

5.9 Traffic

This section describes both the onshore and offshore transportation systems in the vicinity of the proposed project and the impacts of the proposed project. The analysis in this section is based on field surveys, a review of local and regional maps, and discussions with appropriate agencies.

5.9.1 Environmental Setting

This section is divided into two parts. The first part covers baseline onshore traffic and the second covers the baseline offshore traffic in the vicinity of the proposed project.

5.9.1.1 Onshore Traffic

Roadway and Intersection Classification

Circulation conditions are often described in terms of levels of service (LOS). LOS is a means of describing the amount of traffic on a roadway versus the design capacity of the roadways. The design capacity of a roadway is defined as the maximum rate of vehicle travel that can reasonably be expected along a section of roadway. Capacity is dependent on a number of variables including road classification and number of lanes, weather, and driver characteristics. The LOS rating uses qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists. These measures include freedom of movement, speed and travel time, traffic interruptions, types of vehicle, comfort, and convenience. Ideal conditions for a roadway would include good lane widths and roadside clearances, the absence of trucks or other heavy vehicles, and level terrain. LOS is generally a function of the ratio of traffic volume (V) to the capacity (C) of the roadway or intersection, which provides the V/C ratio (see Table 5.9.1).

Table 5.9.1 Traffic Conditions Along Project Related Routes

Road/Route	Class	ADT	ADT LOS	Peak Hr	Design Cap	V/C Ration	Ref.
<i>State Highway 1 from Gaviota to Orcutt</i>							
Las cruces, jct. Rte. 101	Major - 2 Lanes	7,700	A	850	16,000	0.48	1
Jalama Road	Major - 2 Lanes	7,900	A	930	16,000	0.49	1
Lompoc, south jct. Rte. 246	Major - 4 Lanes	16,300	A	1,700	31,900	0.51	1
Lompoc, north jct. Rte. 246	Major - 4 Lanes	16,000	A	1,300	31,900	0.50	1
Lompoc, Santa Ynez River bridge	Major - 4 Lanes	20,000	B	1,600	31,900	0.63	1
Lompoc-Casmalia Road,	Major - 4 Lanes	20,000	B	1,700	31,900	0.63	1
Pine Canyon Road	Major - 4 Lanes	16,100	A	1,400	31,900	0.50	1
Vandenberg Air Force Base, main gate	Major - 4 Lanes	15,200	A	1,600	31,900	0.48	1
South jct. Rte. 135; Vandenberg, north	Major - 4 Lanes	16,200	A	1,550	31,900	0.51	1
Orcutt, jct. Rte. 135 north	Major - 4 Lanes	2,400	A	300	31,900	0.08	1
Clark Ave	Major - 4 Lanes	3,800	A	450	31,900	0.12	1
<i>State Hwy 246 (Ocean Ave) from Hwy 1 West to Surf</i>							
Lompoc west of City Limits	Major - 2 Lanes	6,200	A	900	16,000	0.35	1
W. Ocean Ave: E of Floradale	Major - 2 Lanes	5,375	A	538	16,000	0.34	2
W. Ocean Ave: E of Arguello	Major - 2 Lanes	2,718	A	272	16,000	0.17	2
<i>Harris Grade Road from Hwy 1 to State Hwy 135</i>							
North of State Hwy 1	Major - 2 Lanes	8,223	A	822	16,000	0.51	2
N of Rucker Rd	Major - 2 Lanes	1,663	A	166	16,000	0.10	2

Table 5.9.1 Traffic Conditions Along Project Related Routes

Road/Route	Class	ADT	ADT LOS	Peak Hr	Design Cap	V/C Ration	Ref.
State Hwy 135 East from Harris Grade Road to Hwy 101							
Los Alamos, jct. Rte. 101	Major - 2 Lanes	5,500	A	490	16,000	0.34	1
Old State Highway	Major - 2 Lanes	3,200	A	310	16,000	0.20	1
Old Route 1/Cabrillo Highway	Major - 2 Lanes	2,700	A	290	16,000	0.17	1
State Hwy 135 West from Harris Grade Road to Hwy 1							
San Antonio Road	Major - 2 Lanes	2,700	A	290	16,000	0.17	1
South jct. Rte. 1	Major - 2 Lanes	2,700	A	270	16,000	0.17	1
State Hwy 135 from Highway 1 to Clark Ave							
Orcutt, north jct. Rte. 1;	Major - 4 Lanes	14,800	A	1,400	31,900	0.46	1
East Clark Avenue	Major - 4 Lanes	19,000	A	2,150	31,900	0.60	1
Clark Ave in Orcutt from State Hwy 135 to Hwy 101							
Clark Ave: W of Blosser	Major - 2 Lanes	2,459	A	246	16,000	0.15	2
Clark Ave W of 101	Major - 4 Lanes	18,207	A	1,821	31,900	0.57	2

References: 1 = Caltrans, 2005; 2 = Santa Barbara Public Works Traffic Volumes (2006).

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E.

ADT = Average Daily Traffic Harris Grade Road peak hour based on 10% of Annual Average Daily Trips (AADT).

Trucks impact LOS by occupying more roadway space and by having poorer operating qualities than passenger cars. Because heavy vehicles accelerate more slowly than passenger cars, gaps form in traffic flow that affect the efficiency of the roadway. Also, intersections present a number of variables that can influence LOS including curb parking, transit buses, turn lanes, signal spacing, pedestrians, and signal timing.

The Transportation Research Board has developed the Highway Capacity Manual that details the procedures to be used in predicting LOS for a range of roadways and intersections. The LOS of a roadway is defined by scales ranging from A to F, with A indicating excellent traffic flow quality and F indicating stop-and-go traffic. Level E is normally associated with the maximum design capacity that a roadway can accommodate. The highest quality of traffic service occurs on roadways when motorists are able to drive their desired speed without strict enforcement and are not delayed by slow-moving vehicles more than 30 percent of the time. This condition is representative of LOS A. The classifications of LOS B and C are characterized when average drivers are delayed up to 45 and 60 percent of the time, respectively, by slow moving vehicles. LOS D is characterized by 31 to 70 percent of the signal cycles having one or more vehicles that wait through at least one signal cycle. When an area drops to LOS E, the speed of traffic is restricted 71 to 100 percent of the time; and intersection signal cycles have one or more vehicles waiting through more than one signal cycle during peak traffic periods. The LOS of A, B, and C are generally considered satisfactory.

Santa Barbara County Planning and Development (SBC P&D) uses the County's thresholds for V/C ratios to calculate LOS. As discussed above, LOS is determined not only by traffic volumes, but also by a number of roadway conditions and intersection details. Determining a roadway's potential to present a traffic flow problem is a time-consuming process; therefore, a screening approach is often recommended. The screening approach involves comparing the roadway class with a traffic volume level for each level of service. The screening levels are developed by making generic assumptions for the data input in the Highway Capacity Manual calculations.

Table 5.9.2 shows the screening volume levels that are proposed for this study. Note that the screening tool is for roadways and not for intersections.

Table 5.9.2 LOS Screening Classifications, Roadway Daily Volumes

Roadway Class	LOS (high values)				
	A	B	C	D	E
Arterial - 4 Lanes	23,900	27,900	31,900	35,900	39,900
Arterial - 2 Lanes	12,000	14,000	16,000	18,000	20,000
Major - 4 Lanes	19,200	22,300	25,500	28,700	31,900
Major - 2 Lanes	9,600	11,200	12,800	14,400	16,000
Collector	7,100	8,200	9,400	10,600	11,800

Source: Based on SBC Public Works Department Roadway Design Capacities.

In addition, LOS values are often developed by the respective county engineering and public works departments to address future land use and impacts on requirements of future roadway projects. These analyses are normally conducted as part of a community plan and are available for only limited locations in the proposed project area. They generally utilize the detailed approach given in the Highway Capacity Manual and include both roadways and intersections.

Existing Conditions

Routes that could be affected by the proposed project include major routes to and from the pipeline route areas and major roads accessing the LOGP. Major roads that then connect these areas to Highway 101 for north or south travel are also included. These routes are shown on Appendices A and B and include the following:

- *State Highway 1* can be used for travel to Highway 101 North in Orcutt or for travel south at Las Cruces (near Gaviota). Highway 1 also passes directly through the middle of the City of Lompoc along East Ocean Avenue and north along North H Street. It is a four-lane road from southern Lompoc north until Orcutt. It is a two-lane road south of Lompoc until Highway 101.
- *Highway 246*, also called West Ocean Avenue, can be used to access the western part of the pipeline route via VAFB, south entrance at 13th Street. The state-maintained Highway 246 ends at the western limit of the City of Lompoc, but West Ocean Avenue continues as a two-lane road from Highway 1 west to Ocean Beach Park on the coast.
- *Harris Grade Road* passes directly in front of the LOGP. From the plant, travel north on Harris Grade Road connects to Highway 135. Traveling south connects to Highway 1 just north of the City of Lompoc and Highway 1 Santa Ynez River crossing. This is a two-lane road.
- *Highway 135* travels east from Harris Grade Road to connect with Highway 101 at Los Alamos. Westward travel on Highway 135 from Harris Grade Road joins with Highway 1 north of VAFB. Highway 135 continues south of Orcutt where it branches off from Highway 1 in an east and then northerly direction. Here it connects with Clark Avenue where the route can continue to Highway 101. This is a two-lane road.
- *Clark Avenue* is an east/west road that connects Highway 1 and Highway 135 with Highway 101 passing through the southern part of the community of Orcutt. This is a four-lane road except for the western segments, which have two lanes.

Existing traffic circulation and roadway operating conditions for the proposed project area were compiled for the roadways and intersections along the transportation routes in the vicinity of the project. Average daily traffic (ADT) rates and peak hour traffic flow measurements were used to classify the road segments according to the LOS shown in Table 5.9.2. The LOS provides an indication of the extent to which the roads are currently congested. Information was obtained for the State highways (Highway 1, 135 and 246) from CalTrans, and for major roads and arterial roads from the SBC Public Works Department. For areas where peak hour traffic was not available, it was assumed to be 10 percent of ADT. Table 5.9.1 lists the segments of each route, along with the corresponding traffic volumes, LOS classification, and volume to capacity ratios.

All routes that could reasonably be affected by the proposed project show acceptable LOS levels. The most congested area is along Highway 1 through the City of Lompoc (East Ocean Avenue and North H Street). The segment at the Santa Ynez River shows the most congested area with an LOS B level and a V/C ratio of 0.63. These are based on 2005 CalTrans traffic counts.

Roadways within VAFB are under the control of the military. Traffic counts are not available for these facilities. Coast Road south of Bear Creek Road is a main thoroughfare and critical infrastructure for Base operations.

Future Conditions

Future conditions of the roadways are important in understanding the potential impacts of a proposed project. Most of the routes examined in this document are CalTrans governed and maintained roadways. Traffic data from CalTrans from 1999 and 2005 were compared. The past growth rate of a maximum of 1.8 percent per year was extrapolated to estimate future traffic conditions on the area roadways under CalTrans jurisdiction. SBC circulation studies were also used. These studies generally use a traffic model to develop estimates of future roadway traffic volumes to assist in the planning of future projects. The models utilize inputs such as projected land use and increased growth, population projections, and building activity projections; however, circulation is examined only on selected routes. It was considered that traffic volumes would grow in the area at the same rate as population over the next 10 years (or an annual growth rate of approximately 0.9 percent to 2016 [Department of Finance, 2004]).

Table 5.9.3 lists the projected future traffic conditions and LOS for the proposed project area in the year 2016.

Growth rates of traffic are estimated to range from a low of approximately 2 percent annually to a high of close to 7 percent annually. Future development and growth in the area over the next 10 years is estimated to produce LOS ratings of LOS C for Highway 1 through the City of Lompoc. The areas immediately around the Santa Ynez Bridge and the Casmalia Road would produce highest LOS levels of LOS C with V/C ratios as high as 0.75. It is estimated that Highway 135 near Clark Avenue could also produce a LOS C level with a V/C ratio of 0.71.

Truck Traffic

Truck traffic affects the LOS of a roadway by affecting traffic flow. Information on truck traffic is available from CalTrans for Highways 1, 135 and 246. Table 5.9.4 lists the truck traffic percentages for each highway segment. For comparison, trucks comprise approximately 2 percent of traffic on local urban arterial roads under normal conditions. A method for estimating the truck traffic effects on the LOS is included in the Highway Capacity Manual. Essentially, for

each 10 percent increase in truck traffic, the LOS volume rating is decreased by approximately 5 percent.

Table 5.9.3 Tranquillon Ridge EIR Traffic/Circulation: Area Routes and Future LOS Classifications – 10 year projection

Road/Route	Class	Current ADT	Future ADT	Future ADT LOS	V/C Ratio	Ref.
State Highway 1 from Gaviota to Orcutt growth		1.8 percent annual growth				
Las Cruces, jct. Rte. 101	Major - 2 Lanes	7,700	9,204	A	0.58	1
Jalama Road	Major - 2 Lanes	7,900	9,443	A	0.59	1
Lompoc, south jct. Rte. 246	Major - 4 Lanes	16,300	19,483	B	0.61	1
Lompoc, north jct. Rte. 246	Major - 4 Lanes	16,000	19,125	A	0.60	1
Lompoc, Santa Ynez River bridge	Major - 4 Lanes	20,000	23,906	C	0.75	1
Lompoc-Casmalia Road	Major - 4 Lanes	20,000	23,906	C	0.75	1
Pine Canyon Road	Major - 4 Lanes	16,100	19,244	B	0.60	1
Vandenberg Air Force Base, main gate	Major - 4 Lanes	15,200	18,169	A	0.57	1
South jct. Rte. 135; Vandenberg, north	Major - 4 Lanes	16,200	19,364	B	0.61	1
Orcutt, jct. Rte. 135 north	Major - 4 Lanes	2,400	2,869	A	0.09	1
Clark Ave.	Major - 4 Lanes	3,800	4,542	A	0.14	1
State Hwy 246 (Ocean Ave) from Hwy 1 West to Surf growth		1.8 percent annual growth				
Lompoc west of City Limits	Major - 2 Lanes	6,200	7,411	A	0.46	1
W. Ocean Ave: E of Floradale	Major - 2 Lanes	5,375	6,425	A	0.40	2
W. Ocean Ave: E of Arguello	Major - 2 Lanes	2,718	3,249	A	0.20	2
Harris Grade Road from Hwy 1 to State Hwy 135 growth		3.9 percent annual growth				
North of State Hwy 1	Major - 2 Lanes	8,223	12,056	C	0.75	2
N of Rucker Rd	Major - 2 Lanes	1,663	2,438	A	0.15	2
State Hwy 135 East from Harris Grade Rd to Hwy 101 growth		1.8 percent annual growth				
Los Alamos, jct. Rte. 101	Major-2 Lanes	5,500	6,574	A	0.41	1
Old State Highway	Major - 2 Lanes	3,200	3,825	A	0.24	1
Old Route 1/Cabrillo Highway	Major - 2 Lanes	2,700	3,227	A	0.20	1
State Hwy 135 West from Harris Grade Road to Hwy 1 growth		1.8 percent annual growth				
San Antonio Road	Major - 2 Lanes	2,700	3,227	A	0.20	1
South jct. Rte. 1	Major - 2 Lanes	2,700	3,227	A	0.20	1
State Hwy 135 from Highway 1 to Clark Ave growth		1.8 percent annual growth				
Orcutt, north jct. Rte. 1	Major - 4 Lanes	14,800	17,690	A	0.55	1
East Clark Avenue	Major - 4 Lanes	19,000	22,711	C	0.71	1
Clark Ave in Orcua from State Hwy 135 to Hwy 101 growth		2.1 percent annual				
Clark Ave: W of Blosser	Major - 2 Lanes	2,459	3,027	A	0.19	2
Clark Ave W of 101	Major - 4 Lanes	18,207	22,413	C	0.70	2

References: 1 = Caltrans, 2005; 2 = Santa Barbara Public Works Traffic Volumes (2006).

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E.

ADT = Average Daily Traffic

Percent growth based on peak past 5 year growth in traffic volumes along route. Clark Ave. route based on estimated population growth in Orcutt Area.

Growth number based on data available from CalTrans over past 5 years. Ten year growth numbers not available.

Table 5.9.4 Truck Traffic Volumes

Route	Peak Truck Traffic, % of AADT
State Highway 1 from Gaviota to Orcutt	10.1
State Highway 246 (Ocean Avenue) from Highway 1 West to Surf	4.0
Harris Grade Road from Highway 1 to State Highway 135	7.0
State Highway 135 East from Harris Grade Road to Highway 101	10.2
State Highway 135 West from Harris Grade Road to Highway 1	11.5
State Highway 135 from Highway 1 to Clark Avenue	4.5

Source: CalTrans 2004 Annual Average Daily Truck Traffic Volumes.

Proposed Roadway Projects

According to the SBC Land Use Element and the Lompoc City General Plan, there are no projects proposed for the roadways which would be affected by the proposed project discussed in this EIR. However, in the SBC Year 2030 Study (1999), for the Lompoc area, it states that some road improvements along Highway 1 through the City of Lompoc would be needed due to increased traffic congestion.

Rail Facilities

A mainline for the Union Pacific Railroad (UPRR) runs parallel to the coastline within the project area. The railway carries both passenger and freight traffic. There are three Amtrak trains per day in each direction and seven regularly scheduled freight trains per day. In addition, there may be other scheduled freight trains on the line in peak demand periods. There is a spur line that travels parallel to West Ocean Avenue from the City of Lompoc west to the main rail line. There is also an Amtrak passenger railroad station on the west side of Coast Road at Surf Beach.

Current Point Pedernales Project Operations

PXP currently operates facilities at the LOGP along Harris Grade Road and along the pipeline route between Ocean Beach Park area and the LOGP. Currently, the LOGP facility generates vehicle trips due to employee commuting and due to transport of gas liquids and sulfur. These vehicle trips are shown in Table 5.9.5 below.

Table 5.9.5 Current Point Pedernales Project Vehicle Volumes

Vehicles	Annual Average Trip, one-way	Average Daily Trips, One-way	Comments
<i>LOGP</i>			
LOGP Commuters	9490	26.0	Based on 26 workers currently employed.
Trucks – Gas Liquids	278	0.8	Based on monthly reports to SBC for the year 2005.
Trucks – Sulfur	24	0.1	Based on monthly reports to SBC for the year 2005.
Trucks – misc. (vacuum trucks, etc.)	104	0.3	Estimated at 2 per week.

Table 5.9.5 Current Point Pedernales Project Vehicle Volumes

Vehicles	Annual Average Trip, one-way	Average Daily Trips, One-way	Comments
<i>Platform Irene</i>			
Commuters	2616	7.2	Based on 654 helicopter round trips per year (2005) and an estimated 2 persons per trip.
Trucks – Materials related to supply boats	214	0.6	Based on 107 one-way supply boat trips per year and an estimated two truck loads of materials per supply boat.
Supply Boats – Marine Traffic	107	0.29	Based on 107 one-way supply boat trips per year.

Current ConocoPhillips Pipeline Operations

The operation of ConocoPhillips Pipeline system has minimal traffic requirements. At any given time there may be a number of trucks that are used to service the various pump stations and pipeline route for maintenance and repair activities.

5.9.1.2 Offshore Traffic

The U.S. Coast Guard's recommended traffic corridors are located approximately 13 miles to the south of Platform Irene and 5.6 miles south of Point Conception, running in an approximately east-west direction in the Santa Barbara Channel and in a north-south direction west of Point Conception (see Figure. 5.9-1). The Coast Guard Marine Waterways Division estimates that traffic within the main northbound and southbound lanes can run up to 30 to 50 vessels per day for both directions combined. Fishing and pleasure boat traffic along the coast is limited, but traffic is estimated to be on the order of five craft per day between Platform Irene and the shoreline. Supply boat traffic to Platform Irene for current operations averages approximately 50 return trips per year.

Helicopter round trips associated with operation of the Point Pedernales Project in 2005 numbered approximately 654 with a daily maximum of six one-way trips, which is below the permitted annual number of 2,190 trips.

5.9.2 Regulatory Setting

The transportation system requirements for the proposed project are subject to the policies and plans of SBC and CalTrans.

SBC outlines policies and standards in the Circulation Element of the SBC Comprehensive Plan. The standards provide guidance in defining whether a proposed project is consistent with established roadway capacity levels and intersection LOS. Project consistency with roadway standards is based on the number of ADTs contributed by the project and the potential for exceedances of acceptable capacity, design capacity, and the estimated future volumes for roadways in the project area. In addition, the SBC Environmental Thresholds and Guidelines Manual defines the impact thresholds for determining significance of proposed projects.

Maximum load limits for trucks and safety requirements for oversized vehicles are generally regulated by CalTrans for operation on highways, and by the counties and cities for their roads.

5.9.3 Significance Criteria

Transportation/Circulation significance criteria have been established in SBC. These are included in the SBC's Environmental Thresholds and Guidelines ~~Guidance~~ Manual. The main criterion is based on the V/C ratio (see Table 5.9.1). Impacts are regarded as significant when the addition of project traffic to an intersection increases the peak hour V/C ratio by the value provided in Table 5.9.6 or sends at least 5, 10, or 15 peak hour trips to a LOS F, E or D, respectively.

Table 5.9.6 Significance Criteria

Peak Hour LOS (including project)	Increase in V/C	Additional Trips
A	0.20	-
B	0.15	-
C	0.10	-
D	-	15
E	-	10
F	-	5

Transportation impacts would be considered significant by the SBC Circulation Element of the SBC Comprehensive Plan if a project leads to any of the following:

- Project access to a major road would require a driveway that would create an unsafe condition or a new traffic signal or major revisions to an existing traffic signal.
- Project adds traffic to a roadway that has design features or receives use that would be incompatible with substantial increases in traffic. This could be indicated by exceedance of the Circulation Element Capacity designation for the roadway.
- Project traffic would utilize a substantial portion of an intersection's capacity that is currently at an acceptable LOS (LOS A through C) but is projected to have an LOS D or less (V/C of 0.81).

Offshore transportation impacts would be considered significant if a project leads to any of the following:

- The project disrupts commercial shipping, fishing, or recreational traffic due to an oil spill of sufficient volume to require mobilization of oil spill response crews or other emergency response activity.
- The project alters normal commercial maritime traffic due to construction, maintenance, or other project-related transportation activities (i.e., increased boat trips to Platform Irene).

Marine traffic significance criteria were developed by the preparer of this EIR because SBC does not have significance thresholds for marine traffic.

5.9.4 Impact Analysis for the Proposed Project

This section addresses the impacts on onshore vehicular and offshore marine vessel traffic associated with the proposed project. Attention is focused primarily on roadway conditions and marine traffic in the immediate vicinity of the proposed project area. Due to the location of the proposed project, impacts associated with private property access restrictions, parking restrictions, and pedestrian circulation are not applicable in this analysis. All construction

activities would take place at locations where public access is restricted: at Platform Irene, at Valve Site #2 on VAFB, and at the LOGP. While the installation of power lines along 13th Avenue between Ocean Avenue and Terra Road may require a temporary lane closure for one day, off-site vehicle trips would constitute the majority of the impact to roadway networks surrounding the project area.

While the well drilling phase of the Tranquillon Ridge Project would be spread over 15 years, the addition of shipping pumps at Platform Irene ~~is~~are estimated to take approximately 9 ~~weeks~~ months to complete. The addition of booster pumps and associated equipment including the power pole installation at and to Valve Site #2 is estimated to take 14 weeks. Installation of the transformer is estimated to take 4 weeks.

The applicant would be required to comply with all existing federal lease stipulations, including movement restrictions, governing Platform Irene that apply to missions that originate from VAFB.

Impact #	Impact Description	Phase	Residual Impact
T.1	Onshore construction associated with the project would temporarily add to local road traffic.	<i>Construction</i>	<i>Class III</i>

Construction traffic would increase local road traffic but would not change the LOS of any roadways. As shown in Table 2.8, the modifications at Valve Site #2 and the LOGP would require an estimated 40 construction workers. Even if every worker were to drive a vehicle, the increase in traffic would not change the LOS of the adjacent West Ocean Avenue (Highway 246) west of Lompoc near Valve Site #2 or on Highway 1 across the Santa Ynez River, the busiest roadway south of the LOGP. Therefore, this impact is considered adverse but not significant.

Mitigation Measures

In accordance with SBC policies, the following mitigation measure is required to mitigate Impact T.1 to the maximum extent feasible.

T-1 PXP shall include a restriction on delivery of equipment and supplies to non-rush hour periods (rush hour periods are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in the project construction plans that are sent out in the contractor bid packages. The construction plans shall be submitted to SBC Planning and Development for approval prior to land use clearance.

Residual Impact

During ~~the estimated nine months of~~ construction at LOGP (nine weeks) and Valve Site #2 (14 weeks), adjacent roadways would experience a temporary increase in vehicle volume. The impact would be considered *adverse but not significant (Class III)*.

Impact #	Impact Description	Phase	Residual Impact
T.2	Increased production at LOGP would increase facility truck traffic on local roads.	<i>Increased Throughput Extension of Life</i>	<i>Class III</i>

Operational traffic would increase local road traffic but would not change the LOS of any roadways. The increased pipeline throughput would result in increased production of LPG/NGL and possibly sulfur products. These truck trips would increase from 2.9 per week to 5 per week. This impact to traffic represents an increase of less than 0.1 percent in daily vehicle trips on Harris Grade Road, which would not change the LOS. Therefore, this impact is considered adverse but not significant. Additional traffic safety impacts are discussed in Section 5.1, Risk of Upset/Hazardous Materials of this EIR.

Mitigation Measures

In accordance with SBC policies, the following mitigation measure is required to mitigate Impact T.2 to the maximum extent feasible.

- T-2** PXP shall include a restriction on LPG/NGL and sulfur truck traffic at the LOGP to non-rush hour periods (rush hour period are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in their contracts with vendors. The applicant shall also document arrival and departure times for these trucks. This requirement shall be included in the Traffic Management Plan (TMP). The revised TMP shall be submitted to SBC Planning and Development for approval prior to land use clearance.

Residual Impact

A small increase in roadway traffic would result from operation of the Point Pedernales Project with Tranquillon Ridge production due to increased transportation of NGL/LPGs. This impact would be considered *adverse but not significant (Class III)*.

Impact #	Impact Description	Phase	Residual Impact
T.3	Increased offshore drilling activity would increase offshore traffic.	Drilling	Class III

The proposed project would increase supply boat traffic servicing Platform Irene only during the drilling phase of the project. Supply boat traffic would increase from the current average of one one-way trip every 3 to 4 days to an average of one one-way trip every 3 days. Existing marine traffic (project- and non-project-related) between Platform Irene and the shoreline is estimated at five vessels per day. Project-related marine traffic is estimated to be 3.3 vessels per week, based on average 2006 supply boat trips. Once drilling operations are complete, the supply boat traffic would be the same as for the current operations. The impact during drilling would represent a one percent increase over existing levels. Because the projected ocean traffic is minimal and the area large, this small increase would not affect commercial or recreational boat traffic.

During drilling only, helicopter traffic would increase to six one-way trips per day every day. Although this increase is within the limits of the existing Point Pedernales FDP, it represents an adverse but not significant impact.

Mitigation Measures

In accordance with SBC and Coastal Act policies, the following mitigation measure is required to mitigate Impact T.3 to the maximum extent feasible.

- T-3** Require supply boats from Port Hueneme to use the Coast Guard's recommended marine traffic corridors to the maximum extent feasible.

Residual Impact

The impact caused by an increase in marine traffic would be small and therefore considered *adverse but not significant (Class III)*.

Impact #	Impact Description	Phase	Residual Impact
T.4	An oil spill from the proposed Tranquillon Ridge project could result in the disruption of commercial shipping, fishing, and recreational marine traffic, and onshore transportation infrastructure.	<i>Increased Throughput Extension of Life</i>	<i>Class I</i>

An oil spill could result in the closure of the Coast Guard's recommended marine traffic corridors through the Santa Barbara Channel and restrict boating along up to 70 miles of coastline and San Miguel, Santa Rosa, and western Santa Cruz Islands (see Appendix G regarding oil spill modeling), a regionally significant impact. Estimated daily shipping traffic in the main traffic corridors consists of 30 to 50 vessels per day. Commercial/recreational fishing vessel traffic is estimated at five vessels per day between Platform Irene and the shoreline. An oil spill could disrupt marine traffic for a number of days, due to clean-up activities. Depending on the location of the spill, marine traffic might have to use routes outside of the Coast Guard's recommended marine traffic corridors. Also, commercial/recreational fishing boat traffic could be precluded from areas around the spill during the cleanup activities (see Section 5.7, Commercial and Recreational Fishing/Kelp Harvesting, for impacts on fishing). If an oil spill reaches the shoreline, adjacent roadways would be affected by spill clean up response activities. The degree of the severity of roadway disruptions would be dependent on location.

Mitigation Measures

Refer to Sections 5.5, Marine Biology, and 5.6 Oceanography and Marine Water Quality of this EIR for specific spill-related mitigation measures. Mitigation measures directly applicable include MB-1a2 (contingency planning), MWQ-1 (updated Oil Spill Response Plan), and MWQ-3 (increased inspection frequency).

Residual Impacts

The proposed mitigation measures would not be completely effective in reducing the significant risk of a spill, nor would they adequately eliminate the significant effect of a spill on marine recreational or commercial traffic. Mitigating impacts from a marine oil spill is largely a function of the effectiveness of the spill-response measures. The effectiveness of spill cleanup measures is dependent on the response time, availability and type of equipment, the size of the spill, and the weather and sea conditions during the spill. Only some of these aspects are within the control of the spill response team. Therefore, residual impacts are considered *significant (Class I)*.

5.9.5 Impact Analysis for the Alternatives

Detailed descriptions of the various alternatives have been provided in Chapter 3. This section provides a discussion of the transportation impacts of these alternatives.

5.9.5.1 No Project Alternative

Scenarios 2 and 3. As discussed in Section 3.2, under the No Project Alternative Scenarios 2 and 3, production of the federal portion of the Tranquillon Ridge field would and would not

occur, respectively. However, no extension of life of Point Pedernales facilities (Platform Irene, pipelines, and LOGP) is assumed under either scenario.

Impact T.1 – Onshore Construction Traffic: The traffic impacts due to construction would not occur since none of the proposed facilities would be built under the No Project Alternative Scenarios 2 and 3.

Impact T.2 – Operational Truck Traffic: Truck traffic associated with Scenarios 2 and 3 would be the same as for current operations; slightly lower for a shorter project life than for the proposed project (10 versus 30 years).

Impact T.3 – Marine Traffic: The marine traffic impacts associated with increased drilling would not occur under the No Project Alternative. The current level of marine traffic associated with drilling at Platform Irene fluctuates as needed for maintenance of the existing Point Pedernales Field wells, with greater traffic during times of well workovers. However, this traffic is considered to be within baseline levels. ~~be fewer than the proposed project because only three new wells would be drilled instead of the proposed 22 to 30 wells. The impact would still be considered adverse but not significant (Class III), except the duration of the impact would be shorter since fewer wells would be drilled.~~ Mitigation Measure T 3 would apply.

Impact T.4 – Accidental Oil Spills: Marine traffic impacts due to an accidental oil spill would be the same as for current operations and would not increase due to increased spill risk associated with extension of the platform’s operating lifetime.

Options for Meeting California Fuel Demand. The relative traffic impacts associated with the various options for meeting California fuel demand are summarized in Table 5.9.7.

Table 5.9.7 No Project Alternative Comparison to Options for Meeting California Fuel Demand, Traffic

Source of Energy		Impacts
Other Conventional Oil & Gas		
	<u>Domestic onshore crude oil and gas</u>	<u>Likely to displace onshore transportation impacts.</u>
	<u>Increased marine tanker imports of crude oil</u>	<u>Would increase offshore transportation impacts.</u>
	<u>Increased gasoline imports¹</u>	<u>Would increase onshore transportation impacts if tanker trucks are used.</u>
	<u>Increased natural gas imports (LNG)</u>	<u>Would increase offshore transportation impacts if tankers are used.</u>
Alternatives to Oil and Gas		
	Fuel Demand Reduction: <u>increased fuel efficiencies, conservation, electrification²</u>	
	<u>Alternative transportation modes</u>	<u>Proposed project impacts would be eliminated.</u>
	<u>Implementation of regulatory measures</u>	<u>Proposed project impacts would be eliminated.</u>
	<u>Coal, Nuclear, Hydroelectric</u>	<u>Proposed project impacts would be eliminated. Construction of facility infrastructure could generate traffic impacts. Coal delivery to power plants could result in increased operation traffic.</u>

Table 5.9.7 No Project Alternative Comparison to Options for Meeting California Fuel Demand, Traffic

Source of Energy		Impacts
<u>Alternative Transportation Fuels</u>		
<u>Ethanol/Biodiesel³</u>		<u>Transportation impacts would increase due to increased truck traffic.</u>
<u>Hydrogen²</u>		<u>Proposed project impacts would be eliminated. Potential traffic impacts due to hydrogen delivery infrastructure development and operation.</u>
<u>Other Energy Resources²</u>		
<u>Solar^{2,4}</u>		<u>Proposed project impacts would be eliminated. Construction of solar facility infrastructure could result in traffic impacts. Operational traffic impacts would be nominal.</u>
<u>Wind^{2,4}</u>		<u>Proposed project impacts would be eliminated. Construction of wind facility infrastructure could result in traffic impacts. Operational traffic impacts would be nominal.</u>
<u>Wave^{2,4}</u>		<u>Proposed project impacts would be eliminated. Construction of wave facility infrastructure could result in traffic impacts. Operational traffic impacts would be nominal.</u>

Footnotes:

1. Pipeline and tanker truck import from out-of-State assumed.
2. Assumes that Tranquillon Ridge production would not be replaced with other petroleum-based energy supply.
3. Assumes ethanol and biodiesel used as blends only and therefore would reduce, but not eliminate Tranquillon Ridge or equivalent production.
4. Assumes, large centralized facilities.

5.9.5.2 VAFB Onshore Alternative

The VAFB Onshore Alternative would include the construction of drilling and production facilities within a 25-acre site, and installation of approximately 10 miles of emulsion and gas pipelines and 6 miles of overhead 69 kV transmission line. In addition, a pipeline tie-in station, and associated electrical substation and power line would be required. These alternative facilities would be operating for approximately 30 years. Construction equipment, materials, and personnel would need to be transported to the site(s). It is assumed that the drilling/production facility operations would also require 24-hour day staffing similar to the LOGP. The traffic impacts associated with this alternative are described below.

Impact T.1 – Onshore Construction Traffic: This impact would be similar to that for the proposed project except under this alternative, the construction traffic at the VAFB drilling/production site and tie-in station would be over a longer duration and would be a higher frequency than the proposed project. Access to the VAFB site would occur through Lompoc, where the busiest roadways (such as Highway 1 over the Santa Ynez River bridge) would experience a traffic increase. Heavy equipment and the drilling rig would need to travel to and from the site over VAFB roadways, West Ocean Avenue (Highway 246), and Highway 1. Mitigation Measure T-1 would apply. Because Coast Road south of Bear Creek Road is a main thoroughfare and critical infrastructure for the Base, Mitigation Measure T-4 would also apply.

Mitigation Measures

T-4 Consultation with VAFB shall be conducted to develop a Construction Traffic Management Plan that minimizes conflicts to Base operations during alternative construction and operation. In addition, the Plan shall address traffic related to potential oil spill clean-up operations. The VAFB-approved plan shall be provided to SBC prior to land use clearance for review and approval.

Residual Impact

With the implementation of the noted mitigation measures, this impact would be considered *significant but mitigable (Class II)*.

Impact T.2 – Operational Truck Traffic: The traffic impacts due to the operation of the VAFB Onshore Alternative drilling and production facility would occur on West Ocean Avenue (Highway 246), 13th Street, Coast Road, and Surf Road within VAFB. Traffic within VAFB would need to conform to Base operations. Under the VAFB Onshore Alternative, truck traffic at the LOGP would be similar to that of the proposed project. Workers and trucks traveling to the VAFB drilling and production facility would increase local road traffic, but would not significantly change the level of service (LOS) of any roadways. Mitigation Measures T-2 and T-4 would apply. The impact at the VAFB site would still be considered *adverse but not significant (Class III)*.

Impact T.3 – Marine Traffic: The marine traffic impacts associated with the proposed project would not occur under the VAFB Onshore Alternative, but rather would be the same as the No Project Alternative. As under the No Project Alternative, the impact would still be considered *adverse but not significant (Class III)*.

Impact T.4 – Accidental Oil Spills: The traffic impacts due to an accidental oil spill or release would be greater than what exists for the current operations (i.e., baseline) or the proposed project because offshore oil and gas production would occur onshore at VAFB. An oil spill, sour gas release, or fire caused by the VAFB Onshore Alternative facilities could temporarily close transportation infrastructure at VAFB, including portions of Coast Road, Surf Road, ~~and~~ Bear Creek Road, and 13th Street. Such an event would temporarily disrupt Base operations. As noted for marine oil spills under the discussion of the proposed project, mitigating the effects of an accidental release depends on variables that are not entirely within the control of the spill response team. The impacts to VAFB operations are considered *significant (Class I)*. Mitigation Measure T-4 would apply.

5.9.5.3 Casmalia East Oil Field Processing Location

For this alternative, Impacts T.3, Marine Traffic, and T.4, Accidental Oil Spill, would be the same as for the proposed project. Mitigation Measure T-3 would apply. The other impacts associated with this alternative are discussed below.

Impact T.1 – Onshore Construction Traffic: This impact would be the same as the proposed project for Valve Site #2 and along the power line route. However, under this alternative the construction traffic at the LOGP would be over a longer duration and would be a higher frequency than the proposed project due to the dismantling activities, which would take approximately 6 months, require a work force of 60, and add 104 daily one-way vehicle trips

during the first 5 months and 165 trips during the final month. Near the LOGP, the busiest roadway (Highway 1 over the Santa Ynez River bridge) would experience an increase in V/C of 0.005, which would not change the LOS although peak hour traffic could increase by as much as 5 percent. Based on the significance criteria this would be considered *adverse but not significant (Class III)*.

Additionally, construction of a new processing facility in Casmalia and connecting pipeline from the LOGP would add to local traffic, affecting more roadways and occurring over a longer duration than the proposed Tranquillon Ridge Project. It would take 6 months and require an average work force of 60, working 6 days a week. The pipeline construction would take 9 to 10 weeks and require a work force of 22. During the first month, these projects would require an estimated 243 daily one-way vehicle trips, including truck trips used for constructions and materials handling. For the remainder of construction, the projects would require 164 daily one-way vehicle trips.

Construction in and around Casmalia and Orcutt would affect Casmalia Road, State Highways 1 and 135, and Clark Avenue. Casmalia Road would experience an increase in V/C of 0.02, which would not change the level of service. Highway 1 between Casmalia Road and Clark Avenue would experience an increase in V/C of 0.02, which would not change the level of service. The busiest section of Clark Avenue would experience an increase in V/C of 0.02, which would not change the LOS. None of the roads would experience a change in LOS or exceed the significance criteria; therefore, the impacts would be *adverse but not significant (Class III)*. Mitigation T-1 would apply.

Impact T.2 – Operational Truck Traffic: The traffic impacts due to increased throughput would be the same as the proposed project except they would no longer occur at the LOGP, but rather would occur at the new Casmalia East site. The impact at the new site would still be considered *adverse but not significant (Class III)*. Mitigation Measure T-2 would apply.

5.9.5.4 Alternative Power Line Routes to Valve Site #2

For all power line routes, Impacts T.2, Operational Truck Traffic; T.3, Marine Traffic; and T.4, Accidental Oil Spill, would remain the same as for the proposed project. Mitigation Measures T-2 and T-3 would apply. The other impacts associated with each of the power line alternatives are discussed below.

Alternative Power Line Route – Option 2a

Impact T.1, Onshore Construction Traffic would be the same as for the proposed project. Mitigation Measure T-1 would apply.

Alternative Power Line Route – Option 2b

Impact T.1 – Onshore Construction Traffic: This alternative would have slightly greater truck traffic during the installation of the power line due to the need to directionally bore under the Santa Ynez River. It is estimated that an additional 10 truck trips would be needed for this operation. While the construction traffic impacts would be slightly greater than the proposed project, they would not result in an increase in the LOS for the subject roads. As such the impact is considered *adverse but not significant (Class III)*. Mitigation Measure T-1 would apply.

Underground Power Line along Terra Road

Impact T.1 – Onshore Construction Traffic: This alternative would have slightly less construction traffic than the proposed project since there would be no traffic associated with the delivery of the power poles for this portion of the route. The rest of the construction equipment and traffic would remain the same. Even with this slight decrease in construction traffic, the impacts would remain *adverse but not significant (Class III)*. Mitigation Measure T-1 would apply.

5.9.5.5 Replacement of Oil Emulsion Pipeline from Platform Irene to LOGP

Impact T.2, Operational Truck Traffic, would remain the same as for the proposed project. Impact T.4, Accidental Oil Spill, would be slightly less than the proposed project because of the approximate 10 percent decrease in spill risk; however, spill volumes would be the same. The other impacts associated with this alternative are discussed below.

Impact T.1 – Onshore Construction Traffic: The impact would be the same as the proposed project for the LOGP. Under this alternative there would be no construction traffic impacts associated with Valve Site #2. However, this alternative would result in increased traffic from commuters and the delivery of equipment and supplies associated with the onshore construction of the new emulsion pipeline.

The construction of the onshore pipeline replacement would require approximately 60 workers per day, 6 days per week. A worst-case commuting scenario would be one vehicle per worker, which would not change the level of service on any roadway in the project region near the City of Lompoc. The onshore pipeline replacement would require the transportation of construction related heavy machinery to the project site totaling an additional 14 vehicle trips to transport. The onshore pipeline replacement would also require 12.1 miles, or 64,000 feet, of pipe to be transported via rail to Lompoc, where it would be temporarily stored on a rail spur. From there, trucks would haul pipe to the project site at a rate of 100 feet per truck trip. Because this work would be spread over 10 weeks, this alternative would require approximately ten truck trips per day. As compared with traffic data in Table 5.9.1, this increase, including the worst case transportation of construction equipment, would not exceed the significance criteria for any part of the proposed travel route.

The offshore pipeline replacement would require approximately 60 workers per day for 7 days per week. Since the workers would remain aboard the barge during construction and leave periodically via helicopter for breaks, commuting road traffic would be limited to approximately ten vehicles per day around the Santa Maria Airport. The offshore pipeline replacement would require approximately 10.1 miles, or 53,300 feet, of pipe to be transported to Port Hueneme, where it would be loaded on barges for transport to the project site. The conveyance from Los Angeles would be either rail or 550 truck trips to Port Hueneme. As shown in Table 5.9.8, roads accessing Port Hueneme experience existing congestion. The Ventura County General Plan (2005) identifies measures for widening Hueneme Road and Las Posas Road. Assuming these improvements occur on schedule, an increase of 550 truck trips over project construction would not exceed the significance criteria for any part of the proposed travel route, even in the unlikely event that all the truck trips would occur in one day. Based on existing roadway conditions, an increase of more than 15 truck trips per day would be adverse but not significant.

Table 5.9.8 Traffic Counts on Route to Port Hueneme

Road/ Route	Class	ADT	ADT LOS	Peak Hour	Design Cap	V/C Ratio	Ref.
<i>Port Hueneme to Ventura/Los Angeles County Border</i>							
Hueneme Rd.	Major - 2 Lanes	10,200	C	1,020	16,000	0.64	1
Las Posas Rd.	Major - 2 Lanes	13,600	D	1,360	16,000	0.85	1
101 Southbound at Las Posas Rd.	Freeway 6 - Lanes	139,000	C		195,000	0.71	2
101 Southbound at Kanan Rd.	Freeway - 8 to 10 Lanes	182,000	B		292,500	0.62	2

References

1. Traffic counts from Ventura County General Plan Update (2005).
2. Traffic counts from CalTrans (2005). Design capacity based on an average 32,500 cars per lane per day.

Because the level of service criteria could be exceeded on the Las Posas Road portion of the transportation route, the residual impact would be considered *significant but mitigable (Class II)*. Mitigation Measure T-1 would apply.

Impact T.3 – Marine Traffic: This impact would be greater than the proposed project due to the construction of the offshore pipeline. The offshore pipeline would be installed using a ~~dynamic positioning lay vessel~~ the pull barge method. The duration of the offshore pipeline construction would be about 2 months. One supply boat would travel to the project site from Port Hueneme every 5 days. Two supply barges would transport 10.1 miles, or 53,300 feet, of pipe from Port Hueneme over a total of 50 round trips. The presence of project vessels would limit marine traffic in the project area but only temporarily and only over a relatively sparsely used area. The traffic between the project site and Port Hueneme would be limited to at most three vessels in a single day, which would generate only a slight increase over current marine traffic. Therefore, these impacts are considered *adverse but not significant (Class III)*. Mitigation Measure T-3 would apply.

5.9.5.6 Alternative Drill Muds and Cuttings Disposal

Inject Drill Muds and Cuttings into Reservoir

The injection of muds and cuttings into the Point Pedernales Reservoir would not result in any additional impact to traffic.

Transport Drill Muds and Cuttings to Shore for Disposal

Impacts T.1, Construction Truck Traffic; T.3, Marine Traffic; and T.4, Accidental Oil Spill, would remain the same as for the proposed project. Mitigation Measures T-2 and T-3 would apply. The other impacts associated with this alternative are discussed below.

Impact T.2 – Operational Truck Traffic: Drilling 30 wells over a 15 year period would produce an estimated 75,000 metric tons (10,607 barrels) of muds per well (see Appendix D). One vacuum truck hauls approximately 100 barrels of muds, so the muds from one well would require 106 vacuum trucks. Approximately 1,670 tons of cuttings would be produced per well. One haul truck can carry 18 tons of cuttings, so the cuttings from one well would require 93 haul trucks. (Refer to Chapter 3.0, Alternatives, for a detailed description of this alternative.) The operational truck traffic impacts associated with this alternative would increase throughout the

proposed project as a result of the trucks that would be required to haul waste from Port Hueneme to the landfill. Truck traffic from Port Hueneme would exit the port at Hueneme Road, heading east for several miles. They would turn left at Las Posas Road and enter the ramp of southbound Highway 101. The trucks would then take Highway 101 south to Los Angeles County.

In a worst-case scenario, all the waste from each well would be offloaded and stored at Port Hueneme and then transported from the port over the course of one work week, which would require 40 truck return trips per day. The proposed project would result in traffic increases of 0.4 percent, 0.3 percent, 0.03 percent, and 0.02 percent at Hueneme Road, Las Posas Road, Highway 101 at Las Posas Road, and Highway 101 at Kanan Road, respectively. This transportation event would occur following the drilling of each of 30 wells. As shown in Table 5.9.7, a potentially significant impact could occur because an increase of 15 truck trips per day would exceed the significance criteria on the Las Posas Road part of the proposed travel route.

Rather than 40 truck return trips per day, a more realistic scenario is that the trucks would haul waste twice a week for the approximate three-month drilling period for each well, which coincides with the 2 weekly supply boat trips. This truck schedule would mean an increase in truck trips in a single day. The small traffic increases of this scenario would not affect the LOS of any of these roadways, nor would they exceed the significance criteria. Therefore, the impact would remain *adverse but not significant (Class III)*. Mitigation Measure T-1 would apply.

5.9.6 Cumulative Impacts

Cumulative projects relevant to the current analysis include both offshore oil and gas projects, and onshore development projects. Each of these is discussed separately below.

The cumulative traffic impacts associated with the cumulative projects discussed in Section 4.0 could be significant if simultaneous construction activities lowered the Level of Service (LOS) of roadways in the vicinity of the proposed project. Simultaneous construction projects in the study area and the proposed project could create significant cumulative impacts to traffic.

5.9.6.1 Offshore Oil and Gas Projects

Potential offshore oil and gas development projects would involve marine traffic. While the exact timing of these developments is unknown, it is assumed that maximum marine traffic would occur during the drilling or operational phases of each cumulative project. As discussed in Sections 4.2 and 4.3, the majority of future offshore development would use existing platforms, pipelines, and onshore facilities. Therefore, construction activities would only generate a major increase in marine traffic for new platform development projects. However, if all of the potential offshore oil and gas projects in the northern Santa Maria Basin were to occur within a similar time frame, the marine traffic associated with their construction and operation could generate substantial volumes of marine vessel traffic. Assuming that these potential offshore projects would be subject to the same or similar types of mitigation measures associated with existing offshore oil and gas development projects, such as maximum use of designated marine vessel traffic corridors, cumulative impacts, including the proposed project's incremental contribution to them, would not be considered significant.

An oil spill from the proposed project could result in the disruption of commercial shipping, fishing, and recreational marine traffic, and onshore transportation infrastructure. An oil spill could result in the closure of the Coast Guard's recommended marine traffic corridors through the Santa Barbara Channel and restrict boating along up to 70 miles of coastline. If a spill were to occur within southern VAFB or come onshore along southern VAFB, oil spill clean up response times could be hindered if mission critical operations were underway, as was the case in 1997. Therefore, the cumulative impacts to offshore and onshore transportation infrastructure, including the contribution of the proposed project, would be considered significant.

5.9.6.2 Onshore Projects

Onshore potential development projects primarily include pending or approved residential and commercial projects in the Santa Maria area, and multiple types of development and redevelopment projects in the City of Lompoc and the unincorporated area of Lompoc surrounding the LOGP (see Table 4.2 and Figures 4-3 and 4-4) and between the City of Lompoc and the LOGP. Traffic projections are only available for the Bluffs at Mesa Oaks and the Providence Landing residential developments. If construction of these two projects were to occur at the same time as the proposed project, the cumulative impact to Highway 1 at the Santa Ynez River bridge and along Harris Grade Road could be significant, although the proposed project's contribution would be minor. Mitigation Measure T-1 would apply.

The other potential onshore development projects would likely use Highways 1 and 246 for ingress and egress to the development sites in the Lompoc area and if construction of some of these projects is scheduled at the same time as the proposed project, cumulative impacts could be significant along the Lompoc-Casmalia section of Highway 1, although the proposed project's contribution would be minor. Mitigation Measure T-1 would apply.

Additionally, two proposed residential developments are planned for the same stretch of Harris Grade Road that serves as the route for LOGP's NGL/LPG truck traffic. The increased risk of a NGL/LPG spill or accident from cumulative the increased construction related traffic and subsequent increase in daily residential traffic is discussed in Section 5.1, Risk of Upset.

As outlined in Section 4.4, the existing Guadalupe Restoration Project is currently utilizing up to 30 truck trips per day to transport up to 850,000 cubic yards of Non-Hazardous Hydrocarbon Impact Soil (NHIS) from the Guadalupe Oil Field to the City of Santa Maria Landfill (County of San Luis Obispo, 2006). The approved and certified Final Supplemental Environmental Impact Report (FSEIR) prepared for this increase concludes that the proposed truck traffic increase would be adverse but mitigable to a level of less than significant; the FSEIR additionally concludes that cumulative project impacts on Betteravia Road could be significant if one or more large development projects in that area are constructed at the same time (Marine Research Specialists, et al., 2005). However, the proposed project's contribution to cumulative transportation impacts associated with currently planned development projects in the Orcutt and Santa Maria area, including those along Betteravia Road, would be negligible. Therefore, the proposed project's incremental contribution to these cumulative impacts would not be expected to be significant.

5.9.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
T-1	The applicant shall include a restriction on delivery of equipment and supplies to non-rush hour periods (rush hour periods are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in the project construction plans that are sent out in the contractor bid packages. The construction plans shall be submitted to SBC Planning and Development for approval prior to land use clearance.	EQAP inspections during construction.	During Construction	SBC P&D
T-2	The applicant shall include a restriction on LPG/NGL and sulfur truck traffic at the LOGP to non-rush hour periods (rush hour period are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in their contracts with vendors. The applicant shall also document arrival and departure times for these trucks. This requirement shall be include in the Traffic Management Plan (TMP). The revised TMP shall be submitted to SBC Planning and Development for approval prior to land use clearance.	Annual audit of shipping records.	During Operations	SBC P&D
T-3	Require supply boats from Port Hueneme to use the Coast Guard's recommended marine traffic corridors to the maximum extent feasible.	Annual audit of marine vessel contracts	During Operations	SBC P&D
T-4 (VAFB Onshore Alternative only)	Consultation with VAFB shall be conducted to develop a Construction Traffic Management Plan that minimizes conflicts to Base operations during alternative construction and operation. In addition, the Plan shall address traffic related to potential oil spill clean-up operations. The VAFB-approved plan shall be provided to SBC prior to land use clearance for review and approval.	Submit construction Traffic Management Plan to VAFB for review and approval. Once approved by VAFB, submit to SBC for review and approval	Prior to land use clearance	SBC P&D

5.9.8 References

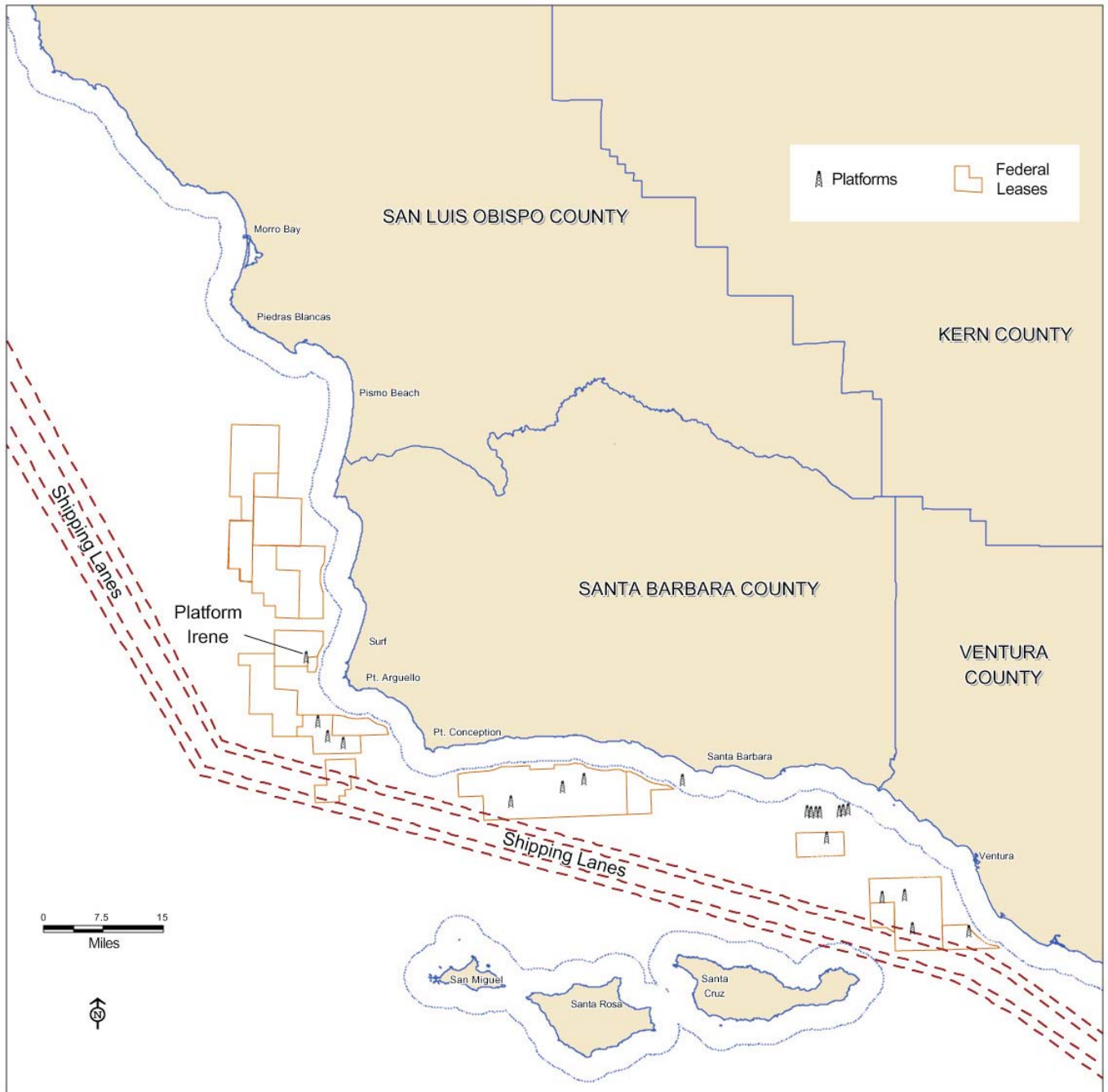
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Source: MRS, 2002.



Figures 5.9-1
Shipping Lanes in the Project Area