

## CHAPTER 2.0

### PROJECT DESCRIPTION

#### PROJECT OBJECTIVES

The proposed project includes Refinery modifications that will improve the air quality in the South Coast Air Basin (Basin) by producing cleaner-burning reformulated gasoline for use in motor vehicles. Cleaner-burning gasoline will reduce emissions of criteria and toxic air pollutants, and, thereby, help to achieve and maintain federal and state ambient air quality standards in the Basin. The objective of the proposed project is to comply with California's Phase 3 Reformulated Gasoline requirements without any loss in the volume of gasoline produced by the Refinery.

#### REGULATORY BACKGROUND

California gasoline specifications are governed by both state and federal agencies. During the past decade, federal and state agencies have imposed numerous requirements on the production and sale of gasoline in California. In December 1999, the California Air Resources Board (CARB) developed additional regulations that affect the quality of gasoline in California. In order to meet these additional regulations, the Tosco Los Angeles Refinery (Refinery) will require modifications to its Wilmington Plant site.

In 1990, the amendments to the federal Clean Air Act (CAA) conditionally required [Statestates](#) to implement programs in federal carbon monoxide (CO) non-attainment areas to require gasoline to contain a minimum oxygen content in the winter beginning in November 1992. In response to the federal CAA requirements to reduce CO emissions, California established a wintertime oxygenate gasoline program requiring between 1.8 and 2.2 weight percent oxygen content in gasoline.

In addition, the CAA directed the U.S. Environmental Protection Agency (U.S. EPA) to adopt federal reformulated fuel gasoline (RFG Phase 1) regulations applicable starting January 1995 in the nine major metropolitan areas of the country with the worst ozone pollution, including the South Coast Air Basin. The federal CAA required that RFG Phase 1 contain at least 2.0 weight percent oxygen year-round. In addition to the federal RFG Phase 1 requirements, California adopted regulations for reformulated gasoline in 1991 (CARB Phase 2). Because of the federal requirements for oxygen content in RFG Phase 1, an oxygen content specification was incorporated in the CARB Phase 2 California reformulated gasoline regulations. The [CARB](#) RFG Phase 2 requirements were implemented in March 1996. A summary of the air quality benefits from the CARB Phase 2 requirements are shown in Table 2-1. [A comparison of both The CARB Phase 2 specifications and Phase 3 specifications](#) are shown in Table 2-2 ~~below~~.

**TABLE 2-1**

**EMISSION BENEFITS ASSOCIATED WITH  
CARB PHASE 2 REGULATIONS\***

<b>POLLUTANT</b>	<b>Reduction Tons per Day</b>	<b>Reduction Percent</b>
Hydrocarbons	190	17
Nitrogen oxides	110	11
Carbon Monoxide	1,300	11
Sulfur oxides	30	80
Potency-weighted sum of toxic species	--	40

\*Source: CARB, 1999.

**TABLE 2-2**

**CARB PHASE 2 AND 3 REQUIREMENTS\***

<b>PROPERTY</b>	<b>CARB RFG Phase 2 Requirements</b>	<b>CARB RFG Phase 3 Requirements</b>
RVP (psi)	7.0	6.9**
Benzene (vol. %)	1.00	0.80
Sulfur (ppmw)	40	20
Aromatic Hydrocarbons (vol. %)	25	25
Olefins (vol. %).	6.0	6.0
Oxygen (wt. %)	1.8 to 2.2	1.8 to 2.2
T50 °F***	210	213
T90 °F***	300	305

Source: CARB, 1999.

\* Based on the flat limit standard for producers, there are “average” and “cap” limits for all gasoline sold throughout the distribution system.

\*\* The listed RVP limit applies when the Evaporative Model is activated within the Predictive Model. If the Evaporative Model is not activated the flat limit for RVP is 7 psi.

\*\*\* T50 and T90 is the temperature at which 50 and 90 percent, respectively, of gasoline is distilled.

Neither [CARB](#) RFG Phase 1 nor [CARB](#) Phase 2 regulations specified the type of oxygenate required. While there are several oxygenates that can be used to meet the oxygenate requirement for gasoline, methyl tertiary butyl ether (MTBE) and ethanol are used most frequently. In 1996, over 95 percent of the gasoline used in California was blended with MTBE (CARB, 1999).

In California and other parts of the U.S., the use of MTBE and other ether-based oxygenates in gasoline raised environmental and health concerns. Recent legislation in California (SB 521, The MTBE Public Health and Environmental Protection Act of 1997) directed the University of California to conduct a study of the health and environmental risks as well as the ~~and~~ benefits of MTBE in gasoline compared to other oxygenates. SB 521 also required the Governor to take appropriate action based on the findings of the report and information from public hearings.

In consideration of this study, public testimony, and other relevant information, California's Governor Davis found that, "on balance, there is significant risk to the environment from using MTBE in gasoline in California." In response to this finding, on March 25, 1999, the Governor issued Executive Order D-5-99 which directed, among other things, that California phase out the use of MTBE in gasoline by December 31, 2002. As part of the Executive Order, on December 9, 1999, CARB adopted new gasoline specifications which are known as California Reformulated Gasoline Phase 3 (CARB RFG Phase 3) requirements. A summary of CARB RFG Phase 3 requirements is shown in Table 2-2.

The CARB RFG Phase 3 requirements prohibit the use of MTBE by-after December 31, 2002, while establishing more stringent standards for sulfur and benzene to preserve current emission benefits and to gain additional reductions of hydrocarbon, nitrogen oxide and toxic air pollutant emissions ~~reductions~~. Sulfur reduction is the only fuel parameter that simultaneously reduces emissions of hydrocarbons, NOx, and toxics. Therefore, lowering sulfur content provides additional NOx emission reductions (CARB, 1999). The two distillation standards (T50 and T90) are also being relaxed (see Table 2-2). In addition, the CARB RFG Phase 3 requirements provide flexibility in meeting the Reid vapor pressure (RVP) standard.

To realize full emissions benefit and flexibility that would be provided by the proposed amendments, relief from the federal RFG oxygenate requirement is necessary. §Section 211(k)(2)(B) of the federal Clean Air Act expressly authorizes the U.S. EPA Administrator to waive the 2.0 weight percent minimum oxygen requirement for federal RFG, in whole or in part "for any ozone non-attainment area upon a determination by the Administrator that compliance with such requirement would prevent or interfere with the attainment by the area of a national primary ambient air quality standard."

California has requested that the U.S. EPA waive the year-round 2.0 percent by weight oxygen requirement for federal RFG in each of California's three current federal RFG areas, including the Basin. The waiver is justified by CARB's technical analysis which shows that maintaining the federal 2.0 weight percent oxygen requirement after MTBE has been ~~in~~ eliminated in California gasoline will diminish the extent to which the California CARB RFG Phase 3 requirements can achieve emission reductions over and above the reductions achieved in the federal program. The loss of additional benefits from the California program will interfere with attainment of national ambient air quality

standards for ozone, particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5) (CARB, 1999).

CARB estimates that the Phase 3 requirements will reduce hydrocarbon emissions [in the state](#) by 0.5 tons per day, NOx emissions by 19 tons per day, and will eliminate MTBE concentrations. Potency weighted toxic emissions are expected to decrease by about [seven](#) percent. These emission reductions were based on comparing the properties of the 1998 average [gasoline fuel](#) to the properties of a representative CARB RFG Phase 3 fuel. The CARB RFG Phase 3 requirements are expected to preserve and enhance the motor vehicle emission reduction benefits of the current program and will further aid in meeting the emission reductions required by the State Implementation Plan (CARB, 1999).

In order to comply with CARB RFG Phase 3 requirements, and produce adequate quantities of products, Tosco is proposing modifications to its existing Refinery.

### NEED FOR EMISSION REDUCTIONS

[ROG/NOx](#): California continues to violate state and federal ambient ozone standards. Most of the state does not meet state or federal ozone standards. California's plan for achieving the federal ozone standard is contained in the California State Implementation Plan (SIP) that was approved by the CARB in 1997. A significant part of the emission reductions in the SIP are from [controlling-regulating](#) vehicles and their fuels. Table 2-3 below shows the ROG and NOx contribution from motor vehicles and stationary sources. Mobile source emissions account for approximately 70 percent of ozone precursors statewide. The SIP also calls for additional motor vehicle emission reductions in the [South Coast Air](#) Basin of about 75 tons per day of ROG and NOx, but it does not specify how the reductions are to be achieved.

TABLE 2-3

#### [CURRENT OZONE PRECURSOR CONTRIBUTION](#) [FROM MOTOR VEHICLES IN CALIFORNIA](#) [\(tons/day\)](#)

	ROG	NOx	ROG + NOx	Percent
On-Road Gasoline Vehicles	1588	1574	3162	45
On-Road Diesel Vehicles	64	507	571	8
Other Mobile Sources	321	695	1016	14
Stationary Sources	735	633	1368	20
Area-Wide Sources	779	95	874	13
Total	3487	3504	6991	100

## CHAPTER 2: PROJECT DESCRIPTION

---

Source: CARB, 1999

**CO:** The ~~Statestate~~ and ~~nationalFederal~~ ~~Cearbon monoxide (CO)~~ ambient air quality standards are now attained in most areas of California. The requirements for cleaner vehicles and fuels have been primarily responsible for the reduction in ambient CO concentrations, despite significant increases in population and the number of vehicle miles traveled each day. While the Basin is designated as non-attainment, violations of the ~~Statestate~~ and ~~nationalFederal~~ CO ambient air quality standards are now limited to only a small portion of Los Angeles County. No violations have occurred in the other three counties of the Basin (Orange, Riverside, and San Bernardino) since 1992. California RFG Phase 2 requirements have contributed substantially to the SCAQMD's efforts to attain the ambient air quality standards. ~~helped bring the State into CO attainment.~~ Additional emission reductions will be needed in the future to keep pace with the increases in population and vehicle usage.

**PM10:** The majority of California, including the Basin, is designated as non-attainment for the ~~Statestate~~ PM10 ambient air quality standards.

### LEAD AGENCY

The California Environmental Quality Act (CEQA), Public Resources Code Section §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. To fulfill the purpose and intent of CEQA, the ~~South Coast Air Quality Management Distriet (SCAQMD)~~ is the lead agency for this project and has prepared this Final EIR to address the potential environmental impacts associated with the Tosco RFG Phase 3 proposed project at their Wilmington Plant.

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment (Public Resources Code ~~§Section~~-21067). It was determined that the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines ~~Section-§~~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.

### PROJECT LOCATION

The equipment associated with the Tosco Los Angeles Refinery is operated at two locations (Wilmington Plant and Carson Plant) approximately three miles apart. Both locations are in the South Coast Air Basin. The two sites are integrated with raw, intermediate, and finished materials transferred between the sites primarily by pipelines. Finished products are transferred from the Los Angeles Refinery via the Torrance Tank

## TOSCO REFINERY WILMINGTON PLANT

---

Farm to distribution terminals in the Southern California area or to interstate pipelines.  
| The proposed project will ~~only~~ involve physical changes to ~~only~~ the Wilmington Plant,  
| located at 1660 West Anaheim Street, Wilmington, California 90745 (See Figures 2-1  
| and 2-2). [No changes to the Carson Plant are necessary at this time.](#)

## CHAPTER 2: PROJECT DESCRIPTION

---

Figure 2-1 goes here

# TOSCO REFINERY WILMINGTON PLANT

---

Figure 2-2 goes here

### LAND USE AND ZONING

The Wilmington Plant consists of approximately 42500 acres within the jurisdiction of the City of Los Angeles. The Wilmington Plant is located within the Wilmington-Harbor City Planning Area of the City of Los Angeles which permits heavy industrial uses, including petroleum refining (City of Los Angeles, 1999). The Wilmington-Harbor City Plan places no additional restrictions on refineries. The facility is located in the southern portion of Los Angeles County near the Port of Los Angeles. The eastern portion of the Wilmington Plant borders a residential area, a roofing materials plant, and a portion of the Harbor 110 Freeway. The northern portion of the site borders Ken Malloy Harbor Regional Park, Harbor College, Harbor Park Municipal Golf Course, and a small residential area. The western portion of the site borders Gaffey Street, including a firing range, vacant fields, recreational fields, and a U.S. Navy fuel storage facility. Finally, the southern portion of the site shares a border with a vacant property formerly a fuel blending facility belonging to Western Fuels that is currently under development for warehouse/storage facilities.

### EXISTING REFINERY OPERATIONS

Crude oil and distillates and other raw materials are delivered to the Refinery by pipelines, ships, and trains. Crude oil is processed in the crude unit where it is heated and distilled into various hydrocarbon components, which are further processed in downstream Refinery units. The major Refinery products include unleaded gasoline, diesel, and jet fuels. Elemental sulfur and petroleum coke are produced as co-products of the refining process. Major processing units at the Refinery include the crude unit, vacuum flasher, coker unit, hydrotreating units, reforming units, fluid catalytic cracking unit, alkylation unit, sulfur recovery units, hydrogen plant, acid plant and the cogeneration unit. A plot plan of the existing Wilmington Plant is shown in Figure 2-3. A flow diagram of the existing Wilmington Plant configuration is shown in Figure 2-4.

### PROPOSED PROJECT

To comply with CARB RFG Phase 3 gasoline specifications, Tosco will modify existing process units at the Wilmington Plant. ~~No new process units are proposed at the Refinery. In addition, no No\_~~ modifications are currently planned at the Carson Plant or Marine Terminal or at any other distribution terminals. The primary objective of these modifications is to increase the rate through the Alkylation Unit to produce more alkylate, a high octane and low vapor pressure gasoline blendstock that is needed for meeting the CARB RFG Phase 3 RVP standard, as well as for meeting the more stringent benzene and sulfur standards. The process unit modifications will also require modifications to associated support facilities, such as utility systems and interconnecting piping. Additionally, some tanks will undergo service changes. The proposed project will not increase the crude throughput capacity of the Refinery. Table 2-4 provides a summary of the proposed project changes and Figure 2-5 provides the Wilmington Plant configuration following construction of the proposed project.

Figure 2-3 goes here

## CHAPTER 2: PROJECT DESCRIPTION

---

Figure 2-4 goes here

TABLE 2-4

PROPOSED WILMINGTON PLANT MODIFICATIONS

Process Change/Equipment Description	Nature of Change
<b>RVP Control</b>	
Alkylation Unit – Fractionation Equipment Refrigeration Compressor System Pumps, Heat Exchangers, and Piping	New/Modifications New New/Modifications
Acid Plant – —Vapor Recovery System	New
<a href="#">Catalytic Light Ends Fractionation Unit -     Fractionation Equipment     Pumps and Piping</a>	<a href="#">New Modifications</a>
Butamer Unit – —Pumps	Modifications
Rail Car Offloading Facilities	Modifications
Butane Storage Tank System	Modifications
Storage Tank System	Modifications
Utilities – Nitrogen System Steam System Water System Condensate System Electrical System Hydrocarbon Relief System Fresh/Spent Acid System	Modifications Modifications Modifications Modifications Modifications Modifications Modifications
<b>Reduce Sulfur Content</b>	
Storage Tank System	Modifications
Catalytic Light Ends Fractionation Unit - Heat Exchanger and Piping	New
Utilities – Electrical System	Modifications

Figure 2-5 goes here

|

The following equipment/processes are proposed to be modified at the Wilmington Plant.

### **Alkylation Unit**

The existing Alkylation Unit will be modified to produce more alkylate product for blending into finished gasoline. The Wilmington Plant Alkylation Unit is divided into three major sections: The Merox feed treatment; reaction refrigeration; and effluent treating/fractionation. The Merox feed treatment section will need only minor upgrades of existing pumps.

The reaction/refrigeration section modifications will require installation of a complete refrigeration system in parallel with the existing system and realignment of an existing distillation column. The modifications consist of a new parallel refrigeration compressor system; installation of a new deisobutanizer system; realignment of the fractionation system; and pump, heat exchanger, and piping changes. -In the reaction portion of the unit, existing feed pumps will be replaced with upgraded, larger pumps to handle the increased raw material feed rate. New heat exchangers will also be added to maintain process temperatures at optimum levels and for energy recovery. consist of a new parallel refrigeration compressor system; installation of a new deisobutanizer system; realignment of the fractionation system, and pump, heat exchanger, and piping changes.

The new parallel refrigeration system will consist of an electric driven compressor; a reused depropanizer column; and related peripheral pumps, heat exchangers and vessels. The new deisobutanizer system will consist of a deisobutanizer column and related pumps, heat exchangers and vessels. The fractionation system realignment will consist of shutting down an existing deisobutanizer and an existing depentanizer; reusing an existing depropanizer system in the new refrigeration system; and reusing an existing debutanizer system for depentanizer service. In addition to these major changes, several pumps at the Alkylation Unit will be replaced with pumps of higher capacities and certain existing vessels will be replaced with larger sized vessels. A new non-contact cooling tower and electrical substation will be provided to support these changes. These proposed modification will increase alkylate production which is needed for meeting the CARB RFG Phase 3 RVP standard, as well as for meeting the more stringent benzene and sulfur standards.

### **Acid Plant**

The existing Acid Plant will be modified to accommodate the increase in spent acid processing and transportation associated with the increased Alkylation Unit rate. The major modification will be the installation of a new vapor recovery system to handle increased vapors from the existing spent sulfuric acid tank and the existing sulfuric acid truck and railcar loading rack. Other minor modifications are anticipated to the Acid Plant equipment to ensure reliable processing and/or shipment of the spent acid from the Alkylation Unit. These may include modifications to the spent acid tank, transfer facilities and other minor modifications to equipment at the Acid Plant. Spent acid that

## CHAPTER 2: PROJECT DESCRIPTION

---

is not processed in the Acid Plant will be sent to an off-site regeneration facility. These proposed modifications will allow the Wilmington Plant to handle the increase in alkylate production.

~~A new Acid Plant vapor recovery system will be provided to handle vapors from the existing sulfuric acid tank and the existing sulfuric acid truck loading rack.~~

### **Catalytic Light Ends Fractionation System**

~~The Fluid Catalytic Cracking (FCC) Unit is divided into two major sections: the Fluid Catalytic Cracking section; and the Catalytic Light-Ends Fraction (CLEF) section. In the FCC section heavy feeds are first catalytically cracked into lighter hydrocarbons and then passed through initial fractionation. The overhead from this initial fractionation in the FCC section is sent to the CLEF for separation into other intermediate streams, which includes feedstocks for the Alkylation Unit.~~ Modifications will be made to the existing Catalytic Light Ends Fractionation (CLEF) system to recover the incremental C3 olefin and C4 olefin feedstock for the Alkylation Unit. ~~The CLEF system is part of the fractionation facilities at the Fluid Catalytic Cracking (FCC) Unit.~~ These modifications, which will allow the Wilmington Plant to produce additional alkylate, consist of replacement of an existing fractionating tower with a new fractionating tower, and pump/piping revisions.

Additionally, the existing fractionation section will be operated differently to allow current naphtha streams to be produced with different boiling ranges, permitting improved optimization of existing sulfur removal facilities at Hydrotreating Units 59 and 79. An additional heavy naphtha rundown cooling exchanger at the FCC Unit is ~~anticipated to be~~ needed.

### **Butamer Unit**

To supply the incremental isobutane needed to support the increased Alkylation Unit rate, the Butamer Unit will require modifications ~~that to would allow permit processing~~ additional normal butane feedstock to be processed. The revisions will also include changes to existing pump impellers and drivers.

### **Railcar Offloading Facility~~Transfer and Tankage Systems~~**

Butane is brought into the Wilmington Plant by railcar and unloaded into pressurized storage tanks. To handle the increased number of railcars, the three existing unloading pumps will be replaced with higher capacity pumps. ~~Rail car offloading facilities will be modified to handle the increase in normal butane receipts necessary~~ to support the higher Butamer Unit rate. The revisions will also include pump and piping ~~modification~~changes.

### **Butane Storage Tank System**

To support the increased offloading rate, two existing butane tanks will undergo vent system ~~modification~~changes.

### Storage Tank System

Several existing storage tanks will undergo service changes to accommodate the production of additional alkylate and products. The throughput of certain storage tanks also may change including those that store naphtha, alkylate, ammonium sulfate, and sulfuric acid.

There will be several ancillary piping changes to support the increased tank car offloading rate and the tankage changes.

### **Utilities**

Existing utility systems will be modified as necessary to support the revisions to the process units and associated tankage/transfer systems. The affected utility systems include nitrogen, steam, water, condensate, electrical, and hydrocarbon relief. The nitrogen system will be modified in two ways: (1) an existing two inch diameter pipeline to the butane railcar unloading rack will be increased to three inch diameter pipe; and (2) a new two inch diameter pipeline will be used to extend the existing nitrogen distribution system to the Acid Plant because the blanket on the spent acid tank F-301 will be changed from carbon dioxide to nitrogen. The steam distribution system will be extended to supply steam to the new cooling tower circulating water pumps and to other new equipment inside the Alkylation Unit. No modifications are required to boilers or major steam distribution piping. The condensate system modifications will parallel the steam system modifications. A new electrical substation and motor control center will be added to supply electrical power to the new equipment in the Alkylation Unit, and upgrade the main electricity supply to the existing equipment in the Alkylation Unit. The only physical changes to the hydrocarbon relief system are to connect new pressure relief valves in the Alkylation Unit to the existing relief system. There will be an increase in operational venting that will be handled by the vapor recovery compressor, and a small amount will also be vented to the Butane Flare. The estimated worst-case emergency relief load will actually be reduced by the proposed project.

~~The steam and hydrocarbon relief changes are anticipated to be piping and valve additions to connect the new or modified systems into the existing systems. Capacity increases in the steam and hydrocarbon relief systems are not anticipated or this project.~~

### **Changes in Transportation**

Production of spent sulfuric acid is expected to increase by 44 tons per day. This incremental increase in acid will be processed in the Acid Plant up to unit limits, with the remainder (if any) being shipped to offsite processing facilities and the resultant fresh sulfuric acid being returned to the Wilmington Plant. Based on shipment of the entire incremental volume of spent sulfuric acid, there will be an estimated increase of 1,460 trucks per year associated with acid movement.

## TOSCO REFINERY WILMINGTON PLANT

---

Increased butane usage will require additional receipt of butane from outside suppliers, resulting in the delivery of nine additional railcars per day. It is expected that the additional railcars will be delivered on each current trip so that additional railroad trips are not anticipated.

Perchloroethylene usage at the Butamer Unit will increase, resulting in three additional truck ~~transport trips~~~~receipts~~ per year.

The use of anhydrous ammonia at the existing Acid Plant will increase. Assuming all the ~~spent~~~~90 percent~~ sulfuric acid is processed in the Acid Plant, an additional 33 truck trips per year will be required.

Ammonium sulfate production at the Acid Plant will increase. Based on processing all the incremental ~~spent~~~~90 percent~~ sulfuric acid in the Acid Plant, an additional 448 truck trips per year will be required.

Liquid sulfur shipments from the Acid Plant will increase. Based on processing all the incremental sulfuric acid in the Acid Plant, an additional 40 truck trips per year will be required.

The amount of ship activity within the Port is expected to decrease by an estimated 11 ships per year due to changes in the types of blendstocks that will be received.

The ~~NOP/ISettee-of-Preparation~~ completed for this project (SCAQMD, 2000) indicated that the proposed project would include modifications to Hydrotreating Units 59 and 79. After further review of the proposed project needs, it was determined that the modifications to Units 59 and 79 are not needed and have been removed from the proposed project.

### CONSTRUCTION OF THE PROPOSED PROJECT

Construction of the proposed project is expected to begin in the first quarter of 2001 and be completed by December 2001 (see Figure 2-6). Construction activities are expected to take place primarily from approximately 6:30 a.m. to 5:30 p.m., Monday through Friday.

Construction of the proposed project is expected to employ a maximum of about 250 to 300 workers. Proposed parking for the construction workers will be provided within the Wilmington Plant at an existing contractor's parking lot located west of the main plant entrance.

### CUMULATIVE PROJECTS

Cumulative projects at the Tosco Los Angeles Refinery include the refinery modifications changes that will occur relative to eliminating with the elimination of Mmethyl tertiary butyl ether (MTBE) from gasoline. Potential environmental impacts from the import and distribution of ethanol were previously analyzed in a Negative Declaration (SCH No. 20005115) which is available from the SCAQMD online at [www.aqmd.gov/ceqa/nonaqmd.html](http://www.aqmd.gov/ceqa/nonaqmd.html) or by calling (909) 396-2039. The cumulative impacts of the ethanol import and distribution project as well as other projects have been evaluated in the EIR.

### PERMITS AND APPROVALS

Tosco requires environmental permits to operate its facility from a variety of federal, state, and local agencies (see Table 2-5). Tosco has secured the appropriate permits to operate the existing Refinery. Tosco has applied for and must obtain air quality permits related to the proposed project. The environmental permits generally required by Tosco are discussed below. Most of these permits have been issued but some may require

| [Figure 2-6 goes here](#)

modifications associated with the proposed revisions to the Refinery. A summary of major permitting and regulatory compliance requirements is provided in Table 2-5.

### **Federal Approvals**

~~Direct federal approvals for the proposed project are not expected.~~ Many of the U.S. EPA regulations and requirements are implemented by state or local agencies. While, the Spill Prevention Control and Countermeasure (SPCC) Plan will require modifications to assure that all new and modified Refinery units are included in the Plan and the Refinery will have to comply with applicable provisions of Title III and OSHA, no direct federal approval is expected to be required.

### **State Approvals**

Construction-related permits may be required from the California Occupational Safety and Health Administration (CalOSHA) for demolition, construction, excavation, and tower and crane erection. Any transport of heavy construction equipment using oversized transport vehicles on state highways will require a Caltrans transportation permit.

### **Local Approvals**

The SCAQMD has responsibility as lead agency for the CEQA process and for certification of the EIR. Permits to Construct/Operate for various combustion sources such as for new units or modifications to existing units will be required. Permits or plan approvals also may be required for construction, soil remediation, and demolition activities. The SCAQMD requires a permit for any equipment or process, which emits an air contaminant or controls the issuance of an air contaminant.

Figure 2-6 goes here

## CHAPTER 2: PROJECT DESCRIPTION

---

The Los Angeles City Bureau of Sanitation (LACBS) has responsibility for issuance of industrial wastewater discharge permits required for sewer discharge.

The City of Los Angeles Fire Department is responsible for issuing permits for storage tanks and for review and approval of Risk Management Plans. The Fire Department also is responsible for assuring that the City fire codes are implemented.

Building and grading permits for the proposed project will be required from the City of Los Angeles to assure that the project complies with the Uniform Building Code.

TABLE 2-5

FEDERAL, STATE AND LOCAL AGENCY PERMITS AND APPLICATIONS

Agency Permit or approval	Requirement	Applicability to Project
<b>Federal</b>		
U.S. EPA	Spill Prevention Control and Countermeasure Plan (40 CFR Part 112)	Modifications to Refinery facilities that affect the potential for oil or flammable materials discharge into navigable waters.
	Title III of the federal Clean Air Act Amendments of 1990, including development of an Accidental Release Program	Modifications to Refinery facilities/operations involving use of listed regulated substances.
	Title III of the Superfund Amendments and Reauthorization Act of 1986, including Section 313 – Annual Release Reporting (Form R)	Modifications to Refinery facilities/operations involving use or storage of <u>extremely hazardous substances</u> (EHSs) or other regulated hazardous materials.
Occupational Safety and Health Administration ( <a href="#">OSHA</a> )	Compliance with 29 CFR 1920, including preparation of an Emergency Response Plan, a Fire Prevention Plan, Process Hazards Safety Review, and employee training	Modifications to Refinery facilities involving materials that are acutely toxic, flammable or explosive.
U.S. Department of Transportation ( <a href="#">DOT</a> )	Compliance with DOT <del>regulations</del> regulations regarding transportation of hazardous substances (40 CFR Part 172)	Project-related transportation (import/export of hazardous substances).

TABLE 2-5 CONT'D

Agency Permit or approval	Requirement	Applicability to Project
<b>State</b>		
California Environmental Protection Agency, Dept. of Toxic Substances Control (DTSC)	On-site hazardous waste generation	Project-related modifications to applicable hazardous materials and hazardous waste generation handling at the Refinery.
	Proposition 65 – California’s Safe Drinking Water and Toxic Enforcement Act of 1986	Project-related exposure of the public to listed carcinogens or reproductive toxins due to proposed modifications. Public notification is required under certain specified conditions.
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) Permit/Waste Discharge <del>reqt.</del> <a href="#">requirement</a> .	Project-related modifications to applicable storm water runoff plans.
Caltrans	Transportation Permit (CCR 21 Division 2, et.seq.);	Project-related application to transport overweight, oversize, and wide loads on <del>State</del> <a href="#">state</a> highway
CalOSHA	Process Safety Management Program (40 CFR Part 1910)	PSM program may require updating due to project revisions including written process safety information, hazop analysis, development of operating procedures, training procedures, and pre-start safety review.
	Construction-related permits (CCR Title 8, Division 1, and crane Chapter 4)	Excavation, construction, demolition and tower erection permit.
	Written Hazard Communication Standard Compliance Program	Project-related modifications to Refinery facilities/operations involving hazardous materials (including needed modifications to employee training programs).

TABLE 2-5 CONT'D

Agency Permit or approval	Requirement	Applicability to Project
<b>Local</b>		
South Coast Air Quality Management District <a href="#">(SCAQMD)</a>	Permits to Construct and Title V of the 1990 Clean Air Act	SCAQMD Rule 201 and Regulation XXX: Permit to construct and operate. Applications are required to construct, operate or modify <a href="#">stationary air</a> -emission sources.
	Permits to Operate	SCAQMD Rule 203: Permit to Operate. Applications are required to operate <a href="#">air stationary</a> emissions sources.
	California Environmental Quality Act (CEQA) Review	The SCAQMD is the lead agency for preparation of the environmental document (CEQA Guidelines, Chapter 2.5, <a href="#">Section §21069</a> ).
	Prevention of Significant Deterioration	<a href="#">SCAQMD Regulation XVII</a> : Requirements for modifications to stationary sources in attainment areas.
	Standards for Approving Permits	SCAQMD Rule 212: Permits cannot be issued if air contaminants create a public nuisance or exceed capacity limits. Also requires public notification of significant project.
	<a href="#">Best Available Control Technology (BACT)</a> and Modeling	SCAQMD Regulation XX and Regulation XIII, New Source Review: New or modified permit units must apply BACT, obtain offsets and perform modeling of new emissions increases.
	<a href="#">Toxics Best Available Control Technology (T-BACT)</a> -and Risk Assessment	SCAQMD Rule 1401: NSR of Carcinogenic Air Contaminants. New or modified permit units must comply with maximum allowed risk levels.

CHAPTER 2: PROJECT DESCRIPTION

TABLE 2-5 ~~Concluded~~ONT'D

Agency Permit or approval	Requirement	Applicability to Project
<b>Local Cont'd.</b>		
City of Los Angeles	Building Permit	Required for project-related foundations and buildings to assure compliance with UBC, etc.
	Grading Permit	Required prior to grading.
	Plumbing and Electrical Permit	General construction permit.
	Hazardous Materials Business Plan	Storage of project-related hazardous materials.
<a href="#">City of Los Angeles Fire Dept.</a>	Acutely Hazardous Material Registration/Risk Management Plan	Project-related use/storage of acutely hazardous materials.
	Above Ground Storage of Hazardous/Flammable Materials (Uniform Fire Code, Article 80)	Project-related storage of regulated materials.
<del>County Sanitation Districts of Los Angeles</del> <a href="#">City of Los Angeles, Bureau of Sanitation</a>	Industrial Wastewater Discharge Permit (CA Health & Safety Code, Division 6, Chapter 4, Article 1, <a href="#">Section §6521</a> )	Project-related modifications to the Refinery's industrial waste-water discharge to the sewer if it affects the quantity, quality, or method of industrial wastewater disposal.

DABWORD:2021EIR2