG Rail Loading and Unloading facilities, Nos. 51 and 52 Vacuum Units, FCCU Modifications, Wet Jet Treater, LHU, Naphtha HDS, Alkylation Unit, No. 3 Reformer, Crude Tanks, and above and below-ground piping. Modifications and new refinery units will occur within the operating portions of the existing refinery. Stacks and towers associated with the new and existing units and flares are generally the tallest structures at a refinery.

Tall structures associated with the proposed modifications include towers, heater stacks contactors, scrubber stacks and vents, and new tanks are shown in Table 2-1. New structures at the Wilmington Operations would range in height from about 70 to 125 feet tall and will be located within the operating portions of the existing refinery. Other nearby existing structures within the Wilmington Operations that are not part of the proposed project range from 90 to 150 feet tall. New structures at the Carson Operations would range in height from about 40 to 120 feet tall. Other nearby existing structures within the Carson Operations that are not part of the proposed project range from about 50 to 180 feet tall. The ammonium thiosulfate plant would be constructed at the existing SRP facility (see Figure 1-4) and include the construction of an approximately 70-foot scrubber vent. Existing structures at the SRP are 170 feet tall and there are hundreds of existing stacks and towers visible at the two Operations. Although the proposed project includes some structures that are higher than existing adjacent units, the overall visual characteristics of the integrated Refinery are expected to be the same or similar to the existing

configuration at the two Operations. Further, installation of new or replacement of existing equipment at the facility, either inside or outside the existing structures, would not appreciably change the visual profile of the entire facility.

TABLE 2-1

Approximate Height of Largest Project Components

Description	Location	Height of Adjacent Structure[1]	Highest Project Component	
			Description	Size
Ammonium Thiosulfate Plant	Wilmington (SRP)	170 ft.	Scrubber Vent	3 ft. dia. x 70 ft. tall
Sulfuric Acid Regeneration Plant	Wilmington	150 ft.	Scrubber Stack	4 ft. dia. x 125 ft. tall
Wet Jet Treater	Carson	50 ft.	Contactors	5 ft. dia. x 40 ft. tall
Naphtha HDS	Carson	180 ft.	Tower	8.5 ft. dia. x 120 ft. tall
Crude Tanks	Carson Crude Terminal	60 ft.	500,000 bbl Crude Tanks	240 ft. dia. x 60 ft. tall
Crude Tanks	Wilmington	117 ft dia. x 42 ft tall [2]	Replaced Crude Tank	180 ft. dia. x 72 ft. tall

[1] These pieces of existing equipment are not part of the proposed project, but are shown here for comparison purposes only.

[2] Existing crude tanks, which are 42 feet tall by 117 feet diameter tanks, will be replaced with 72 feet tall by 180 feet diameter new tanks.

The proposed project includes constructing six new crude oil storage tanks at the Carson Crude Terminal. While the Carson Crude Terminal is located within an existing heavy industrial area, a residential area is located about 850 feet from the proposed new crude oil storage tanks. The Carson Crude Terminal area is currently used for storage of truck containers and is fenced (with an approximately eight-foot high fence) so that views of the area are limited. Existing storage tanks are located to the north and south of the Carson Crude Terminal. The existing storage tanks north of the Carson Crude Terminal are part of the Carson Operations and are 41 to 58 feet in height. The existing storage tanks south of the Carson Crude Terminal are part of the Phillips 66 Refinery and are about 50 feet in height. The new tanks are expected to be approximately 60 feet in height. The existing fencing is expected to block some of the views of the new storage tanks from the residential area so that the general view of the Carson Operations from the residential areas would remain unchanged. In light of these considerations, the portion of the proposed project at the Carson Operations is not expected to substantially degrade the existing visual character or quality of the site and its surroundings.

The proposed project would also include replacing two existing 80,000 barrel crude oil tanks (Tanks 80035 and 80036) at the Wilmington Operations, which are approximately 42 feet high and 117 feet in diameter with two 300,000 barrel tanks (Tanks 300035 and 300036) at the same

location. Each new fixed-roof internal floating roof tank would be approximately 72 feet high and approximately 180 feet in diameter. The new piping will be located at ground level within the Wilmington Operations in the same location as the existing pipeline and will have no discernible difference in look as compared to existing pipeline, which is not visible from offsite.

The Wilmington Operations are surrounded by other industrial land uses. Land uses adjacent to the Wilmington Operations are all heavy industrial and include oil production facilities, refineries, hydrogen plants, coke handling facilities, and automobile wrecking/dismantling facilities. The closest residential area to the proposed project is located about 2,000 feet (approximately 0.4 mile) from the southwest of the Wilmington Operations with other heavy industrial facilities situated between the project site and residential properties. Other facilities within the boundary of the Wilmington Operations, such as scrubber stacks and flares, are at heights of approximately 150 to 200 feet and exceed the height of the replacement tanks to be installed as part of the proposed project so installation of the two new tanks at the Wilmington Operations is not expected to change the overall profile of the facility.

The views of the Wilmington Operations from adjacent properties are not expected to significantly change because the proposed project facilities will blend in with the existing site facilities and operations. The two new tanks at the Wilmington Operations are expected to be visible from Alameda Street, which traverses through an industrial area. As such, the views of the new tanks will be similar and consistent with views of the other industrial facilities in the area. The new tanks are not expected to be visible to the closest residential area because of the distance (2,000 feet or approximately 0.4 miles) and the fact that other structures (e.g., a 6-foot high cinder block wall and a truck distribution facility adjacent to the residential area, which is approximately 40 feet high) are located between the residential area and where the new tanks will be situated within the Wilmington Operations. The intervening structures obscure most of the Wilmington Operations equipment except for the upper portions of the 200-foot high flares in the area of the proposed new storage tanks. Only the storage tanks from the existing asphalt plant operated by another company and located adjacent to the residential area are visible from the residential area. For the aforementioned reasons, the views of the new tanks would be consistent with the other industrial facilities in the area. In light of these considerations, the portion of the proposed project at the Wilmington Operations is not expected to substantially degrade the existing visual character or quality of the site and its surroundings.

I. d) In general, construction activities for the proposed project are not anticipated to require additional lighting because they are scheduled to take place primarily during daylight hours. However, when daylight hours are limited (i.e., winter months), or during Refinery turnarounds (when construction activities could occur 24-hours per day), temporary lighting may be required. Since the proposed project would be located within the boundaries of the existing refinery, additional temporary lighting, if needed, is not expected to be discernible from the existing permanent night lighting already associated with refinery operations.

Most construction activities at the Carson Operations would occur within the existing boundaries of the refinery. The modifications to Nos. 51 and 52 Vacuum Unit would be located the closest to a residential area and would be located approximately 4,000 feet away. A number of existing

storage tanks and existing industrial structures would block construction light sources within the Carson Operations from residential areas.

The Carson Crude Terminal consists primarily of a truck container storage yard and is currently lighted, with light poles approximately 100 feet high. The closest light poles are located about 775 feet from the residential areas. The construction of the crude oil storage tanks at the Carson Crude Terminal would be located approximately 850 feet from residents in an area that is currently lighted at night. Construction activities are not expected to require additional lighting in this area as the area is already lighted for nighttime truck activities.

Construction activities at the Wilmington Operations would occur within the existing boundaries of the Refinery. The existing crude oil storage tanks and HTU-4, which would be modified as part of the proposed project, are located closer to a residential area (west of the Wilmington Operations) than any other portion of the proposed project, approximately 1,500 feet away. This area of the Wilmington Operations is already lighted for nighttime activities and construction activities are not expected to require additional light sources. The existing crude oil storage tanks are currently lighted and no new light sources are expected to be required for the construction of the replacement crude oil storage tanks at the Wilmington Operations. Further, a number of existing storage tanks and existing industrial structures would interfere with construction light sources between the HTU-4 and residential areas.

Lighting could also be required along the pipeline routes, if construction activities are required at night, to minimize traffic impacts. The proposed location of the new pipeline would cross under Alameda Street and Sepulveda Boulevard and is within a heavy industrial area. The closest residents to the pipeline construction area are over 2,500 feet east and separated by other industrial structures (e.g., storage tanks, rail and transportation related activities, commercial buildings, etc.). The streets in the vicinity of the pipeline construction activities are already lighted at night including, Alameda Street and Sepulveda Boulevard. Some of the existing nearby industrial uses, e.g., the Intermodal Container Transportation Facility (ICTF) operate 24 hours per day and are lighted at night during night time operations. Any temporary lighting would be required to point toward the interior to limit the potential for offsite glare in accordance with the City of Los Angeles Planning and Zoning Code §93.0117 and the City of Carson Municipal Code §9147.1.

New lighting may be provided as necessary in accordance with applicable safety standards on new structures constructed as a result of the proposed project. If installed, any new lighting is expected to be consistent with existing lighting at the refinery and, therefore, not noticeable outside the integrated Refinery boundaries. However, any new lights are not expected to create new light and glare impacts to areas adjacent to the integrated Refinery due to the industrial nature of the surrounding area and the fact that refineries and most other industrial facilities are typically lighted at night for safety reasons. Specifically, modified equipment that are part of the proposed project, would continue to use the existing lighting for that equipment, while installation of new equipment will require similar lighting requirements as the existing equipment, e.g., the new Sulfuric Acid Plan and PSTU will be located within the existing operating portions of the Wilmington Operations so that substantial new lighting is not expected to be required. The area of the proposed new crude oil tanks at the Carson Crude Terminal is

currently lighted and lighting associated with the tanks is not expected to differ from the existing lighting. Further, lighting for tanks, is minimal (i.e., less bright) and used for safety/security lighting only as workers do not generally work in the tank farm during the evening hours. Therefore, no significant adverse light and glare impacts are expected from implementing of the proposed project.

Conclusion

Based on the above considerations, no significant adverse impacts to aesthetic resources are expected to occur as a result of construction and operational activities that would be undertaken in order to complete the proposed project. Since no potentially significant adverse impacts to aesthetic resources were identified, no further evaluation will be required in the EIR.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES.** Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☑
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c)	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))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forestry 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

II. a), b), c), and d) The proposed project would not involve construction or operation outside of the existing boundaries of the integrated Refinery or other offsite industrial areas. The proposed project would be consistent with the heavy industrial zoning requirements for the integrated Refinery, including the Carson Crude Terminal. No agricultural or forestry resources or operations, including Williamson Act contracts, are located within or near the boundaries of the Wilmington or Carson Operations. No agriculture or forestry resources would be adversely affected by construction or operation activities from the proposed project because it would be implemented within the existing Refinery of other adjacent industrial areas (e.g., Alameda Corridor) and adjacent industrial areas that support Carson and Wilmington Operations. Therefore, the proposed project would not result in any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract.

Since the proposed project would occur within or adjacent to the boundaries of the Wilmington and Carson Operations, there are no provisions in the proposed project that would affect land use plans, policies, or regulations related to agricultural or forestry resources. Land use and other planning considerations are determined by local governments and no land use or planning requirements relative to agricultural resources will be altered by the proposed project. For these same reasons, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.

Conclusion

Based on the above considerations, no significant adverse impacts to agricultural and forestry resources are expected to occur as a result of construction and operational activities that the Tesoro Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse agricultural or forestry resources impacts were identified, no further evaluation will be required 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?	☐	☐	☐	☑
b)	Violate any air quality standard or contribute to an existing or projected air quality violation?	☑	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☑	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☑	☐	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
f)	Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☐	☑
g)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☑	☐	☐	☐
h)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☑	☐	☐	☐

Significance Criteria

To determine whether or not air quality criteria pollutants, greenhouse gas (GHG), and toxic emission impacts from implementing the proposed project are significant, impacts will be evaluated and compared to the criteria in Table 2-2. If the preliminary analysis of the proposed project shows that overall emissions have the potential to equal or exceed any of the thresholds in Table 2-2, these potential impacts will be further evaluated in the EIR.

TABLE 2-2

Air Quality and Greenhouse Gas (GHG) 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
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	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 ≥ 10 in 1 million Chronic and Acute Hazard Index ≥ 1.0 (project increment) Cancer Burden ≥ 0.5 excess cancer cases (in areas ≥ 1 in 1 million)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000MT/yr CO_2eq 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)	
PM10 24-hour annual average	10.4 $\mu g/m^3$ (construction)[e] and 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
PM2.5 24-hour average	10.4 $\mu g/m^3$ (construction)[e] and 2.5 $\mu g/m^3$ (operation)	
SO_2 1-hour average 24-hour average	0.255 ppm (state) and 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 $\mu g/m^3$ (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 $\mu g/m^3$ (state) 0.15$\mu g/m^3$ (federal) 1.5$\mu g/m^3$ (federal)	

a) Source: SCAQMD Air Quality Significance Thresholds, www.aqmd.gov/ceqa/handbook/signthres.pdf.
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; $\mu g/m^3$ = microgram per cubic meter; lbs/day = pounds per day; MT/yr CO_2eq = metric tons per year of CO_2 equivalents, NO_2 = nitrogen dioxide, ≥ greater than or equal to, > = greater than

Discussion

III. a) and f) The 2012 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 provided to the Southern California Association of Governments (SCAG), the agency that develops regional growth forecasts, and they are then used to develop future air quality forecasts for the 2012 AQMP. Development consistent with the growth projections in the City of Carson and City of Los Angeles General Plans is considered to be consistent with the 2012 AQMP. The City of Carson and City of Los Angeles General Plans designate the Wilmington and Carson Operations as heavy industrial so the proposed project is consistent with this land use. The proposed project would be consistent with the City of Carson and City of Los Angeles General Plans for the following reasons:

- As indicated in the Population and Housing and Transportation and Traffic sections, the estimated 700-800 construction workers are expected to be drawn from the existing labor pool in the southern California area.

- As indicated in the Population and Housing and Transportation and Traffic sections, the proposed project is not expected to require additional employees, so there would be no additional worker-related traffic generated during operation.

- Because the proposed project would not require additional workers during operations, it would not increase the demand for additional housing or recreational facilities.

Therefore, because the proposed project would not exceed growth projections in the City of Carson and City of Los Angeles General Plans and would not require a General Plan amendment, the proposed project would be considered consistent with the City of Carson and City of Los Angeles General Plans. Since the proposed project would be consistent with the City of Carson and City of Los Angeles General Plans, it would be consistent with the 2012 AQMP.

Additionally, the proposed project will be required to comply with applicable SCAQMD requirements for new stationary sources. Compliance with established rules ensures the integrity of the emission inventories in the 2012 AQMP. For example, new and modified emission sources associated with the proposed project would be subject to the SCAQMD Regulation XIII - New Source Review, will be required to be equipped with Best Available Control Technology (BACT), and will require Emission Reduction Credits (ERCs) to offset any emission increases greater than one pound per day. The proposed project will also be required to comply with prohibitory rules, such as SCAQMD Rule 403 - Fugitive Dust and stationary source rules such as Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants, as well as a number of other federal, state and local air quality rules and regulations. Finally, a portion of the proposed project is specifically designed to comply with federally mandated Tier 3 gasoline specifications.

Based the analysis above, the proposed project is not expected to conflict with or obstruct implementation of the applicable air quality plan or diminish an existing air quality rule or future compliance requirement resulting in a significant increase in any air pollutants. Therefore, these topics will not be further analyzed in the EIR.

III. b) The proposed project has the potential to increase criteria pollutants and toxic air contaminants (TACs) emissions. To minimize potential emission increases, the proposed project will be required to comply with all relevant SCAQMD rules and regulations.

The SCAQMD makes significance determinations for construction impacts based on the maximum or peak daily emissions during the construction period, which provides a "worst-case" analysis of the construction emissions. Construction activities will not all occur at the same time but rather over time as depicted in Figure 1-6. Construction emissions are expected from the following equipment and processes:

- Onsite Construction Equipment (dump trucks, cranes, excavator, etc.);
- Onsite and Offsite Vehicle Emissions, including Delivery Trucks and Worker Vehicles;
- Onsite Fugitive Dust Associated with Site Construction Activities; and,
- Onsite and Offsite Fugitive Dust Associated with Travel on Unpaved and Paved Roads.

Construction activities are expected to occur in several locations throughout the Wilmington and Carson Operations (see Figures 1-3 and 1-4) and have the potential to generate emissions of CO, NOx, volatile organic compounds (VOCs), SOx, PM10, and PM2.5. Construction activities include grading, setting foundations, equipment installation, tie-in connections to existing systems, pipeline/conduit construction, etc. Construction-related activities would generate emissions from worker vehicles, trucks, and construction equipment, as well as fugitive dust associated with grading and land disturbance. 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 shutting down of the FCCU at the Wilmington Operations and relinquishing all relevant FCCU permits to the SCAQMD. The shutdown of the FCCU will result in emission reductions associated with the FCCU regenerator, CO Boiler, Steam Superheater, Fresh Feed Heater, Hot Oil Loop Reboiler, and fugitive emission components. The proposed project would also add emission sources to the Refinery including emissions from the PSTU, Ammonium Thiosulfate Plant, Sulfuric Acid Regeneration Plant, LPG Rail Loading and Unloading, Wet Jet Treater, new and modified storage tanks, as well as exhaust and fugitive emissions from heaters, pumps, valves, and flanges. The proposed project would also result in an increase in steam demand that would need to be supplied by combustion sources. The SCAQMD requires the installation of BACT pursuant to Rule 1303 for new, modified, and relocated emission sources within the South Coast Air Basin, which, generally, is expected to result in the lowest achievable emissions rate for affected equipment. Nonetheless, because of the scope of the proposed project, impacts on air quality during the operational phase are potentially significant and will be evaluated in the EIR.

The proposed project may also alter the transport of LPG from the Refinery by rail, as well as the transport of sulfuric acid and ammonium thiosulfate by truck. Potential emission impacts related to changes in transport will be evaluated in the EIR.

III. c) Because the proposed project has the potential to generate significant adverse project-specific construction and operational air quality impacts, it has the potential to generate significant adverse cumulative air quality impacts. Since the project-specific air quality impacts may be significant, they may contribute to impacts that are cumulatively considerable. Therefore, cumulative air quality impacts are potentially significant and will be evaluated in the EIR.

III. d) New emission sources are associated with the proposed project that could potentially be new sources of TAC emissions (e.g., combustion emissions, ammonia slip emissions, etc.). The proposed project will be subject to the requirements of SCAQMD Rule 1401 - Toxic Air Contaminants. The cancer and non-cancer health risk impacts of the TAC emissions from new equipment at the Carson and Wilmington Operations, with particular focus 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, have the potential to exceed the significance threshold identified in Table 2-2 and, therefore, will be evaluated in the EIR. Although the shutdown of the FCCU at Wilmington Operations will result in the elimination of TAC emissions from this piece of equipment, this effect will also be evaluated in the EIR.

III. 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. Hydrogen sulfide (a gas) is typically generated at the Refinery as part of the process to remove sulfur impurities from crude oil. Hydrogen sulfide gas is treated in the Sulfur Recovery Units where it is converted to solid elemental sulfur, which has no odor. The proposed project is not expected to require modifications to the Sulfur Recovery Units or alter the handling and treatment of hydrogen sulfide. Natural gas will be the combustion fuel for all fired emission units for the proposed project. The sulfur content of natural gas is stringently regulated by SCAQMD Rule 431.1 and, therefore, contains only trace amounts of sulfur compounds. Further, objectionable odors are not expected since the natural gas supply system must be operated as a closed system to prevent safety hazards (e.g., potential fires). Finally, the Ammonium Thiosulfate Plant would be equipped with BACT to limit emissions, which would also minimize odors.

The Refinery maintains a 24-hour environmental surveillance effort where operators are trained to report odors so that the source can be identified and remedied promptly, which helps to minimize the frequency and magnitude of odor events. In addition, all new or modified components would be required to comply with BACT requirements as well as existing SCAQMD rules and regulations, including Rule 402 - Prohibition of Nuisances. As a result, no noticeable increases in odors are expected from the new equipment that is part of the proposed project for the reasons given above. Therefore, no significant odor impacts are expected from constructing and operating the proposed project. Potential odor impacts from the proposed project will not be further analyzed in the EIR.

III. g) and h) The proposed project will result in the shutdown of the FCCU at the Wilmington Operations. The shutdown of the FCCU would result in substantial GHG emission reductions currently associated with the FCCU regenerator, CO Boiler, Steam Superheater, Fresh Feed Heater, Hot Oil Loop Reboiler, Startup Heater and fugitive emission components. Therefore, the shutdown of the FCCU would eliminate GHG emissions, as well as criteria pollutant and TAC emissions, from this and ancillary combustion sources. The proposed project also includes the construction of additional combustion sources. The new combustion sources would generate new GHG emissions. Consequently, the overall effects of shutting down the FCCU and installing new equipment have the potential to exceed the GHG emissions significance threshold in Table 2-2 and will be evaluated in the EIR. The Refinery is subject to federal and state GHG emission regulations (e.g., Assembly Bill 32). Potential impacts relating to compliance with GHG plans and reduction regulations will be evaluated in the EIR.

Conclusion

Based on the above considerations, construction and operation of the proposed project is not expected to: generate significant adverse impacts to the applicable air quality plan; conflict with or diminish an air quality rule or future compliance requirement, policy, or regulation adopted for the purpose of reducing emissions; or create objectionable odors.

Project-specific and cumulative adverse air quality impacts associated with increased emissions of air contaminants (criteria air pollutants, greenhouse gases, and toxic air contaminants) during the construction and operational activities 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?	☐	☐	☐	☑
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c)	Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e)	Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Significance Criteria

The 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

IV. a), b), c), and d) The proposed project would be located in a heavy industrial area, entirely within the existing boundaries of the Wilmington and Carson Operations or within already developed existing industrial areas. The Wilmington and Carson Operations have been fully developed and are essentially void of vegetation with the exception of some decorative landscape vegetation near the administration buildings. Landscape plants and growth of vegetation onsite are limited to administration buildings for fire prevention purposes. Further, the Carson Crude Terminal is paved and currently used primarily for truck container storage and is devoid of vegetation, except for landscape vegetation along the perimeter of the property, which will not be impacted by the proposed project. The pipeline route will also be located within existing industrial properties and street/railroad rights-of-way which are already graded, paved and developed, and devoid of vegetation.

A review of the California Natural Diversity Data Base Map for the Long Beach Quadrangle available online did not reveal records of special status species at or in the near vicinity of the Refinery. Based on the disturbed nature of the site, the industrial nature of the proposed and existing activities at the Refinery, the industrial nature of the surrounding property, and records documenting the absence of special status species, no specific wildlife surveys were considered necessary and, thus, none were conducted. No native vegetation is located at the proposed project sites and these areas are currently used for refining operations. For these reasons, the proposed project is not expected to have a significant adverse effect, either directly or through habitat modifications, on any species identified as a special status species. Further, the proposed project would not have an adverse effect, either directly or indirectly or through habitat modifications, on any sensitive biological species, riparian habitat, or other sensitive natural habitat since no such habitat exists at the Refinery due to the developed and industrial nature of the site.

The proposed project would not result in the addition or elimination of water ponds that could be used by animals or migratory birds. Further, the proposed project would not adversely affect federally protected wetlands as defined in §404 of the Clean Water Act as no such wetlands are

located at or adjacent to the Refinery. The Dominguez Channel is a concrete lined flood control channel adjacent to the Refinery. The electrical conduit associated with the proposed project would cross the Dominguez Channel on an existing pipe bridge and on the existing Alameda Street bridge. No construction activities would occur within the Dominguez Channel. There are no significant plant or animal resources, locally designated species, natural communities, wetland habitats, or animal migration corridors that would be adversely affected by the proposed project. There are no rare, endangered, or threatened species at the Refinery or adjacent industrial areas as native vegetation has been removed. Because the area in and near the Refinery is devoid of native habitat, impacts to other, non-listed species are not expected. Therefore, the proposed project would have no direct or indirect impacts that could adversely affect: plant species or habitats, sensitive natural communities, wetlands, animal species or the habitats on which they rely, or the movement of native or migratory species.

IV. e) and f) The proposed project is not envisioned to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by the proposed project as further discussed in Section X – Land Use and Planning. Additionally, the proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because all activities associated with the proposed project would occur within an existing heavy industrial area devoid of native habitat, which is not subject to a Habitat or Natural Community Conservation Plan.

The SCAQMD, as the Lead Agency for the proposed project, has found that, when considering the record as a whole, there is no evidence that the proposed project would have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends. Accordingly, based upon the preceding information, the project will have no effect on fish and wildlife under §753.5 (d), Title 14 of the California Code of Regulations.

Conclusion

Based on the above considerations, no significant adverse impacts to biological resources are expected to occur as a result of construction and operational activities that the Refinery would undertake in order to implement the proposed project. Since no potentially significant adverse biological resources impacts were identified, no further evaluation will be required 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?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☑	☐
c)	Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☑	☐
d)	Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☑	☐

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

V. **a)** CEQA Guidelines state that "generally, a resource shall be considered '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" (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of Historic Places[1] unless they can be shown to be exceptionally important). The buildings, structures, and equipment associated with the proposed project are not listed on registers of historic resources, and do not meet any of the eligibility criteria presented above (e.g., associated with historically important events or people, embodying distinctive characteristics of a type, period, or method of construction), and would not be likely to yield historically important information. The only components of the proposed project that are being removed are old Refinery structures including columns, fans, towers, heat exchangers, pumps, etc. None of these structures meet the aforementioned historical significance criteria. Therefore, no significant adverse impacts to historic cultural resources are expected as a result of implementing the proposed project.

V. b), c), and d) All construction and operational activities that would occur as a result of the proposed project will occur within the existing Wilmington and Carson Operations and existing industrial areas. The proposed project would be consistent with the heavy industrial zoning.

Based on previous studies, the area near the Dominguez Channel was used by the Tongva/Gabrielino people. Cultural studies found a Tongva/Gabrielino village site and a large cemetery exposed in 1998 near the Carson Operations (former BP Refinery) (east of the Dominguez Channel) (SCAQMD, 2001). In 1999 construction activities at the Wilmington Operations uncovered human remains within the confines of the Refinery near the eastern property line, just north of Pacific Coast Highway and adjacent to the Dominguez Channel. The human remains were determined to be of Native American origin. Construction activities were suspended until all the remains were uncovered and a complete site investigation could be conducted. Additional site investigations did not uncover any additional human remains (Applied Earth Works, 1999). Since 2001 for the Carson Operations and 1999 for the Wilmington Operations, there have been a number of projects involving construction on site that have not uncovered archaeological or paleontological resources or human remains.

The entire active portions of the Wilmington and Carson Operations have been previously graded and developed. Proposed project activities will occur in areas of the integrated Refinery and Carson Crude Terminal where the ground surface has already been disturbed, within or adjacent to existing refining and other units, and this past disturbance reduces the likelihood that previously unknown cultural resources will be encountered. Further, the Refinery site does not contain known paleontological resources and thus the proposed project also is not expected to impact any sites of paleontological value.

The construction of the pipelines would occur in areas which have been previously graded and developed and which are located adjacent to existing pipelines. For example, a small portion of

[1] The eligibility criteria of the California Register criteria are modeled on those of the eligibility criteria of the National Register of Historic Places.

the new pipelines would be constructed underneath Alameda Street and Sepulveda Boulevard and would be located near other existing pipelines. The pipelines would run above ground within the confines of the integrated Refinery. Therefore, cultural resources are not expected to be impacted during pipeline construction activities.

While the likelihood of encountering cultural resources is low, there is still a potential that additional buried archaeological resources may exist. Any such impact would be eliminated by using standard construction practices and complying with state law including Public Resources Code § 21083.2 and CEQA Guidelines § 15064.5, which require the following, in the event that unexpected sub-surface resources were encountered:

- Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if this occurred;

- Monitoring of subsurface earth disturbance by a professional archaeologist and a Gabrielino/Tongva representative if cultural resources are exposed during construction;

- Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction, so the find can be evaluated and mitigated as appropriate; and,

- As required by State law in Public Resources Code §§ 5097.94 and 5097.98, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

Conclusion

Based upon the above considerations, no significant adverse impacts to cultural resources are expected to occur as a result of construction and operational activities that would be undertaken in order to complete the proposed project. Since no potentially significant adverse cultural resources impacts were identified, no further evaluation will be required in the EIR.

		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?	☐	☐	☐	☑
b)	Result in the need for new or substantially altered power or natural gas utility systems?	☐	☐	☑	☐
c)	Create any significant effects on local or regional energy supplies and on requirements for additional energy?	☐	☐	☑	☐
d)	Create any significant effects on peak and base period demands for electricity and other forms of energy?	☐	☐	☑	☐
e)	Comply with existing energy standards?	☐	☐	☐	☑

Significance Criteria

The impacts to energy 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

VI. a) and e) The proposed project is not expected to conflict with any adopted energy conservation plan or existing energy standard. There is no known energy conservation plan or existing energy standard that would apply to either of the existing Wilmington and Carson Operations or the proposed project as it primarily involves new and modified equipment that will allow the Refinery to operate more efficiently. The FCCU at Wilmington Operations will be shut down, reducing the energy requirements in this portion of the integrated Refinery. As explained in the following section, heat exchangers will be added to a number of units to increase overall energy efficiency. As concluded in the discussion in section VI. b), c), and d) below, the potential additional energy demand that may be needed to implement proposed project construction and operational activities is shown to be less than significant.

VI. b), c), and d) It is not expected that natural gas-fired or electrically-powered construction equipment would be used (with the exception of electric welders); thus, there would be no need for new or substantially altered power or natural gas utility systems during construction of the proposed project. Construction of the proposed project is estimated to require about 64,000 gallons of diesel fuel per year. In 2011, the Los Angeles region used 4,892 million gallons of gasoline (CEC, 2013a) and 281 million gallons of diesel (CEC, 2013b). The fuel associated with construction of the entire project represents less than one percent of the total annual demand in the Los Angeles region, and a negligible fraction of the total use of fuel in California. The construction activities are not expected to result in an increase in gasoline as the construction equipment is predominately diesel fueled. Therefore, less than significant adverse impacts on energy are expected during the construction period. Additionally, no permanent employees are anticipated to be needed to operate the Refinery once construction is completed, so no additional demand for gasoline fuel is expected.

Refinery fuel gas and natural gas required to operate new and modified equipment associated with the proposed project at the Wilmington and Carson Operations would continue to be supplied by the existing facility utility system and Southern California Gas Company. The FCCU at Wilmington Operations will be shutdown, reducing the energy requirements in this portion of the integrated Refinery. Heat exchangers will be added to a number of units to increase overall energy efficiency. Heat exchangers allow waste heat to be transferred from one location to another location where heat is required, thus acting to "reuse" already generated heat and increasing heat efficiency within the Refinery, as well as reducing the use of cooling water. To operate new and modified equipment, the proposed project is expected to increase natural gas consumption by approximately 2,628 million standard cubic feet per year (MMscf/yr). Southern California Gas Company delivered 2,834 million standard cubic feet per day (MMscf/d) (about 1,034,410 million standard cubic feet per year) to users in southern California in 2012 (CGEU, 2013). The additional yearly usage of natural gas required to operate the equipment associated with the proposed project would comprise approximately 0.003 percent of the total gas delivered to the region, which is considered to be less than significant. Since the natural gas demand for the integrated Refinery is expected to be less than significant, the proposed project will not result in the need for new or substantially altered natural gas utilities or adversely affect local or regional natural gas supplies. Similarly, the proposed project would not adversely affect peak or base period natural gas demand. Thus, less than significant adverse impacts on fuel gas and natural gas are expected during operation.

Relative to electricity supply, the Wilmington Operations are currently served by Los Angeles Department of Water and Power (LADWP) and the Carson Operations are are served by Southern California Edison (SCE). Currently, the Wilmington and Carson Operations each operate separate onsite cogeneration units to generate electricity for operations at each site. The proposed project includes the construction of an electrical conduit from the Watson Cogen Unit located at the Carson Operations to the Wilmington Operations. The cogeneration units at the Wilmington Operations as well as the Watson cogen currently generate 385 megawatts (MW) of electricity. Current power production capacity by these cogeneration units would be sufficient to supply total electricity demand at the integrated Refinery. In addition, the Watson Cogen is

expected to have the capacity to generate more electricity than is needed by the integrated Refinery, which would continue to be sold back to SCE for use by others on the electrical grid.

The proposed project is expected to require an additional 19 megawatts (MW) of electricity to operate additional pumps, heaters, coolers and blowers. While electricity demand by the integrated Refinery is expected to increase, the additional electricity would come entirely from the existing cogeneration units (primarily Watson Cogen). While this additional use would not require the purchase of electricity from LADWP or SCE, it would reduce the amount of power available for distribution to the electrical grid. Since the integrated Refinery is expected to be completely self sufficient with regard to electricity generation, the proposed project will not result in the need for new or substantially altered electricity utilities or affect local or regional electricity supplies. The entire 19 MW of electricity expected to be required by the proposed project would come from onsite cogeneration units, so no increase in electricity is required from public utilities. Similarly, the proposed project would not adversely affect peak or base period electricity demand. Thus, less than significant adverse impacts on electricity generation and demand are expected during operation.

Conclusion

Based on the above considerations, no significant adverse impacts to energy resources are expected to occur as a result of construction and operational activities that Tesoro would undertake in order to complete the proposed project. Similarly, the proposed project would not utilize non-renewable energy resources in a wasteful or inefficient manner. Therefore, since no potentially significant adverse energy impacts were identified, no further evaluation will be required 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:	☐	☐	☑	☐
	• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☑
	• Strong seismic ground shaking?	☐	☐	☑	☐
	• Seismic–related ground failure, including liquefaction?	☐	☐	☑	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c)	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☑	☐
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☑	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑

Significance Criteria

The 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

VII. a) The proposed project is located within a seismically active region. The most significant potential geologic hazard is estimated to be seismic shaking from future earthquakes generated by active or potentially active faults in the region. Table 2-3 identifies those faults in the southern California region that could affect the proposed project in terms of potential for future seismic activity. Seismic records have been available for the last 200 years, with improved instrumental seismic records available for the past 50 years. Based on a review of earthquake data, most of the earthquake epicenters occur along the Whittier-Elsinore, San Andreas, Newport-Inglewood, Malibu-Santa Monica-Raymond Hills, Palos Verdes, Sierra Madre, San Fernando, Elysian Park-Montebello, and Torrance-Wilmington faults (see Jones and Hauksson, 1986). All these faults are elements of the San Andreas Fault system. Past experience indicates that there has not been any substantial damage, structural or otherwise to the Wilmington and Carson Operations as a result of earthquakes. Table 2-4 identifies the historic earthquakes over magnitude 4.5 in southern California, between 1915 and the present, along various faults in the region.

Table 2-3

Major Active or Potentially Active Faults in Southern California

Fault Zone	Fault Length (Miles)	Maximum Credible Earthquake	Maximum Acceleration (G)
Malibu-Santa Monica-Raymond Hill	65	7.5	0.49
Newport-Inglewood	25	7.0	0.42
Northridge	12	6.7	0.16
Palos Verdes	20	7.0	0.24
San Andreas	200+	8.25	0.21
San Jacinto	112	7.5	0.11
San Fernando	8	6.8	0.17
Sierra Madre	55	7.3	0.23
Whittier-Elsinore	140	7.1	0.46
Elysian Park – Montebello	15	7.1	0.27

G = acceleration of gravity.

Table 2-4

Significant Historical Earthquakes in Southern California

Date	Location (epicenter)	Magnitude
1910	Elsinore	6.0
1915	Imperial Valley	6.3
1918	San Jacinto	~6.8
1923	North San Jacinto Fault	6.3
1925	Santa Barbara	6.3
1927	Lompoc	7.1
1933	Long Beach	6.4
1937	San Jacinto Fault	6.0
1940	Imperial Valley	6.9
1941	Santa Barbara	5.5
1941	Torrance-Gardena	4.8
1942	Fish Creek Mountains	6.6
1946	Walker Pass	6.0
1947	Manix	6.5
1948	Desert Hot Springs	6.0
1952	Kern County	7.5
1952	Bakersfield	5.8
1954	San Jacinto Fault	6.4
1966	Parkfield	6.0
1968	Borrego Mountain	6.5
1970	Lytle Creek	5.2
1971	San Fernando (Sylmar)	6.5
1973	Point Mugu	5.3
1978	Santa Barbara	5.1
1979	Imperial Valley	6.4
1980	White Wash	5.5
1982	Anza Gap	4.8
1986	North Palm Springs	5.6
1987	Whittier	5.9
1987	Elmore Ranch/Superstition Hills	6.2
1988	Tejon Ranch	5.4
1988	Pasadena	5.0
1988	Upland	4.7
1989	Montebello	4.6
1989	Newport Beach	4.7
1990	Upland	5.4
1991	Sierra Madre	5.8
1992	Joshua Tree	6.1
1992	Landers	7.3
1992	Big Bear	6.4
1992	Mojave (Garlock)	5.7
1994	Northridge	6.7
1995	Ridgecrest	5.4

Table 2-4 (Concluded)

Significant Historical Earthquakes in Southern California

Date	Location (epicenter)	Magnitude
1997	Calico	5.3
1999	Hector Mine	7.1
2002	Laguna Salada	5.7
2008	Chino	5.3
2009	Northern Baja California	5.8
2010	Sierra El Mayor (No. Baja Calif.)	7.2
2014*	La Habra	5.1

Source: SCEC, 2014.

* Source: USGS, 2014 available at http://comcat.cr.usgs.gov/earthquakes/eventpage/ci15481673#summary

The fault zones in the region with potential for future activity that may affect the Refinery are described below. These faults have been identified under the Alquist-Priolo Earthquake Fault Zoning Act.

Malibu-Santa Monica-Raymond Hills Fault Zone: The Raymond Hills fault is part of the fault system that extends from the base of the San Gabriel Mountains westward to beyond the Malibu coast line. The fault has been relatively quiet, with no recorded seismic events in historic time (see SCEC, 2013, 2013a, 2013b, and 2013c); however, recent studies indicate movement can occur with a recurrence interval of from 740 years for the Santa Monica Mountains Thrust Fault up to 3,290 years for the Hollywood-Santa Monica-Malibu Coast system to rupture (see Dolan, 1995).

The Newport-Inglewood Fault Zone: The Newport-Inglewood fault is a major tectonic structure within the Los Angeles Basin. This fault is best described as a structural zone comprising a series of echelon and sub-parallel fault segments and folds. The faults of the Newport-Inglewood uplift in some cases exert considerable barrier influence upon the movement of subsurface water (see DWR, 1961). Offsetting of sediments along this fault usually is greater in deeper, older formations. Sediment displacement is less in younger formations. The Alquist-Priolo Act has designated this fault as an earthquake fault zone. The purpose of designating this area as an earthquake fault zone is to mitigate the hazards of fault rupture by prohibiting building structures across the trace of the fault.

This fault poses a seismic hazard to the Los Angeles area (see Toppozada, et al., 1988, 1989), although no surface faulting has been associated with earthquakes along this structural zone during the past 200 years. Since this fault is located within the Los Angeles Metropolitan area, a major earthquake along this fault would produce more destruction than a magnitude 8.0 on the San Andreas fault. The largest instrumentally recorded event was the 1933 Long Beach earthquake, which occurred on the offshore portion of the Newport-Inglewood structural zone with a magnitude of 6.3. A maximum credible earthquake of magnitude 7.0 has been assigned to this fault zone (see Ziony, 1985).

The Palos Verdes Fault Zone: The Palos Verdes fault extends for about 50 miles from the Redondo submarine canyon in Santa Monica Bay to south of Lausen Knoll and is responsible for

the uplift of the Palos Verdes Peninsula. This fault is both a right-lateral strike-slip and reverse separation fault. The Gaffey anticline and syncline are reported to extend along the northwestern portion of the Palos Verdes hills. These folds plunge southeast and extend beneath recent alluvium east of the hills and into the San Pedro Harbor, where they may affect movement of ground water (see DWR, 1961). The probability of a moderate or major earthquake along the Palos Verdes fault is low compared to movements on either the Newport-Inglewood or San Andreas faults (see Los Angeles Harbor Department, 1980). However, this fault is capable of producing strong to intense ground motion and ground surface rupture. This fault zone has not been placed by the California State Mining and Geology Board into an Alquist-Priolo special studies zone.

San Andreas Fault Zone: The San Andreas fault is located on the north side of the San Gabriel Mountains trending east-southeast as it passes the Los Angeles Basin. This fault is recognized as the longest and most active fault in California. It is generally characterized as a right-lateral strike-slip fault which is comprised of numerous sub-parallel faults in a zone over two miles wide. There is a high probability that southern California will experience a magnitude 7.0 or greater earthquake along the San Andreas or San Jacinto fault zones, which could generate strong ground motion in the project area. There is a five to twelve percent probability of such an event occurring in southern California during any one of the next five years and a cumulative 47 percent chance of such an event occurring over a five year period (see Reich, 1992).

San Fernando Fault: The westernmost segment of the Sierra Madre fault system is the San Fernando segment. This segment extends for approximately 12 miles beginning at Big Tujunga Canyon on the east to the joint between the San Gabriel Mountains and the Santa Susana Mountains on the west (see Ehlig, 1975). The 1971 Sylmar earthquake occurred along this segment of the Sierra Madre fault system, resulting in a 6.4 magnitude fault. Dolan, et al. (1995) indicates the San Fernando fault segment is capable of producing a 6.8 magnitude fault every 455 years.

Sierra Madre Fault System: The Sierra Madre fault system extends for approximately 60 miles along the northern edge of the densely populated San Fernando and San Gabriel valleys (Dolan, et al., 1995) and includes all faults that have participated in the Quaternary uplift of the San Gabriel Mountains. The fault system is complex and appears to be broken into five or six segments each 10 to 15 miles in length (see Ehlig, 1975). The fault system is divided into three major faults by Dolan, et al. (1995), including the Sierra Madre, the Cucamonga and the Clamshell-Sawpit faults. The Sierra Madre fault is further divided into three minor fault segments the Azusa, the Altadena and the San Fernando fault segments. The Sierra Madre fault is capable of producing a 7.3 magnitude fault every 805 years (see Dolan, et al., 1995).

Whittier-Elsinore Fault Zone: The Whittier-Elsinore Fault is one of the more prominent structural features in the Los Angeles Basin. It extends from Turnbull Canyon near Whittier, southeast to the Santa Ana River, where it merges with the Elsinore fault. Yerkes (1972) indicated that vertical separation on the fault in the upper Miocene strata increases from approximately 2,000 feet at the Santa Ana River northwestward to approximately 14,000 feet in the Brea-Olinda oil field. Farther to the northwest, the vertical separation decreases to approximately 3,000 feet in the Whittier Narrows of the San Gabriel River.

The fault also has a major right-lateral strike slip component. Yerkes (1972) indicates streams along the fault have been deflected in a right-lateral sense from 4,000 to 5,000 feet. The fault is capable of producing a maximum credible earthquake event of about magnitude 7.0 every 500 to 700 years.

Elysian Park-Montebello System: The Elysian Park fault is a blind thrust fault system, i.e., not exposed at the surface, whose existence has been inferred from seismic and geological studies. The system as defined by Dolan, et al. (1995) comprises two distinct thrust fault systems: 1) an east-west-trending thrust ramp located beneath the Santa Monica Mountains; and 2) a west-northwest-trending system that extends from Elysian Park Hills through downtown Los Angeles and southeastward beneath the Puente Hills. The Elysian Park thrust is capable of producing a magnitude 7.1 earthquake every 1,475 years.

Torrance-Wilmington Fault Zone: The Torrance-Wilmington fault has been reported to be a potentially destructive, deeply buried fault, which underlies the Los Angeles Basin. Kerr (1988) has reported this fault as a low-angle reverse or thrust fault. This proposed fault could be interacting with the Palos Verdes hills at depth. Little is known about this fault, and its existence is inferred from the study of deep earthquakes. Although information is still too preliminary to be able to quantify the specific characteristics of this fault system, this fault appears to be responsible for many of the small to moderate earthquakes within Santa Monica Bay and easterly into the Los Angeles area. This fault itself should not cause surface rupture, only ground shaking in the event of an earthquake.

In addition to the known surface faults, shallow-dipping concealed "blind" thrust faults have been postulated to underlie portions of the Los Angeles Basin. Because there exist few data to define the potential extent of rupture planes associated with these concealed thrust faults, the maximum earthquake that they might generate is largely unknown.

No faults or fault-related features are known to exist at the Refinery. The closest fault zone to the Refinery is the Newport-Inglewood Fault Zone, which is located approximately 1.5 to 2.0 miles northeast of the Refinery. The proposed project is not located in any Alquist-Priolo Earthquake fault zone and is not expected to be subject to significant surface fault displacement. Therefore, no significant adverse impacts to the proposed project facilities are expected from seismically-induced ground rupture.

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 site. 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 release during an earthquake are addressed in Section VIII - Hazards and Hazardous Materials.

The new and modified equipment must be designed to comply with the California Building Code requirements since the proposed project is located in a seismically active area. The California Building Code is considered to be a standard safeguard against major structural failures and loss

of life. The code requires 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 zone and site coefficient, which represent the foundation conditions at the site.

The new and modified equipment at the Refinery will require building permits, as applicable, for all new structures associated with the proposed project from the City of Los Angeles and the City of Carson. The Refinery must receive approval of all building plans and building permits to assure compliance with the latest Building Code adopted by each City prior to commencing construction activities. The issuance of building permits from the local authority 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 proposed project will be required to comply with the California Building Codes, including those addressing seismic effects.

Thus, the proposed project would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground shaking, ground failure or landslides is not anticipated.

The topic of liquefaction is addressed in the discussion in VII. c) below.

VII. b) The proposed project is located within the confines of the existing Refinery. Concrete foundations presently support refinery structures and equipment. The proposed new and modified processing units for the proposed project will be constructed in areas within the existing Wilmington and Carson Operations. The proposed crude storage tanks would be constructed within the Carson Crude Terminal which is paved. The pipelines and electrical conduit would be placed within the confines of the existing Refinery or within the existing right-of-way of existing streets, all of which are industrial areas which are currently paved. Most of the roads in the Refinery, including all high traffic roads, have been paved. The major aspects of the proposed project are expected to be constructed in locations within the Refinery that have been previously graded or excavated for refining equipment. The locations of the proposed new and modified crude storage tanks have also been graded and paved, so soil erosion or loss of topsoil is not anticipated to occur.

Wind erosion during construction is not expected to occur to any appreciable extent, because construction contractors operating at any dust generating sites within the Wilmington and Carson Operations would be required to comply with the best available control measure (BACM) requirements of SCAQMD Rule 403 – Fugitive Dust. In general, fugitive dust must be controlled through a number of soil stabilizing measures such as watering the site, using

		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?	☑	☐	☐	☐
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?	☑	☐	☐	☐
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☑	☐	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☑	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑	☐
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?	☐	☐	☐	☑
h)	Significantly increased fire hazard in areas with flammable materials?	☑	☐	☐	☐

Significance Criteria

The 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

VIII. a) and b) Though hazard analyses have been previously completed for the existing equipment at the Wilmington and Carson Operations, the proposed project may alter the existing hazards setting. The Wilmington and Carson Operations use a number of hazardous materials at each site to manufacture petroleum products. The major types of public safety risks consist of impacts from toxic substance releases, fires, and explosions. Toxic substances handled by the Refinery include hydrogen sulfide and ammonia. Flammable materials handled by the Refinery include propane and butane, and petroleum products like crude oil, gasoline, fuel oils, and diesel. Shipping, handling, storing, and disposing of hazardous materials inherently poses a certain risk of a release to the environment.

Some of the new units that are proposed to be installed, such as the new Wet Jet Treater, Sulfuric Acid Regenerator, ATS, etc., may increase the potential for exposure to toxic hazards in the event of an accidental release from one the new units. The proposed project could also increase the potential for fires and explosions associated with additional storage/use of flammable materials such as crude oil, feedstock, or petroleum products. In addition, the proposed project may result in changes to the quantities of hazardous materials that will need to be transported to or from the Refinery (e.g., LPG, sulfuric acid, spent caustic, etc.) and the hazards associated with the transport of these materials will be evaluated in the EIR.

Increases in potential hazards associated with the implementation of the proposed project could potentially alter the probability for upset and accident conditions that could cause a release of hazardous materials into the environment. The potential effects of an accidental release of the additional hazardous materials being stored, used, and transported as part of implementing the proposed project will be evaluated in the EIR.

VIII. c) The Wilmington and Carson Operations are not located within one-quarter mile of an existing or proposed school site. The proposed Project is not expected to impact school sites from handling hazardous materials or wastes. Hazardous emissions impacts on schools, as well

as other sensitive receptors, will be evaluated as part of the air quality analysis section of the EIR.

VIII. d) Government Code §65962.5 refers to the "Hazardous Waste and Substances Site List," which is a list of facilities that may be subject to the Resource Conservation and Recovery Act (RCRA) corrective action program. The Wilmington Operations are not included on the list prepared by the Department of Toxic Substances Control (DTSC) pursuant to Government Code §65962.5. Nonetheless, the Wilmington Operations are included on a list of RCRA-permitted sites that require corrective action as identified by DTSC. Furthermore, the Wilmington Operations are subject to corrective action under the Spill Cleanup Program (SCP) formerly "Spills, Leaks, Investigation & Cleanup (SLIC) Program" administered by the Regional Water Quality Control Board (RWQCB) pursuant to California Water Code §13304. In order to provide full public disclosure per CEQA (Public Resources Code §21092.6) with regard to corrective actions required by local agency, the following information is provided:

Applicant:	Tesoro (Wilmington Operations)
Address:	2101 E. Pacific Coast Highway, Wilmington, CA 90744
Phone:	(310) 522-6000
Address of Site:	2101 E. Pacific Coast Highway, Wilmington, CA 90744
Local Agency:	Wilmington, City of Los Angeles
Assessor's Book:	Parcel numbers 7315-014-008, 7315-017-005, 7428-007-003
List:	Corrective Action
SCP Case No:	SCP T10000002352

The Carson Operations is listed on the RCRA database as a State Equivalent of Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site (CALSITE) and as a leaking underground storage tank (LUST) site. Hazardous wastes from the facility are managed in accordance with applicable federal, state, and local rules and regulations. The Carson Operations is included on a list prepared pursuant to Government Code §65962.5. CEQA (Public Resources Code §21092.6) requires the following information for sites which are listed pursuant to Government Code §65962.5:

Applicant:	Tesoro Carson Operations (former BP Carson Refinery)
Address:	2350 E. 223rd Street, Carson, CA 90810
Phone:	(310) 816-8100
Address of Site:	1801 East Sepulveda Boulevard, Carson, CA 90749
Local Agency:	City of Carson
Assessor's Book:	7315-006-003
List:	LUFT/SLIC
Case No:	R-20190/0224

Given the heavily industrialized nature of the Wilmington and Carson Operations and the fact that refining activities, petroleum storage, and distribution have been conducted at the site for over 75 years, construction activities associated with the proposed project such as grading, excavating, and trenching could potentially uncover contaminated soils. The location of the proposed new crude oil storage tanks at the Carson Crude Terminal is a former oil reservoir that

has been closed and remediated pursuant to Regional Water Quality Control Board guidance. Construction activities associated with the crude oil tanks could require the removal of a large amount of contaminated soil, up to 151,000 cubic yards. The handling, processing, transportation and disposal of the contaminated soils will be subject to multiple hazardous waste regulations such as Title 22 of the California Code of Regulations and other local and federal rules. Title 22 has multiple requirements for hazardous waste handling, transport, and disposal, such as requirements to use approved disposal and treatment facilities, to use certified hazardous waste transporters, and to have manifests for tracking the hazardous materials. Contaminated soils also must be handled and disposed in accordance with SCAQMD's Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil, and the Refinery's Soils Handling Plan. Contaminated soil would be stored at a temporary holding location within the Refinery before transport to an appropriate disposal or treatment facility. Because of the large volume of contaminated soil that may be removed due to the proposed project, the project impacts related to soil contamination are potentially significant and will be evaluated in the EIR.

VIII. e) The Tesoro Refinery is not located within an airport land use plan or within two miles of a public or private use airport. Therefore, the proposed project would not be expected to result in a safety hazard for people residing or working in the area of the Wilmington and Carson Operations, on any airport, or on an airport land use plan.

VIII. f) The proposed project is located within the existing Refinery and industrial properties. The existing emergency response procedures include detailed requirements for specific actions for employees to take (including evacuation and spill control), individuals to be notified, and agencies to call when assistance is required. The proposed project would require updating and revising the existing emergency response plans to address emergency response activities that will be associated with new and modified equipment at the integrated Refinery. Tesoro already uses and stores, processes, and transports crude oil and refined products at the Wilmington and Carson Operations, so the current emergency response procedures are specific to the use of crude oil. Emergency responses related to the proposed project would include accidental releases, spills, and fires associated with hazardous materials. Based on existing requirements for developing and revising emergency response plans, the proposed project would not impair implementation or physically interfere with an adopted emergency response plan or evacuation plan. Evacuation plans generally require employees to head towards the employee parking areas and away from the operating portions of the Refinery. The emergency response plans at the Refinery would be reviewed and updated to reflect the proposed project modifications, new units, and new and modified crude oil tanks. The emergency response plans are expected to be limited to the integrated Tesoro Refinery as the proposed project is not expected to affect in any way emergency response plans at other industrial facilities in the local area. Therefore, no significant adverse impacts to emergency response or evacuations plans are expected.

VIII. g) The proposed project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees because the proposed project is located in an urbanized, industrial area and no wildlands are located in the immediate or surrounding areas of the Wilmington and Carson Operations. Also, no substantial or native vegetation exists within the operational portions of the Refinery, and for safety reasons, no vegetation is located within the existing areas where the new and modified equipment will be sited. For these reasons, the

proposed project would not expose people or structures to wildland fires. Therefore, no significant adverse impacts resulting from wildland fire hazards are expected from the proposed project.

VIII. h) The Wilmington and Carson Operations use a number of hazardous materials to manufacture petroleum products. The major types of public safety risks consist of impacts from the transportation, release, fire, and explosion of flammable substances. Examples of toxic substances handled by the Refinery include hydrogen sulfide and ammonia. Regulated flammable materials like propane and butane, and petroleum products like gasoline, fuel oils, and diesel are also used, processed, produced and/or stored onsite.

The primary hazards associated with refining are fire hazards and subsequent exposure to thermal radiation. Thermal radiation is the heat generated by a fire and the potential impacts associated with exposure. Exposure to thermal radiation would result in burns, the severity of which would depend on the intensity of the fire, the duration of exposure, and the distance of an individual to the fire.

The Refinery operators have prepared a Risk Management Plan (RMP) for hazardous materials (butane, pentane, hydrogen sulfide, and ammonia) that are currently used at the Refinery. For the Tesoro Wilmington Operations, the City of Los Angeles Fire Department administers this program through the California Accidental Release Prevention (CalARP) program. For the Tesoro Carson operations, the County of Los Angeles Fire Department administers the CalARP program. Modifications under the RMP and CalARP are required for covered processes if there is a major change to the process requiring a new process analysis. New RMPs are expected to be required because there would be new hazards associated with new equipment and modified equipment may handle more or different types of hazardous materials. As part of the review of the proposed project under the RMP and CalARP programs, a process hazard analysis will be conducted to verify the materials and engineering adequacy of the proposed modifications. In addition, a review of the project changes is required to ensure that no unexpected or adverse interactions with existing systems would occur. Such reviews are required as part of the RMP, CalARP, and Process Safety Management programs for covered processes.

The proposed project includes changes to a number of existing units, including the HCU at Wilmington, CRU-3, HTU-1, HTU-2, HTU-4, LPG Rail Loading and Unloading facility, Nos. 51 and 52 Vacuum Units, FCCU modifications, HCU, LHU, Naphtha HDS, Alkylation Unit, and existing storage tanks. In addition, new units would be added to the Refinery including a new PSTU, Ammonium Thiosulfate Plant, Sulfuric Acid Regeneration Plant, Wet Jet Treater, new crude oil storage tanks, and new pipelines. All of these modifications have the potential to introduce new hazards to the Refinery.

New safety systems would also be included as part of the proposed project. For example, the new crude oil storage tanks to be constructed as part of the proposed project will be constructed with connections to both foam- and water-based fire extinguishing systems. Centralized foam generation systems would deliver foam to the tanks in the event of a fire. Foam would cover the tank and fire, extinguishing flames by eliminating the presence of oxygen. In addition, the tanks would also be served by fire protection systems to minimize heat generated in the event of a fire.

Despite installation of the above-described safety features, the proposed project has the potential to introduce new hazards to the integrated Refinery. Because the proposed project has the potential to generate new fire hazard impacts, this topic will be evaluated in the EIR.

Conclusion

Based on the above considerations, the potential hazards and hazardous materials impacts related to the operations at the integrated Refinery, the transport of hazardous materials, and the potential excavation of contaminated soils associated with the proposed project are potentially significant. Therefore, hazards and hazardous material impacts will be further evaluated 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?	☐	☐	☑	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☑	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

		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?	☐	☐	☐	☑
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?	☐	☐	☑	☐
h)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☑	☐	☐	☐
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?	☐	☐	☑	☐

Significance Criteria

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

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 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.

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 water by more than five million gallons per day.

Discussion

IX. a), g), and i) Wastewater Generation: The potential for wastewater generation and water quality impacts associated with construction activities at the Refinery was determined to be less than significant because construction activities are not expected to generate any additional wastewater as there will be no changes to any refinery units during construction activities. Water may be used for dust suppression but would not be used in sufficient quantities to generate wastewater discharge because the area will be sufficiently wetted without generating runoff. The current volumes of wastewater generated by the existing Wilmington and Carson Operations would not be expected to change during the construction activities.

Wastewater streams from the Wilmington and Carson Operations include process wastewater, boiler blowdown, sanitary wastewater, and surface runoff. Process wastewater and surface water streams are treated by the Refinery's existing wastewater treatment facilities prior to discharge to the Los Angeles County Sanitation District (LACSD) sewer system; the sanitary wastewater stream is discharged directly to the sewer without prior treatment. Wastewater is treated and sampled in compliance with the LACSD Industrial Wastewater Discharge Permit. The LACSD places limitations on wastewater parameters such as oil and grease contents, pH levels, temperature, heavy metals, organic compounds and so forth. Wastewater that complies with the LACSD permit requirements is discharged to the LACSD sewer system. Wastewater that does not comply is returned to the wastewater treatment system for further treatment.

Operational activities are expected to require approximately 370,000 gallons per day of additional water use. Most of the additional increase in water use is associated with cooling water, which will evaporate. The proposed project is not expected to generate additional wastewater discharge as the shutdown of the FCCU is expected to result in a reduction in wastewater generation. Future discharges of wastewater from the integrated Refinery will continue to be required to comply with the LACSD Industrial Wastewater Discharge permit, so the proposed project is not expected to 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.

IX. b) and h) Water Demand: Water is primarily provided to the Wilmington Operations by an existing onsite water well (e.g., groundwater) and supplemental water is supplied by the LADWP, as necessary. The Carson Operations obtains its water from a combination of sources including: (1) purchased water from the California Water Services via various well sources; (2) water from Wilmington Operations-owned wells; and (3) reclaimed water.

Construction activities associated with the proposed project would require water for dust suppression during grading to prepare the construction site for the placement of foundations. In addition, the new and modified crude oil storage tanks and the new pipelines will require water for hydrotesting during construction.

Preliminary analysis of water demand from new or modified equipment associated with operation of the proposed project indicates that there may be an increase in water demand at the integrated Refinery of approximately 370,000 gallons per day. The SCAQMD significance criteria states that impacts are considered significant if 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. Therefore, impacts to ground water supplies and water demand from implementing the Tesoro Integration and Compliance Project are potentially significant, and will be further evaluated in the EIR.

IX. c) and d) Surface Water Runoff: The Wilmington and Carson Operations are located adjacent to the Dominguez Channel and approximately 1.5 miles west of the Los Angeles River. The Los Angeles River and the Dominguez Channel are the major drainages that flow into the Los Angeles-Long Beach Harbor complex. The Los Angeles River drains an 832-square mile watershed basin into the Long Beach Harbor. The Los Angeles River watershed is controlled by a series of dams and an improved river channel with a design flow capacity of 146,000 cubic feet per second.

The Dominguez Channel originates in the area of the Los Angeles International Airport and flows southward into the East Channel of the Los Angeles Harbor. The Dominguez Channel, an 8.5-mile long structure, drains approximately 80 square miles west of the Los Angeles River drainage basin. Permitted discharges from industrial sources are a substantial percentage of the persistent flows in the Dominguez Channel. The Tesoro Refinery does not routinely discharge into the Dominguez Channel.

The proposed project is not expected to increase impermeable surfaces at the integrated Refinery. New units and modifications to existing units would occur within existing paved areas. The proposed new crude oil storage tanks will be located in an area currently paved and used for truck container storage. The modified storage tanks will be located within the general footprint of the existing storage tanks, which are also paved. Therefore, the proposed project is not expected to result in an increase in impermeable surfaces that would increase storm water runoff from the integrated Refinery.

At both the Wilmington and Carson Operations, storm water runoff within process unit areas is handled by the existing wastewater system and sent to an on-site wastewater treatment system prior to discharge to the LACSD system. Storm water runoff from outside the process unit areas is collected, treated as necessary, and discharged pursuant to the existing NPDES permits. The Wilmington and Carson Operations have separate NPDES permits. The proposed project would not require any changes or modifications to the existing NPDES permits at either the Wilmington or Carson Operations. The collection and treatment of storm water runoff is not expected to be modified as part of the proposed project. The proposed project is not expected to result in an increase in storm water runoff, therefore, this topic will not be evaluated further in the EIR.

IX. e) The proposed project is expected to involve construction and modification activities located within existing industrial facilities and would not include the construction of any new housing or construction of new housing within a 100- or 500-year flood hazard area. The Refinery is not located within a 100-year flood zone and would not expose people or property to any known water-related flood hazards. Further, because the proposed project would occur at existing industrial facilities, it does not have the potential to impede or redirect flood flows to a greater extent than is currently the case. The proposed project is not located within a flood zone and therefore, would not expose people or property to a significant risk of loss, injury or death related to flood hazards. Based on the topography and/or site elevations of the Wilmington and Carson Operations in relation to the ocean, the proposed project is not expected to result in an increased risk of flood. Therefore, no significant adverse impacts associated with flooding are expected from the proposed project.

IX. f) The proposed project is located near the Ports of Long Beach and Los Angeles, but at a sufficient distance from the shore to avoid potential impacts from tsunamis or seiches. The Tesoro Refinery is located north of the Ports of Los Angeles and Long Beach. The construction of breakwaters offshore, combined with the distance of the integrated Refinery from the water, is expected to further minimize the potential flooding impacts from a tsunami or seiche so that no significant flooding impacts from these phenomena are expected. Finally, the Refinery is located in a relatively flat area, therefore, the proposed project is not susceptible to mudflows (e.g., hillside or slope areas) so that no significant impacts from mudflows would be expected as a result of the proposed project and will not be further evaluated in the EIR.

Conclusion

Based on the above considerations, the proposed project is not expected to create significant adverse wastewater or water quality impacts, surface runoff impacts, or flood hazard impacts. As a result, these topics will not be analyzed further in the EIR. Potentially significant adverse water demand impacts may occur as a result of construction and operational activities that the integrated Refinery would undertake in order to complete the proposed project. Since potentially significant adverse water demand impacts were identified, those impacts will be further evaluated in the EIR.

	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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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

X. a) The construction and operation of the proposed project will occur primarily within the confines of the existing Wilmington and Carson Operations. Because portions of the two existing Operations are adjacent to each other, separated only by Alameda Street, equipment to fully integrate the two refineries, e.g., the interconnecting piping and Electrical Intertie Connection, would still occur primarily within the confines of both refineries. However, the interconnecting piping would be routed underneath Alameda Street and Sepulveda Boulevard and the electrical conduit would be routed underground and over Alameda Street. As a result, no component of the proposed project would result in physically dividing any established communities, but will continue the use of the site as a Refinery.

X. b) Land use and other planning considerations are determined by local governments. Local land uses in the vicinity of the Tesoro Refinery are shown in Figure 2-1. The proposed project will occur primarily within the confines of the existing Refinery, interconnecting piping would be routed underneath Alameda Street and Sepulveda Boulevard, and the electrical conduit would be routed underground and over Alameda Street. All land uses in the vicinity of the proposed project are existing industrial areas, which are zoned for heavy industrial use (see Figure 2-1). The proposed project is consistent with the heavy industrial land use designation of the Refinery and no land use or planning requirements will be altered by adoption of the proposed project. Therefore, present or planned land uses in the region will not be affected as a result of the proposed project. Further, there is no habitat conservation or natural community conservation plans located within or adjacent to the existing Refinery. Based upon the above considerations,

significant adverse land use planning impacts are not expected from the implementation of the proposed project.

Conclusion

Based on the above considerations, no significant adverse impacts to land use and planning are expected to occur as a result of construction and operational activities that the integrated Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse land use and planning impacts were identified, no further evaluation will be required in the EIR.

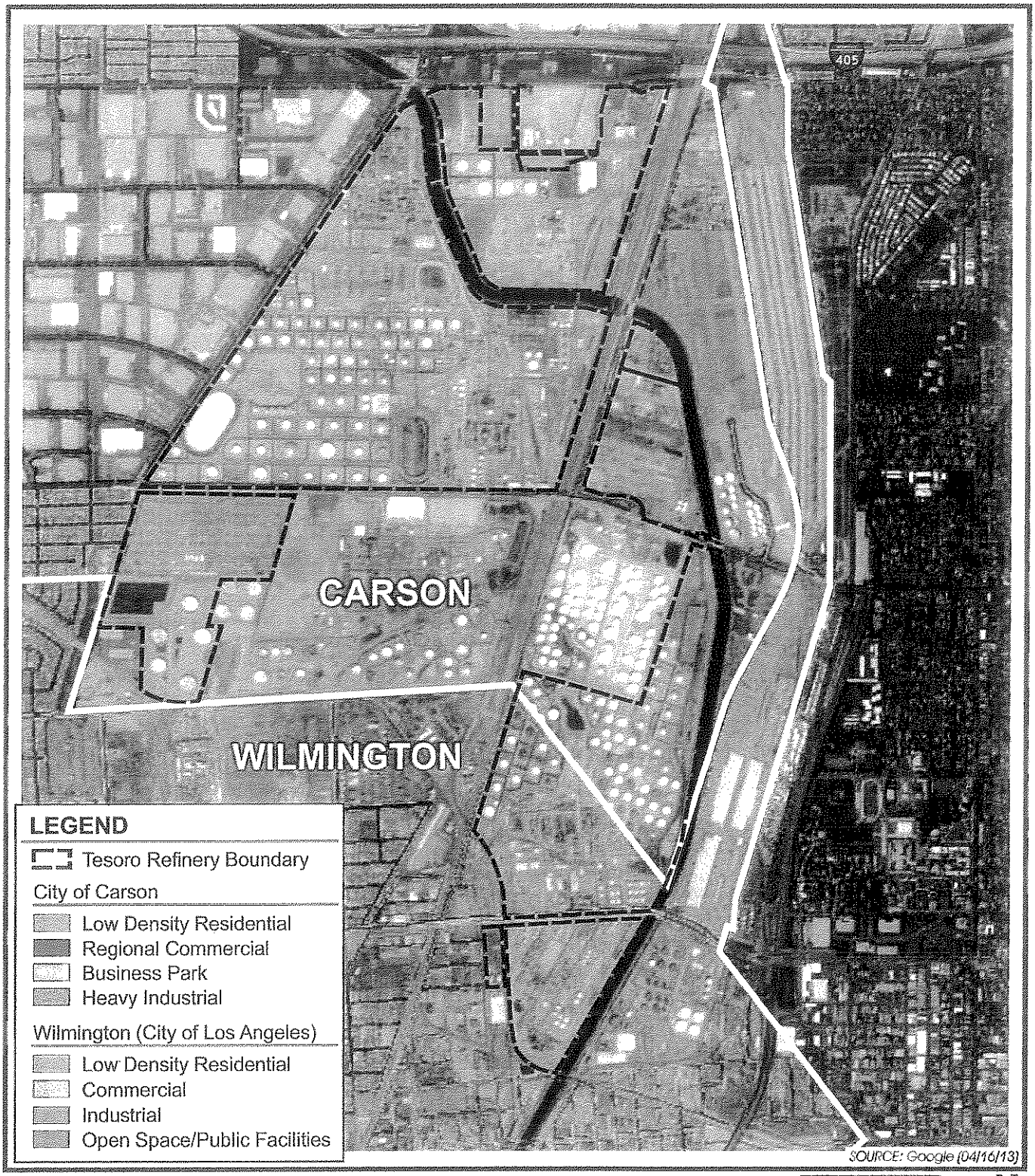


FIGURE 2-1
LAND USE MAP
TESORO LOS ANGELES REFINERY

Project No. 2844
N:\2844\LandUseMap (rev.3).cdr

	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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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

XI. a) and b) Construction and operation of the proposed project would occur entirely within the boundaries of the existing refinery and adjacent industrial areas all of which are zoned heavy industrial (see Figure 2-1). The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) keeps records of oil wells and oil fields in California. According to the DOGGR online data (http://maps.conservation.ca.gov/doms/doms-app.html), there are no oil wells (active or abandoned) located within the confines of the proposed project. The nearest oil and gas wells are located adjacent to the southwestern property line and are either idle or abandoned wells in the Wilmington Oil Field. Thus, the proposed project would not affect the availability of known mineral resources.

There are no provisions of the proposed project that would result in the loss of availability of a known mineral resource of value to the region and the residents of the State of California such as aggregate, coal, clay, shale, etc., or 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 to occur as a result of construction and operational activities that the integrated Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse mineral resources impacts were identified, no further evaluation will be required 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?	☑	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☑	☐	☐	☐
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐	☐	☐
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?	☐	☐	☐	☑

Significance Criteria

Noise impacts 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

XII. a), b), and c) The existing noise environment at the Tesoro Refinery is dominated by refinery equipment, other heavy industrial activities, and traffic. Construction activities for the proposed project are expected to generate noise associated with the use of 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, pavers, and pipe boring machines. The estimated noise level during installation of various equipment 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 are expected to attenuate over distance. Nonetheless, the potential construction noise impacts may be significant.

Once constructed, the proposed project is expected to result in an increase in noise generating equipment. The proposed project includes modifications to existing equipment and construction of new refinery units. A number of the Refinery modifications include replacing columns, accumulators, drums, heat exchangers, and condensers, e.g., FCCU, CRU, HCU, and HTU modifications. These modifications do not involve equipment that is expected to result in substantial increases to existing noise levels because the same basic process will continue to occur. The proposed new equipment at the Refinery includes a new Diesel Hydrotreater, PSTU, Ammonium Thiosulfate Plant, Sulfuric Acid Regeneration Plant, Wet Jet Treater, and crude oil storage tanks. The new equipment will include new noise sources from ancillary equipment such as pumps, heaters, compressors, and blowers. The additional noise sources and noise levels would be similar to noise from existing equipment within the existing Wilmington and Carson Operations. In addition, the proposed project would result in the shutdown of the FCCU at Wilmington eliminating noise sources associated with that unit. Nonetheless, operational noise impacts are potentially significant and will be evaluated in the EIR.

XII. d) The Refinery is not located within an airport land use plan, and the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airplanes.

Conclusion

Based on the above considerations, potentially significant adverse impacts to noise are expected to occur as a result of construction and operational activities that the integrated Refinery would undertake in order to complete the proposed project. Since potentially significant adverse noise impacts were identified, those impacts will be further evaluated 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)?	☐	☐	☐	☑
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Significance Criteria

The 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

XIII. a) Construction and operational activities associated with the proposed project are not expected to involve the relocation of individuals, impact housing or commercial facilities, or change the distribution of the population because the proposed project will occur completely within existing industrial facilities and no housing is located within the industrial areas. An estimated 700-800 construction workers are expected to be needed during peak construction activities and most of the workers are expected to come from the large labor pool in southern California. No increase in the permanent number of workers at the Tesoro Los Angeles Refinery is expected following the construction phase. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing the proposed project. As a result, the proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth or distribution within the district.

XIII. b) The proposed project includes modifications and/or changes to integrate two existing refineries, which are located in an industrial setting. All construction workers are expected to be drawn from the large local southern California labor pool and operation of the proposed project would not require additional workers, as discussed in item XIII. a) above. As a result, the proposed project is not expected to result in the creation of any industry that would affect

population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the district.

Conclusion

Based on the above considerations, no significant adverse impacts to population and housing are expected to occur as a result of construction and operational activities that the Tesoro Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse population and housing impacts were identified, no further evaluation will be required 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?	☐	☐	☐	☑
b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) Other public facilities?	☐	☐	☐	☑

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 government 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

XIV. a) To respond to emergency situations, both the Wilmington and Carson Operations maintain on-site fire departments, which are supplemented by the resources of public fire departments. Both Operations are supported by the Los Angeles County Fire Department (LACFD) and City of Los Angeles Fire Department (City Fire). There are four LACFD stations (all located within the City of Carson) and one City Fire station in Wilmington that serve the proposed project area. The station number and address of each of these five stations are provided in the following bullet points:

- LACFD Station 10 located at 1860 E. Del Amo Boulevard,
- LACFD Station 36 located at 223rd Street,
- LACFD Station 116 located at 755 E. Victoria Street,
- LACFD Station 127 located at 2049 E. 223rd Street, and
- City Fire Station 38 located at 124 East "I" Street.

During construction, safeguards, monitoring for hazards with equipment designed to detect sources of flammable gases and vapors, written procedures, training, and authorization of equipment used on-site will be in place. These safety features are expected to minimize potential accidental fire hazards, thus, construction activities are not expected to result in an increased need for fire response services or affect service ratios or other performance objectives.

Compliance with state and local fire codes is expected to minimize the need for additional fire protection services. In addition, the both Operations maintain their own emergency response teams to respond to emergencies. Each Operation maintains fully trained 24-hour emergency response teams, fire-fighting equipment including fire engines and foam pumper trucks or trailers, and manual and automatic fire suppression systems for flammable and combustible materials. Further, Refinery staff are trained in accordance with industry standards, and on-site fire training exercises with the LACFD and City Fire staff are routinely conducted.

Both the Wilmington and Carson Operations, including the Carson Crude Terminal, are surrounded by fences and entry is restricted to specified gates. Fire-fighting and emergency response personnel and equipment will continue to be maintained and operated at the integrated Refinery. Close coordination with local fire departments and emergency services will be maintained. The proposed project is not expected to increase the need or demand for additional services from the fire department above current levels because onsite firefighting and emergency response capabilities and personnel will be maintained and are expected to be able to continue to respond to potential emergencies in the future, while maintaining acceptable service ratios, response times, or other performance objectives.

XIV. b) The Los Angeles City Police Department and the Los Angeles County Sheriff's Department are the responding agencies for law enforcement needs in the vicinity of the Wilmington and Carson Operations. Because the sheriff and police departments typically have units that are in the field, response times to the Refinery currently vary depending on the location of the nearest unit.

The existing Wilmington and Carson Operations have security departments that provide 24-hour protective services for people and property within the fenced boundaries of each facility. As part of their regular duties, the security departments would monitor construction activities associated with the proposed project since construction would occur within the confines of the Wilmington and Carson Operations' boundaries. Along with the existing work force, entry and exit of the construction work force would be similarly monitored. Once construction is completed, the proposed project would not expect to result in changes to integrated Refinery staffing within the security department compared to staffing at the existing Operations. Thus, no additional or altered police protection would be required for the proposed project once it becomes operational.

XIV. c) and d) As noted in the previous "Population and Housing" (Section XIII.) discussion, the proposed project is not expected to induce population growth in any way because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate all construction activities. Therefore, during construction there would be no increase in the local population so no adverse impacts would be expected to local schools or other public facilities. Similarly, once the proposed project becomes operational, the integrated Refinery is not expected to require

additional permanent staffing to operate new equipment, so an increase in the local population that could adversely affect local schools or other public facilities is not expected.

Besides permitting the equipment or altering permit conditions by the SCAQMD and City building permits, there would be no need for other types of government services. Permitting agencies are currently equipped with the resources necessary to provide permits and environmental review of the proposed project. Thus, the proposed project would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There would be no increase in population and, therefore, there would be no need for physically altered government facilities.

Conclusion

Based on the above considerations, no significant adverse impacts to public services that could adversely affect acceptable service ratios, response times, or other performance objectives are expected to occur as a result of construction and operational activities that the Tesoro Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse public services impacts were identified, no further evaluation will be required 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria

The 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.

XV. a) and b) Parks in the vicinity of the Wilmington and Carson Operations include Silverado, Hudson, and Admiral Kidd Parks in Long Beach; East Wilmington Vest Pocket, East Wilmington Greenbelt, and Banning Parks in Wilmington; and Calas and Friendship Mini-Park in Carson.

As noted in the previous "Population and Housing" (Section XIII.) discussion, the existing labor pool in southern California is sufficient to fulfill the labor requirements for the construction of the proposed project. The operation of the proposed project would not require additional permanent workers to be hired at the Refinery and, therefore, there would be no significant changes in population densities or distribution resulting from the proposed project and, thus, no increase in the use of existing neighborhood and regional parks or other recreational facilities.

As noted in the previous "Land Use and Planning" (Section X.) discussion, there are no provisions in the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project.

Because the proposed project is limited to the confines of the existing industrial facilities and will not result in additional employees during operation, the proposed project would not increase

the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it would not directly or indirectly increase or redistribute population.

Conclusion

Based upon the above considerations, no significant adverse impacts to recreation are expected to occur as a result of construction and operational activities that the Tesoro Refinery would undertake in order to complete the proposed project. Since no potentially significant adverse recreation impacts were identified, no further evaluation will be required in the EIR.

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

Significance Criteria

The proposed project impacts on solid and 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

XVI. a) and b) The potential for solid/hazardous waste impacts associated with the proposed project at the Wilmington and Carson Operations was determined to be potentially significant for the following reasons. Construction activities associated with the proposed project will increase the amount of solid waste generated and disposed. Demolition activities are expected to generate waste from the removal of the existing equipment that is proposed to be replaced. However, this equipment is expected to be either reused at another site outside of the district or recycled for metal content.

The six new storage tanks to be constructed at the Carson Crude Terminal as part of the proposed project are expected to require excavation approaching 151,000 CY of soil. The soil to be excavated will come from an area of the Refinery that has been historically utilized for petroleum storage increasing the potential of uncovering contaminated soils during grading and excavation. The handling, processing, transportation, and disposal of any excavated soils containing high concentrations of certain hazardous substances, such as heavy metals and hydrocarbons, would be subject to applicable hazardous waste regulations (i.e., Title 22 of the California Code of Regulations and other local and federal rules). Title 22, Division 4.5 - Environmental Health Standards for the Management of Hazardous Waste has multiple requirements for hazardous waste characterization, handling, transport, and disposal, such as requirements to use approved disposal and treatment facilities, to use certified hazardous waste transporters, and to have manifests for tracking the hazardous materials. If discovered, contaminated excavated soil would be properly characterized to determine an appropriate offsite processing method(s). These methods may include recycling of the soil if it is considered a non-

hazardous waste, off-site treatment to reduce the contaminant concentrations to non-hazardous levels so that the treated soil could be used as landfill cover, or disposal as a hazardous waste at a permitted hazardous waste facility.

Other construction-related waste such as shipping packing materials, depending on the classification of the waste, would likely need to be disposed of at a Class II (industrial) or Class III (municipal) landfill. A Class II landfill can handle wastes that exhibit a level of contamination not considered hazardous, but that are required by the State of California to be managed for disposal to a permitted Class II landfill. For this reason, Class II landfills are specially designed with liners to reduce the risks of groundwater contamination from industrial wastes, also known as California-regulated waste. Similarly, a Class III landfill can handle non-hazardous or municipal waste. Municipal waste is typically generated through day-to-day activities and does not present the hazardous characteristics of hazardous, industrial, or radioactive wastes.

There are 32 active Class III landfills within the SCAQMD's jurisdiction, many of which have liners that can handle both Class II and Class III wastes. According to the Final Program EIR for the 2012 AQMP (SCAQMD, 2012), total Class III landfill waste disposal capacity in the district is approximately 116,796 tons per day.

There are no hazardous waste landfills within the Southern California area. If contaminated soil is encountered it must be disposed of at a permitted hazardous waste disposal facility. One such facility in California is the Clean Harbors (formerly Safety-Kleen) facility in Buttonwillow (Kern County). Hazardous waste also can be transported to permitted facilities outside of California. The nearest out-of-state landfills are U.S. Ecology, Inc., located in Beatty, Nevada and USPCI, Inc., in Murray, Utah.

In summary, the amount of solid or hazardous waste that may be generated during construction activities is potentially substantial. Due to the volume and type of soil to be removed from the proposed project site during construction, impacts on solid and hazardous waste are potentially significant. For this reason, the construction impacts of the proposed project on solid and hazardous waste will be further evaluated in the EIR.

The operation of the new and modified equipment associated with the proposed project has the potential to generate additional or new solid waste streams, e.g., caustic from the wet jet treater, catalyst from the NHDS at Carson, and additional tank sludge. The operational impacts on solid and hazardous waste will be evaluated in the EIR.

Conclusion

Based on the above considerations, potentially significant adverse solid and hazardous waste impacts could occur as a result of construction and operational activities that the Refinery would undertake in order to complete the proposed project. Since potentially significant adverse solid and hazardous waste impacts were identified, further evaluation will be required in the EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION AND 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?	☑	☐	☐	☐
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?	☑	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☑	☐
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?	☐	☐	☐	☑

Significance Criteria

The impacts on transportation and 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.
- Waterborne, 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

XVII. a) and b) The proposed project will increase traffic in the local area associated with construction workers, construction equipment, and the delivery of construction materials. The proposed project is expected to require an estimated 700 to 800 construction workers during the peak construction phase. Therefore, the traffic impacts associated with the proposed project during the construction phase are potentially significant and 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 or substantially change the volume of traffic. No increase in permanent workers is expected so no increase in worker traffic is expected. Construction of the Sulfuric Acid Regeneration Plant will decrease traffic in the area because spent sulfuric acid is currently transported off-site for recycling. Installing the Sulfuric Acid Regeneration Plant will eliminate

approximately 6,000 acid transport truck trip miles per month that are currently used to transport spent and regenerated sulfuric acid to and from Wilmington Operations. In addition, catalyst in various units (hydrotreater catalyst) will need to be changed once every three to ten years. As a result, the proposed project may result in a maximum increase in trucks of one per day since the delivery of all project-related materials is infrequent. Therefore, the operation-related traffic is not expected to change so no significant impacts on traffic during operation of the proposed project is expected. Traffic impacts during operation, therefore, will not be further evaluated in the EIR.

In the past parking for the construction workers has typically been provided within the confines of the existing Wilmington and Carson Operations. Portions of the proposed project at the Refinery are expected to adversely affect onsite parking that is currently used for contractor parking. Therefore, additional parking will be required during the construction phase and Tesoro is currently investigating the feasibility of off-site parking and transporting workers to the site. Therefore, the proposed project may result in significant parking impacts during the construction phase, which will be evaluated in the EIR. Once construction is complete, no increase in permanent workers is expected. As a result, operational parking impacts will not be further evaluated in the EIR.

XVII. c) The proposed project includes modifications to existing equipment and installation of new equipment associated with the existing Refinery. The proposed modifications and new structures will be similar in height and appearance to the existing industrial structures. The maximum height of a new structure is approximately 125 feet. Other facilities at the Refinery, e.g., flares, are at heights up to approximately 200 feet, which exceeds the heights of the proposed project equipment and are far below the height at which air traffic exists. For these reasons, the proposed project would not be expected to result in a change to air traffic patterns. Since the proposed modifications and new structures will not be greater than 250 feet in height and are not expected to result in a change to air traffic patterns, notification to the Federal Aviation Administration pursuant to Advisory Circular AC 70/7460-2K is not required. Further, since the Refinery is located approximately four miles west of the nearest airport, Long Beach Airport, the Refinery is located outside of the normal flight pattern of the Long Beach Airport. In addition, the proposed project will not involve the delivery of materials via air cargo, so no increase in air traffic is expected.

XVII. d) and e) The proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the site because the proposed project does not include the construction of roadways on-site or off-site that could include design hazards. Emergency access at the Refinery would not be adversely affected by the proposed project because no on-site roadways would be altered as a result of the proposed project and Tesoro would continue to maintain the existing emergency access road and gates to the Refinery. As discussed in topic VIII. f), the proposed project would not significantly adversely affect emergency response plans at the integrated Refinery, therefore, no changes related to emergency response routes are expected as a result of the proposed project.

XVII. f) The proposed project will be constructed within the confines of the existing Refinery and industrial areas and the need for an additional 700 to 800 constructions worker during peak

construction periods and is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks). Construction workers typically drive their own vehicles to construction sites, which will not have any effects on other transportation modes. Once construction is completed, construction workers will no longer be needed. Further, operation of the proposed project is not expected to require any additional workers, Therefore, operation of the proposed project is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

Conclusion

Based on the above considerations, no significant adverse impacts to transportation/traffic are expected to occur as a result of operational activities at the Refinery due to implementation of the proposed project. Since no potentially significant adverse operational transportation/traffic impacts were identified, no further evaluation will be required in the EIR. The traffic and parking impacts associated with construction activities for the proposed project are potentially significant; therefore, these impacts will be further evaluated 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?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☑	☐	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☑	☐	☐	☐

Discussion

XVIII. a) As shown in Section IV – Biological Resources and Section V – Cultural Resources of this environmental checklist evaluation, the proposed project is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The affected sites are part of an existing Refinery and industrial facilities, which have been previously disturbed and graded, such that the proposed project is not expected to degrade any biologically or culturally sensitive areas, so that no significant adverse biological or cultural resources impacts are expected.

XVIII. b) and c) The proposed project has the potential to result in air quality impacts (including criteria pollutants, toxic air contaminants, and greenhouse gas emissions), hazards and

hazardous materials impacts, water demand impacts, noise, solid and hazardous waste, and traffic from the construction of the proposed project and has the potential to result in cumulative impacts in these areas. The potential cumulative impacts will be analyzed, as necessary, in the EIR. Potential adverse air quality and hazards and hazardous materials impacts could also adversely affect humans, either directly or indirectly. Potential adverse effects on humans will be included in the air quality and hazards and hazardous materials analyses.

Conclusion

Based on the review of the environmental impacts associated with the proposed Tesoro Los Angeles Refinery Integration and Compliance Project, the SCAQMD has concluded that the proposed project may result in significant adverse environmental impacts in the areas of air quality, hazards and hazardous materials impacts, hydrology and water quality impacts, noise, solid and hazardous waste, and traffic from the construction of the proposed project (including parking). Therefore, the preparation of an EIR is required.

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ACRONYMS

Abbreviation	Description
AQMP	Air Quality Management Plan
ATS	Ammonium Thiosulfate Plant
BACM	Best Available Control Measure
BACT	Best Available Control Technology
bbl	barrel or 42 gallons
bbl/d	barrels per day
BP	British Petroleum
BPD	barrels per day
Carson Operations	Tesoro Los Angeles Refinery – Carson Operations
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CEQA	California Environmental Quality Act
CO	carbon monoxide
CRU	Catalytic Reformer Unit 3
CY	cubic yards
dBA	A weighted noise level measurement in decibels
DCU	Delayed Coker Unit
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ERCs	Emission Reduction Credits
ERPG	Emergency Response Planning Guideline
FCCU	fluid catalytic cracking unit
G	acceleration of gravity
GHGs	Greenhouse Gases
gpm	gallons per minute
G/D	gasoline to distillate
HCU	hydrocracking unit
HDD	horizontal direction drilling
HTU	Hydrotreater Unit
Kv	kilovolt
LACSD	Los Angeles County Sanitation Districts
LADWP	Los Angeles Department of Water and Power
lbs/day	pounds per day
LGB	Long Beach Airport
LHU	Light Hydrotreating Unit
LOS	Level of Service
LPG	Liquid Petroleum Gas
LUST	leaking underground storage tank
MH	manufacturing heavy
MMBtu/hr	million British Thermal Units per hour
MMscf/d	million standard cubic feet per day
MMscf/yr	million standard cubic feet per year
MW	megawatt

M3-1	heavy industrial use
NOP/IS	Notice of Preparation and Initial Study
NOx	Nitrogen oxide
NPDES	National Pollution Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PM10	particulate matter less than 10 microns in diameter
PM2.5	particulate matter less than 2.5 microns in diameter
PM	particulate matter
ppmv	parts per million volume
proposed project	Los Angeles Refinery Integration and Compliance Project
psig	per square inch gauge
PSTU	Propane Sales Treating Unit
RCRA	Resource Conservation and Recovery Act
Refinery	Tesoro Los Angeles Refinery
RVP	Reid vapor pressure
RWQCB	California Regional Water Quality Control Board
SARP	Sulfuric Acid Regeneration Plant
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCP	Spill Cleanup Program
SHU	Selective Hydrotreating Unit
SLIC	Spills, Leaks, Investigation and Cleanup
SOx	sulfur oxide
SRPs	Sulfur Recovery Plants
SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
TAN	total acid number
Tesoro	Tesoro Refining & Marketing Company, LLC
VOC	Volatile Organic Compound

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CITY OF CARSON

STAFF COMMUNICATION TO
THE ENVIRONMENTAL COMMISSION

NEW BUSINESS October 1, 2014

SUBJECT: City of Carson Public Health Initiative

REQUEST: Review, discuss, and provide ideas to develop the City of Carson Public Health Initiative

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I. Introduction

The Commission has expressed an interest in improving public health in the City of Carson. This item is intended to solicit ideas on how to assess the health of Carson citizens, identify the contributing factors, identify ways to improve it, and fund the improvements. This item will continue to be on the agenda until a firm recommendation is formed that can be presented to the City Council.

II. Background and Analysis

This is perhaps one of the biggest challenges facing the community. The physical location of Carson with near-by freeways, airports, ports, and rail lines limit our ability to improve air quality and all associated health impacts. In addition, established polluting industries contribute a great deal to the local and regional economy and eliminating them will certainly have negative impacts on the local economy. Furthermore, new businesses are also moving in that could impact public health as well. Staff would like to develop strategies with the Commission to accomplish this task.

III. Recommendation

Review, discuss, and provide ideas to develop the City of Carson Public Health Initiative

IV. Exhibits

1. None

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