MOORPARK CITY COUNCIL
AGENDA REPORT

TO: **Honorable City Council**

FROM: **David A. Bobardt, Community Development Director**

DATE: **November 17, 2014 (CC Meeting of 12/3/2014)**

SUBJECT: **Consider Submitting Letter to San Luis Obispo County Planning Commission Opposing Proposed Phillips 66 Company Santa Maria Refinery Rail Spur Extension Project**

BACKGROUND/DISCUSSION

The San Luis Obispo County Department of Planning and Building recently completed a recirculated Draft Environmental Impact Report (EIR) for a project that would extend an existing rail spur of the Union Pacific rail mainline by an additional 6,915 feet to serve the Phillips 66 Company Santa Maria Refinery, which is located approximately 3.5 miles west of the community of Nipomo in San Luis Obispo County. Staff reviewed the recirculated Draft EIR for this project (excerpts attached), which was circulated from October 9 to November 24, 2014. Staff did not have a concern with the analysis or methodology of the recirculated Draft EIR. However, the EIR does identify a significant hazard impact related to the risk for release of crude oil that results in a fire or explosion in the vicinity of a populated area along the Union Pacific mainline tracks. Because this significant hazard impact could affect Moorpark residents and businesses, staff recommends a letter of opposition to the project be sent to the San Luis Obispo County Planning Commission, the decision makers on this request. A hearing before the San Luis Obispo County Planning Commission is tentatively scheduled in late January or early February, 2015.

Although the Santa Maria Refinery is approximately 125 miles from the City of Moorpark, the construction of a rail spur would allow for up to 5 deliveries of oil per week on unit trains (freight trains carrying a single type of freight, in this case crude oil) with 80 tanker cars that are 90 feet long each. Combined with 3 engines and 2 buffer cars, these trains would be approximately 1.4 miles long. These unit trains would come to the refinery spur line either from the north through Roseville, or from the south,

through Colton, depending on where the oil is coming from and which line is available. The route from the south passes through Moorpark on the Union Pacific mainline tracks. Empty trains would return the same route after being unloaded.

The risk analysis in the EIR indicates a small probability of an incident that would result in a release of 100 gallons or more of oil, once every 22.8 years over the entire route from Colton to the refinery, with the risk in any single city being substantially less. Nonetheless, the result of an incident that would result in a fire or explosion could be devastating to any locality. Mitigation that has been identified includes upgraded tank cars and positive train control, however, such mitigation may be pre-empted by federal law at the present time. Even if this mitigation were implemented, the impacts would still be considered potentially significant, according to the EIR.

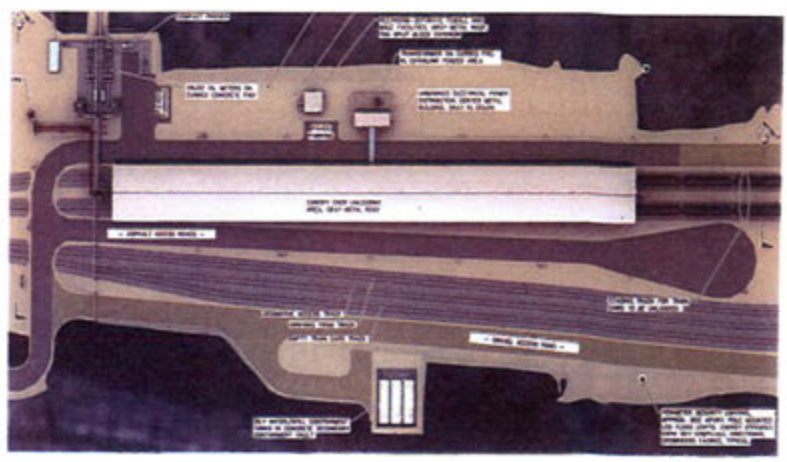
Moorpark has 5 at-grade public street crossings and 3 private crossings on the Union Pacific mainline tracks. Residential, commercial, and industrial uses are all located adjacent to the tracks. A local incident with a 1.4 mile long unit train could affect up to 3 street crossings at the same time, and could impact nearby residents, businesses, and emergency vehicle access.

STAFF RECOMMENDATION

Authorize Mayor to submit letter on behalf of City to the San Luis Obispo County Planning Commission opposing the Phillips 66 Santa Maria Refinery Rail Spur Extension project based on its significant hazard impact related to the risk for release of crude oil that results in a fire or explosion in the vicinity of a populated area along the Union Pacific mainline tracks.

Attachment: Recirculated Draft EIR Excerpts

Phillips 66 Company Rail Spur Extension And Crude Unloading Project Revised Public Draft Environmental Impact Report And Vertical Coastal Access Project Assessment



Prepared For:
San Luis Obispo County

Prepared By:
mrs
Marine Research Specialists

October 2014
SCH # 2013071028

Executive Summary

This Revised Draft Environmental Impact Report (Draft EIR) has been prepared to address a proposed Rail Spur Extension and Crude Oil Unloading Facility (Rail Spur Project) that would be located at the Santa Maria Refinery (SMR) in Nipomo. The applicant for the Rail Spur Project is Philips 66 Company (Phillips 66) (the Applicant). The SMR property is located in the southwestern corner of San Luis Obispo County, approximately 1 mile southwest of State Route 1, and approximately 3.5 miles west of the community of Nipomo, in the South County Coastal and South County Inland planning areas. The location of the SMR property is shown in Figure ES-1.

The EIR also contains a programmatic assessment of various coastal access options through the SMR site (Coastal Access Project). Phillips 66 was recently required to provide a vertical public right of coastal access at the SMR site as a condition of approval of the Phillips 66 Throughput Increase Project (approved by the County Board of Supervisors in March 2013). The assessment of various coastal access options is being considered as a result of the Throughput Project and is not directly related to the Rail Spur Project. The coastal access assessment is discussed in more detail at the end of the Executive Summary.

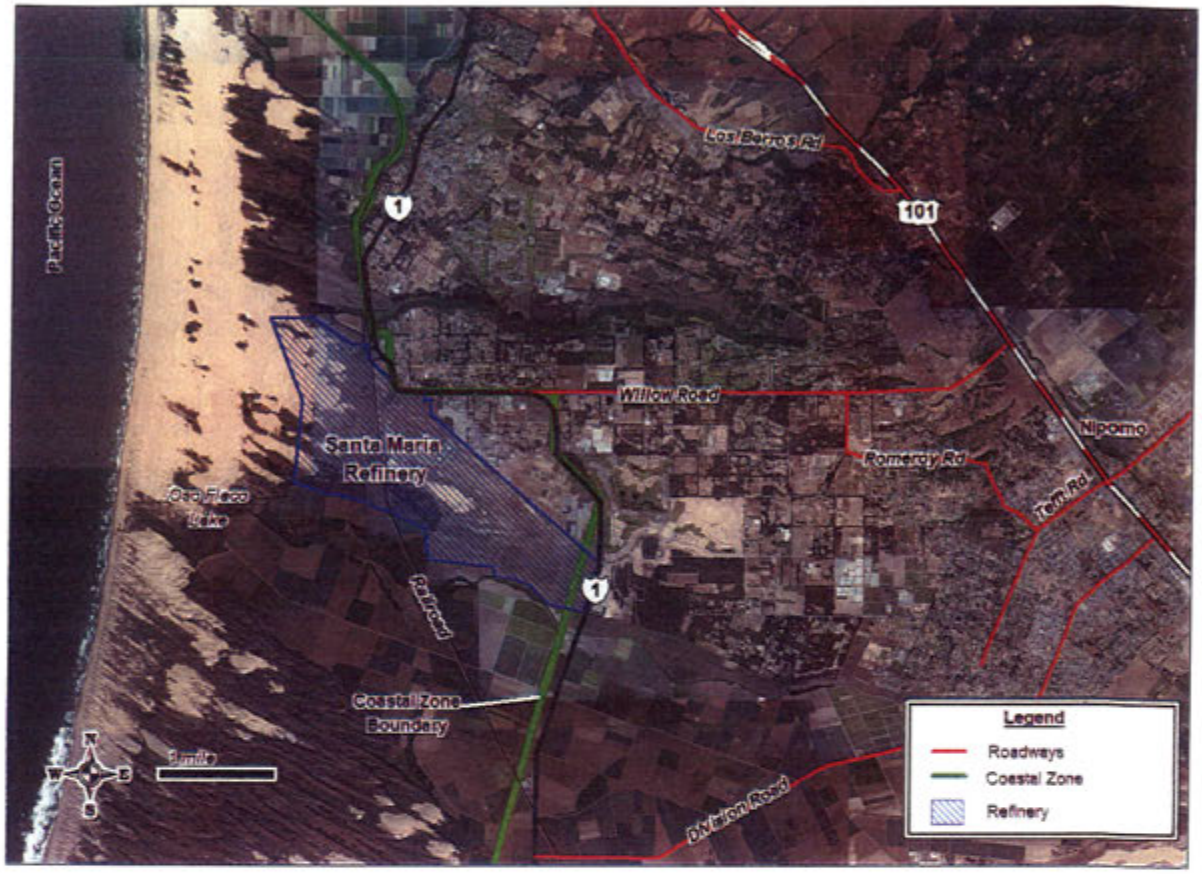
This EIR is an informational document that is being used by the general public and governmental agencies to review and evaluate the Rail Spur Project. The reader should not rely exclusively on the Executive Summary as the sole basis for judgment of the Projects. Specifically, the EIR should be consulted for information about the environmental effects associated with the Projects and potential mitigation measures to address or minimize those effects.

The remainder of the Executive Summary consists of the following sections:

- An introduction, which discusses the Notice of Preparation (NOP) process that was used for the EIR and the reasons for issuing a revised Draft EIR;
- A brief description of the Rail Spur Project;
- A summary of key impacts and mitigation measures associated with the Rail Spur Project;
- A brief description of the alternatives evaluated throughout this EIR for the Rail Spur Project;
- A summary of the Environmentally Superior Alternative for the Rail Spur Project; and
- A summary of the Vertical Coastal Access Project programmatic assessment.

A set of Impact Summary Tables for the Rail Spur Project is provided after the Executive Summary. These tables summarize the impacts and mitigation measures for the Rail Spur Project. The Rail Spur Project impacts and mitigation measures are discussed in further detail in Section 4.0. The alternatives to the Rail Spur Project are discussed in Section 5.0. The Vertical Coastal Access Project assessment is provided in Chapter 9.

Figure ES-1 Proposed Project Location



A. Introduction

The purpose of the Executive Summary is to provide the reader with a brief overview of the Rail Spur and Vertical Coastal Access Projects, the anticipated environmental effects, and the potential mitigation measures that could reduce the severity of the identified impacts. The reader should not, however, rely exclusively on the Executive Summary as the sole basis for judgment of the Projects.

In compliance with State CEQA Guidelines, the County, as the Lead Agency, prepared a NOP for the proposed projects and solicited comments through distribution of the NOP. A public scoping meeting was held in the community on July 29, 2013 to provide an opportunity for the public to comment on the scope of the EIR. The NOP and comments received in response to the NOP were used to direct the scope of the analysis and the technical studies in this EIR. A copy of the NOP and the comments received are in Appendix I of the EIR.

In addition to the County, a number of other governmental agencies require a CEQA analysis of the Rail Spur Project in order to act on the Project. These agencies include the San Luis Obispo

County Air Pollution Control District (SLOCAPCD), Calfire, California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB).

In November 2013 a Draft EIR was issued for the Rail Spur Project with a 60-day comment period. The comment period for the Draft EIR closed on January 27, 2014. After reviewing the comments on the Draft EIR, the County decided that a revised Draft EIR should be recirculated for public comment. The decision to recirculate the EIR was primary based upon the need to expand the discussion of mainline UPRR impacts beyond the borders of San Luis Obispo County. Due to extensive revisions in various parts of the document, this revised Draft EIR does not contain specific written responses to the comments received on the initial Draft EIR. The entire EIR has been recirculated for public comment. All comments on the previous Draft EIR were reviewed, and the revised Draft EIR was modified to address comments that were applicable to the revised document (refer to CEQA Guidelines, Section 15088.5(f)(1)).

The revised Draft EIR has been issued for a 45-day public comment period. Based upon the comments received, changes will be made for the Final EIR. The various stakeholders will have to submit new comments on the revised Draft EIR for them to be considered in the Final EIR. All comments received on the revised Draft EIR and their corresponding responses will be provided in the Final EIR. Comment on the November 2013 Draft EIR will not be included in the Final EIR.

B. Rail Spur and Crude Unloading Facility Project Description

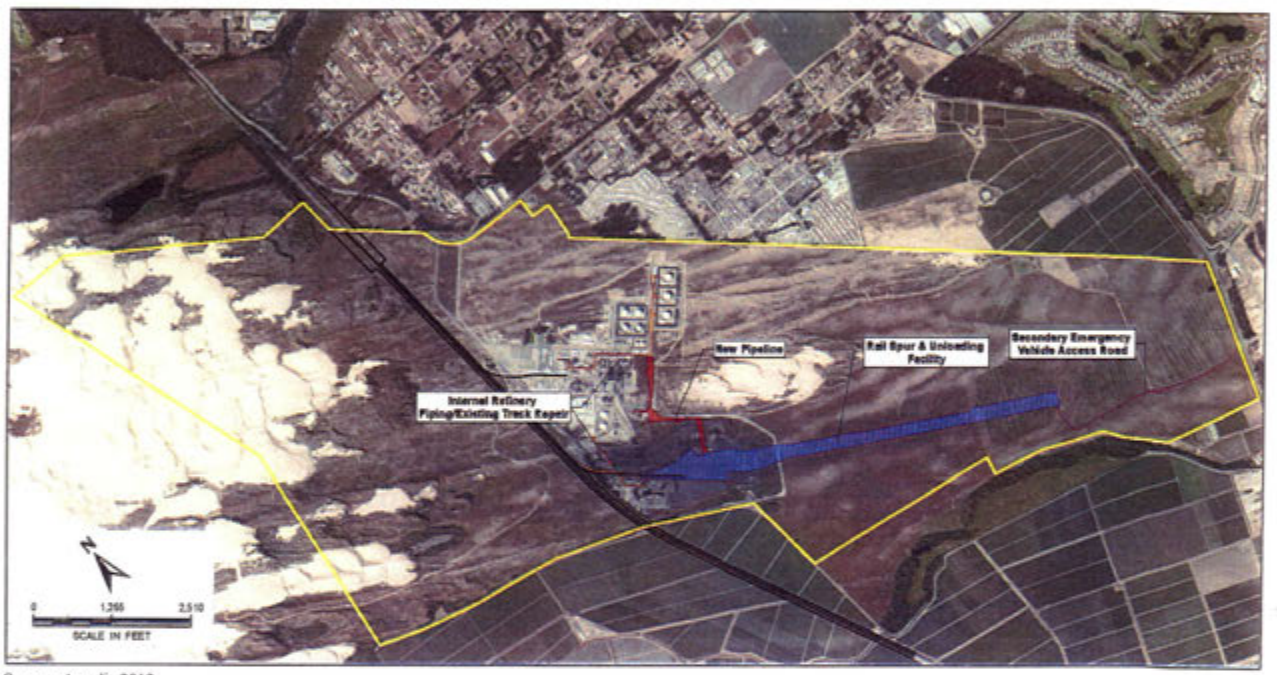
Phillips 66 is proposing to modify the existing rail spur currently on the southwest side of the SMR and to build and operate a crude oil rail unloading facility. The rail spur extension is proposed entirely on the SMR property and would be located east of the Union Pacific Railroad and the existing refinery facilities. The area of the Rail Spur Project is zoned for industrial use. Figure ES-2 shows the proposed location of the Rail Spur Project. The EIR has analyzed the Rail Spur Project to a permit (i.e., project specific) level of detail.

The project would include an eastward extension of the existing rail spur, a railcar crude oil unloading facility, and associated above-ground pipelines Trains would deliver crude oil to the SMR for processing. The unloaded material would be transferred from the proposed unloading facility to existing crude-oil storage tanks via a new on-site above-ground pipeline.

The proposed tracks and unloading facilities would be designed to accommodate unit trains and manifest trains. Unit trains consist of approximately 80 tank cars and associated locomotives and other supporting cars that stay together as one assembly fully dedicated to delivery of crude oil to the SMR. Manifest trains may have a variety of car types and cargos, other than crude oil, that are not fully dedicated as are unit trains. Manifest trains may deliver one or more cars to the refinery and then continue to other destinations to deliver other cargo.

The proposed rail spur lines would extend from the terminus of the current spur. The unloading facility would be located at the end of the existing coke storage area and along an existing internal refinery road.

Figure ES-2 Location of Proposed Rail Spur Project



Source: Arcadis 2013.

Modification of the existing rail spur would include constructing five parallel tracks. Two tracks would surround an unloading rack and then would come together to form a common track that extends to the east of the loading area to allow for the entire train to be parked off of the mainline track and unloaded. Three additional tracks would extend the full length of the rail spur and run parallel to the unloading area.

The Rail Spur Project would involve unloading of up to five unit trains per week (or a combined total of five unit and manifest trains), with a 250 annual maximum number of trains. Trains would arrive from different oilfields and/or crude oil loading points depending on market economics and other factors. Trains could arrive at the Phillips 66 site from the north or the south. The refinery feedstock definition (meaning the materials that could be transported by train into the proposed facility) excludes gaseous feeds, natural gas liquids (NGL), liquefied petroleum gas (LPG), finished refined products, and Bakken crude oil.

Phillips 66 has proposed to ship crude oil to the refinery in non-jacketed CPC-1232 tank cars (i.e., post October 1, 2011 tank cars). These cars have a capacity of approximately 31,808 gallons per car. Each car has a weight limit of 210,700 pounds of crude oil. Each tank car would be approximately 90 feet long. The tank cars would meet the current specifications that have been established by the American Railroad Association for use in transporting crude oil. The rail cars would be designed to meet DOT Packing Group I requirements, which is the highest rating. The tank cars would be equipped with half height head shields, double couplers, and all stainless steel valves. The relief valve would be a designed for high flow. All of the tanker cars servicing the SMR as part of either a unit or manifest train would be owned or leased by Phillips 66.

In a unit train configuration, each train would consist of three locomotives, two buffer cars, and 80 railcars each carrying between 26,076 and 28,105 gallons for a total of between 49,670 and 53,532 barrels of crude oil per unit train. The tank cars would be limited to this range of volume (as opposed to the 31,808 gallons per car listed above) due to the estimated weight of the oil that would be delivered to the SMR. With the delivery of five unit trains per week the average daily delivery of crude oil would be between 35,478 and 38,237 barrels, which is less than the permitted capacity of the SMR with or without the throughput increase project.

Unit trains would arrive at the SMR, be unloaded and then leave the refinery. The total time each train is expected to be at the refinery would be between ten and twelve hours. However, this could vary depending upon when Union Pacific schedules the departure time for the train once it has been unloaded.

The Rail Spur Project would not affect the amount (throughput volume) of material processed at the refinery. Throughput levels at the refinery are capped by the County of San Luis Obispo Department of Planning and Building and by the SLOCAPCD. These throughput limits cannot be exceeded without a modification to existing land use and air permits, which would require additional environmental and public review. In addition, no crude oil or refined product would be transported out of the refinery by rail.

C. Union Pacific Railroad Mainline

The operation of unit and manifest trains to and from the SMR would be performed by Union Pacific Railroad (UPRR), on UPRR property, and on trains operated by UPRR employees. The movements of those trains to and from the Project Site may be preempted from local and state environmental regulations by federal law under the Interstate Commerce Commission Termination Act of 1995 and the Commerce Clause of the United States Constitution.

While the potential impacts of those train movements along the UPRR mainline are described in appropriate chapters of this EIR, the County as CEQA Lead Agency, and other state and local responsible agencies may be preempted from imposing mitigation measures, conditions or regulations on UPRR train movements on the mainline.

Trains could enter California at five different locations (one at the north end of the state from Oregon, two at the northeast from Nevada, one at the southeast from Nevada, and one at the south from Arizona). Depending upon the route taken by the train they could arrive at the Phillips 66 site from the north or the south. It is unknown what route UPRR would use to deliver the trains to the SMR. Figure ES-3 shows the main UPRR train routes in California that could be used to deliver crude to the SMR.

Coming from the north the routes merge at the UPRR Roseville Rail Yard. From the south the routes merge at the Colton Rail Yard. Given that the route the trains would travel to get to these two UPRR yards is speculative, the EIR has evaluated in more detail the impacts of trains traveling from these two UPRR yards to the SMR.

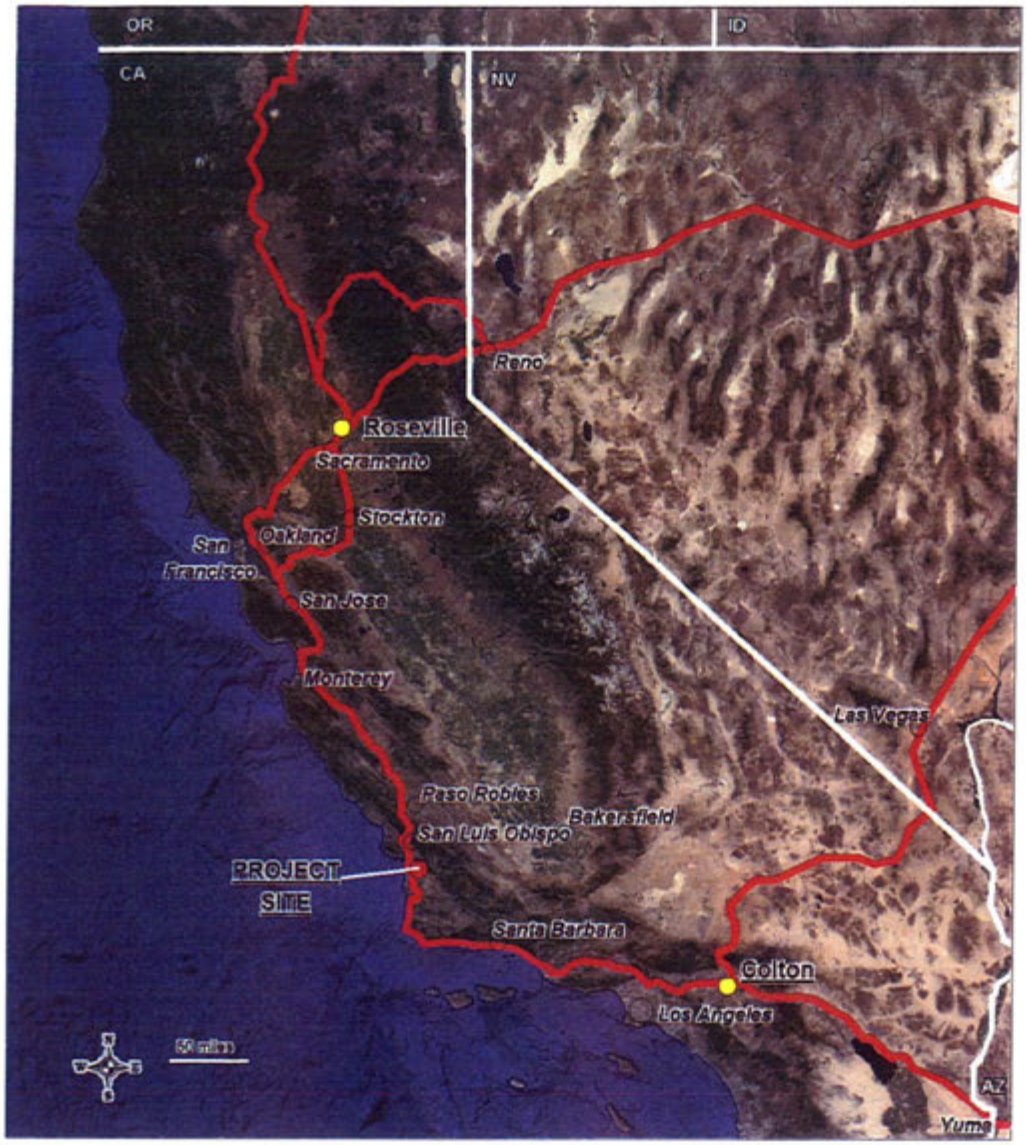
Beyond the two UPRR Yards, trains could travel any number of routes. Also, crude oil delivered to California by UPRR would generally pass through either of these two rail yards in route to the SMR. Depending upon the source of the crude oil, crude oil trains could use any portion of the UPRR network between Roseville/Colton and the source location for the crude oil. The exact route that would be taken would depend upon a number of factors, that could include the source of the crude oil, weather conditions, train traffic conditions, etc. Since the routes past Roseville and Colton are somewhat speculative, the EIR has discussed in a more qualitative nature the potential impacts of train traffic beyond these two rail yards.

D. Rail Spur Project Impacts and Mitigation Measures

In the Impact Summary Tables and throughout this EIR, impacts of the Rail Spur Project and alternatives have been classified using the categories Class I, II, III, and IV as described below.

- Class I – Significant impacts that cannot be mitigated to less than significant levels,
- Class II – Significant impacts that can be mitigated to less than significant levels,
- Class III – Less than significant impacts without mitigation, and
- Class IV – Beneficial impacts.

Figure ES-3 Mainline Rail UPRR Routes to the Santa Maria Refinery



Source: Adapted by MRS from UPRR maps.

The term "significance" is used in these tables and throughout this EIR to characterize the magnitude of the projected impact. For the purposes of this EIR, a significant impact is a substantial, or potentially substantial, change to resources in the local Project area or the area adjacent to the Project in comparison to the thresholds of significance established for the resource or issue area. These thresholds of significance are discussed by issue area in Section 4.0.

The impacts along with the identified mitigation measures for each Rail Spur Project impact are shown in the Impact Summary Tables, immediately following this Executive Summary. Each

section of the Impact Summary Tables describes and classifies each impact, lists recommended mitigation, and states the level of impact after mitigation.

The remainder of this section presents a brief summary of the key impacts and mitigation measures for the Rail Spur Project. The reader should refer to the Impact Summary Tables and Section 4.0 of the EIR for a more detailed discussion of the impacts and associated mitigation measures for the Rail Spur Project.

Aesthetics and Visual Resources
There are no significant and unavoidable (Class I) impacts to aesthetics and visual resources associated with the Rail Spur Project.

The impacts on aesthetics and visual resources would be less than significant with mitigation (Class II). The eastern end of the proposed rail spur and the associated trains operating in the area would reduce the quality of the views of the open space as seen from portion of State Route 1, the California Coastal Trail, the De Anza Trail, and other public areas east of State Route 1. Landscaping and the installation of a berm at the east end of the tracks would reduce these impacts to less than significant.

Lighting associated with the Rail Spur Project would create a new source of substantial light and glare which would adversely affect nighttime views in the area. Development of a lighting plan that requires lighting to be minimized and directed downward and to use lights that are dark sky compliant would reduce this impact to less than significant levels.

Agricultural Resources
The Rail Spur Project could result in less than significant with mitigation (Class II) impacts to productivity of adjacent farmlands due to construction activities. Dust, air emissions, and water runoff generated by the construction activities could produce a significant short-term impact and temporarily affect the productivity of row crops. Implementation of the fugitive dust and stormwater control mitigation measures identified in air quality and water resources would reduce these impacts to less than significant.

In the event of an oil spill at the SMR due to the unloading operations there could be impacts to agricultural crops on adjacent properties. These impacts could be direct oiling of the crops or due to impacts to surface or groundwater. These impacts at the SMR were found to be less than significant with mitigation. Implementation of the oil spill containment systems and Spill Prevention Control and Countermeasure Plan (SPCCP) would reduce this impact to less than significant levels.

If there is an oil spill along the UPRR mainline tracks there could be impacts to adjacent agricultural crops due to direct oiling, fire, or surface and groundwater impacts. These impacts were found to be significant and unavoidable (Class I) in the event that a spill where it could impact agricultural resources. Only portions of the UPRR mainline track runs adjacent to agricultural operations. Mitigation measures identified for improving emergency response and oil spill cleanup would help to mitigate these impacts. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks (See Section H of the Executive Summary for more discussion on the preemption issue).

Air Quality

Construction impact for the Rail Spur Project would be less than significant (Class III). Operational pollutant emissions (i.e., NO_x, ROC, and DPM) within San Luis Obispo County and outside the County on the mainline could be potentially significant and unavoidable (Class I). The operational pollutant emissions associated with operation of the Rail Spur Project within the County would exceed the SLOCAPCD thresholds. Outside the County the mainline emissions would exceed most other air district thresholds. This impact can be reduced to less than significant with the use of Tier 4 locomotive and the application of emission reduction credits, which would make the impact less than significant with mitigation (Class II). However, the County may be preempted by Federal law from mitigating the air impacts associated with the locomotives outside of the SMR property. (See Section G of the Executive Summary for more discussion on the preemption issue). If the County is preempted from applying mitigation to the locomotive emissions on the UPRR mainline, the impact would remain significant and unavoidable (Class I). However, regardless of the preemption issue, the air emissions within the SMR can be mitigated through the use of emission reduction credits.

Air toxic emissions at the SMR would be significant and unavoidable (Class I) since the cancer risk over a 30-year exposure period would be greater than the 10 in a million threshold established by the SLOCAPCD. This cancer risk is driven mainly by diesel particulate emissions. About half of this cancer risk is due to the diesel particulate emissions from the existing trucking operations at the SMR. Use of Tier 4 locomotives would reduce most of the cancer risk from the rail operations, but the cancer risk would remain significant and unavoidable since the baseline risk is already about the SLOCAPCD threshold. As stated above, the County may be preempted by Federal law from applying mitigation to the UPRR locomotives.

Air toxic emissions from the mainline rail operations would be significant and unavoidable (Class I) for areas along the mainline that are in close proximity to populated areas, and there is a speed limit restriction on trains of less than 30 mph (when more emissions occur per length of rail due to the slower speeds). In these locations the 30-year cancer risk would exceed the SLOCAPCD thresholds beyond the railroad right-of-way. There are areas along the mainline rail route that have reduced speed limits for trains that pass in proximity of sensitive receptors. For example, in the City of San Luis Obispo, trains are limited to a speed of 25 miles per hour. In the City of Davis, there are stretches of track that are limited in speed to 10 mph.

Greenhouse gas (GHG) emissions within the State of California could be significant and unavoidable (Class I) since they would exceed the SLOCAPCD threshold for GHG emissions. This impact can be reduced to less than significant with the use of emission reduction credits, which would make the impact less than significant with mitigation (Class II). However, the County may be preempted by Federal law from mitigating the GHG emissions associated with the locomotives outside of the SMR property. (See Section G of the Executive Summary for more discussion on the preemption issue).

Fugitive dust (PM_{10}) emissions from the project would be less than significant (Class III). Operation of the Rail Spur Project would generate very low levels of fugitive dust, which are well below the SLOCAPCD thresholds. The Rail Spur Project would not be expected to affect the overall PM_{10} emissions in the project area.

Biological Resources
Most of the biological impacts would be associated with construction of the Rail Spur Project. Construction activities associated could result in impacts to habitat for listed and special status species and habitat for rare plants and animals. These impacts were found to be less than significant with mitigation (Class II). Some of the mitigation measures identified for these impacts include implementing a Sensitive Species Management Plan, a Dune Habitat Restoration Plan, conducting updated surveys of sensitive species habitats, and employing an independent biological monitor. With implementation of these measures the impacts to biological resources would be less than significant.

An oil spill at the SMR due to the unloading operations could result in impacts to biological resources. These impacts at the SMR were found to be less than significant with mitigation (Class II). Implementation of the oil spill containment systems and Spill Prevention Control and Countermeasure Plan (SPCCP) would reduce this impact to less than significant levels.

In the event of an oil spill along the UPRR mainline tracks there could be impacts to adjacent biological resources due to direct oiling, fire, or surface water impacts. These impacts were found to be significant and unavoidable (Class I) in the event that a spill impacted sensitive biological resources. Only portions of the UPRR mainline tracks run adjacent to sensitive biological areas. Mitigation measures identified for improving emergency response and oil spill cleanup would help to mitigate these impacts. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks (See Section H of the Executive Summary for more discussion on the preemption issue).

Cultural Resources
Impacts to cultural resources during construction were found to be less than significant with mitigation (Class II) include unanticipated disturbance to human remains due to construction activities. Mitigation measures for these impacts include developing a monitoring plan and halting area activities for expert assessment if resources are discovered.

In the event of an oil spill at the SMR due to the unloading operations there could be impacts to cultural resources associated with the cleanup operations. These impacts at the SMR were found to be less than significant with mitigation (Class II). Implementation of the oil spill containment systems and Spill Prevention Control and Countermeasure Plan (SPCCP) would reduce this impact to less than significant levels.

An oil spill along the UPRR mainline tracks would require cleanup activities that could impact cultural resources. These impacts were found to be significant and unavoidable (Class I) in the event that a spill occurred in an areas that had cultural resources. Only portions of the UPRR mainline tracks would have the potential to be in areas where cultural resources might be encountered during the cleanup activities. Mitigation measures identified for improving emergency response and oil spill cleanup would help to mitigate these impacts. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks.

Geological Resources
There are no significant and unavoidable (Class I) impacts to geological resources associated with the Rail Spur Project.

Construction activities associated with the Rail Spur Project could result in erosion due to the grading activities. Seismically induced ground shaking could damage proposed structures and infrastructure, potentially resulting in loss of property, risk to human health and safety, and oil spills. These impacts were found to be less than significant with mitigation (Class II). Implementation a Storm Water Pollution Prevention Plan (SWPPP) using Best Management Practices, and adequate design of the facilities to withstand anticipated horizontal and vertical ground acceleration in the Project area, based on the California Building Code would result in less than significant impacts.

Hazards and Hazardous Materials
The main hazards associated with the Rail Spur Project are potential accidents at the SMR and along the UPPR mainline that could result in oil spills, fires and explosions. At the SMR the hazard zones associated with these events would be limited to the SMR property and would not impact offsite areas. The hazards that could occur at the SMR would be limited to spills during the unloading operations and the pipeline. Given the low speed the trains would be moving at the SMR site (3 mph) it is unlikely that a tank car could be impacted enough to result in a spill. The estimated shell and head puncture velocity of the tank car design proposed for use by the Applicant are 8.3 and 10.3 miles per hour respectively. Therefore, the hazard impacts at the SMR were found to be less than significant (Class III).

For the UPRR mainline tracks within the County a quantitative risk assessment (QRA) was conducted to determine the level risk associated with the movement of trains from the SMR to the Roseville and Colton rail yards. The risk for the full length of all three of the routes evaluated was found to be significant (Class I) in the event of a release of crude oil that resulted in a fire or explosion in the vicinity of a populated area. This finding is based upon the risk along the entire length of the routes. The risk within any individual City or County would be considerably less. The risk is primarily driven by the HTUA (Los Angeles Area, Bay Area, and Sacramento) since these are the locations where fairly long stretches of track are in close proximity to heavily populated areas. Mitigation requiring the use of the safest tank car design that is part of the U.S. Department of Transportation (DOT) proposed rulemaking for high hazard flammable trains (HHFT), which would include crude oil trains, would substantially reduces the risk. It has been estimated that use of this tank car design would reduce the probability of an oil spill by about 74 percent. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks (See Section H of the Executive Summary for more discussion on the preemption issue).

The hazards analysis found that the return period (i.e., average incident rate) for a release of 100 gallons or more of oil from a train between the SMR and the Roseville or Colton rail yards was estimated to be between one every 46 years to once every 76 years depending upon the rail route used to get to the SMR. For the full routes within the State of California the return period for a release of 100 gallons or more of oil from a train was estimated to be between once every 19 years to once every 30.8 years depending upon the route taken. All of these estimates assume

that all 250 trains per year use the same route. These numbers represent a range of return periods for the crude oil train within California. The actual figure likely would be a weighted average of several of these routes, and likely would vary each year.

Recreation
There are no significant and unavoidable (Class I) impacts to recreation associated with the Rail Spur Project. Impacts to recreational access were found to be less than significant (Class III) in the event of an oil spill along the UPRR mainline that impacted a recreational area. While spill cleanup activities could limit access to recreational areas, it would be temporary and would not result in permanent limits on access.

Noise and Vibration
There are no significant and unavoidable (Class I) impacts to noise and vibration associated with the Rail Spur Project.

Operation of the Rail Spur Project would generate noise in the area around the SMR due to the movement of trains during the unloading operations. These impacts were found to be less than significant with mitigation (Class II). The unloading of a unit train would be expected to take about 10 to 12 hours. This includes the time need to position the train, unload the tanker cars, reassemble the train, and depart the facility. Noise modeling done as part of the EIR determined that the County nighttime nose standards could be exceeded during the train positioning operations when locomotive are operating east of the unloading racks. This is the area closest to residential area.

The requirement for a Rail Unloading and Management Plan, and limits on the amount of time locomotives can operate at night east of the unloading racks should reduce the noise impacts to less than significant. There is some level of uncertainty associated with the unloading timeline and the noise modeling. Therefore, a mitigation measure has been added that would require noise monitoring to assure that the rail unloading operations due not exceed the County noise standards.

Population and Housing
There are no significant and unavoidable (Class I) impacts to population and housing associated with the Rail Spur Project. Impacts to population and housing demand were found to be less than significant (Class III).

Public Services and Utilities
Operation of the Rail Spur Project could increase demand for fire protection and emergency response services at both the SMR and along the UPRR mainline tracks due to incidents such as oil spills, fires, or explosions. The impact to fire protection and emergency services was found to be less than significant with mitigation (Class II) at the SMR. As part of the Rail Spur Project fire protection and spill containment systems would be installed, and a new emergency access road would be constructed to the rail unloading site. Implementation of a Fire Protection Plan, Emergency Response Plan, Spill Prevention Control and Countermeasure Plan, training requirements for Calfire and other local mutual aid fire departments, and the SMR fire brigade would result in less than significant impacts.

The impact to fire protection and emergency services along the UPRR mainline was found to be significant (Class I) in the event of a fire or explosion. Many of the local emergency responders along the various mainline rail routes that could be used for transporting crude oil to the SMR lack adequate resources to respond to oil by rail accidents. Many of these first responders are in rural areas and have little or no funding for firefighters and rely on volunteer firefighters. Specifically, 40% of the fire fighters in California are volunteer firefighters, with many fire departments entirely staffed by volunteer firefighters. These departments lack the necessary capacity to support a hazmat team or to obtain training in the specialized areas of oil rail safety and flammable liquid, and their response time to significant oil by rail accident could be hours. In addition, some of these volunteer fire departments are in rural mountain areas were the rail lines traverse local safety hazard areas (LSHA), which historically have had a higher probability of train derailments.

Mitigation measures requiring training, drills, and notification for emergency responders along the mainline rail routes would help to mitigate these impacts. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks (See Section H of the Executive Summary for more discussion on the preemption issue). Therefore, the impact would remain significant (Class I).

Transportation and Circulation

There are no significant and unavoidable (Class I) impacts to transportation and circulation associated with the Rail Spur Project.

Minimal traffic would be generated during the operations of the Rail Spur Project. Traffic impacts during construction were found to be less than significant with mitigation (Class II). Trucks delivering construction materials to the SMR would be required to use Willow Road from the new interchange with Highway 101. Implementation of a Construction Traffic Management Plan would reduce the construction traffic impact to less than significant.

The EIR evaluated the impacts of the Rail Spur Project on passenger train on-time performance. Unit trains moving on the UPRR mainline tracks could potentially interfere with schedule passenger trains. The EIR analysis found that impact to on-time performance of passenger train service from two additional trains per day (one coming to the SMR and one leaving the SMR) would be less than significant (Class III).

Water Resources

Construction and operational activities associated with the Rail Spur Project could degrade surface water and groundwater quality, which was found to be a less than significant with mitigation (Class II) impact. Implement a Storm Water Pollution Prevention Plan (SWPPP) using Best Management Practices, and an Oil Spill Contingency Plan would result in less than significant impacts.

Accidental oil spills at the SMR associated with the operation of the Rail Spur Project were found to be less than significant with mitigation (Class II). Oil spills could result from onsite pipelines, or other rail unloading equipment such as the unloading pumps and lines. Implementation of the oil spill containment systems and Spill Prevention Control and Countermeasure Plan (SPCCP) would reduce this impact to less than significant levels.

Accidental oil spills along the UPRR mainline tracks were found to be significant and unavoidable (Class I) in the event that a spill where it could impact water resources. Only portions of the UPRR mainline track run adjacent to water resources. In the event of an oil spill along the UPRR mainline tracks there could be impacts to adjacent surface and groundwater. Mitigation measures identified for improving emergency response and oil spill cleanup would help to mitigate these impacts. However, the County may be preempted by Federal law from requiring mitigation for operations on the UPRR mainline tracks (See Section H of the Executive Summary for more discussion on the preemption issue).

The Rail Spur Project would increase water demand by 250 gallons per day, or 0.3 AFY. The total SMR water demand would be 1,111.3 AFY, which would be less than the 1,550 AFY of water available for SMR use under the Court Stipulation. Therefore, water supply related impacts are considered less than significant (Class III).

E. Description of Project Alternatives

Alternatives to the Rail Spur Project have been developed per CEQA Guidelines Section 15126.6. The EIR has used an alternative screening analysis to select the alternatives evaluated in detail in the EIR. The screening analysis looked at alternative transportation modes such as trucking and marine transport, alternative rail unloading sites, an alternative rail unloading facility configuration, and reduced train deliveries.

The screening analysis provides the detailed explanation of why some of the alternatives were rejected for further analysis and ensures that only potentially environmentally preferred alternatives are evaluated and compared in the EIR. Please see Chapter 5 of the EIR for a detailed discussion of the screened alternatives. The following are the alternatives that were selected as part of the screening analysis for more detailed review.

No Project Alternative

With the No Project Alternative no rail spur would be built and crude oil would not be delivered by train to the SMR. Crude oil deliveries to the SMR would continue to be via pipeline and truck. Trucks deliver crude oil to the Santa Maria Pump Station, and the oil is then moved via pipeline to the SMR. In the past year the SMR has been receiving Canadian crude via rail and truck. The crude is delivered to a rail unloading facility in Bakersfield and then loaded into truck and delivered to the Santa Maria Pump Station, which it is moved via pipeline to the SMR.

Under the No Project Alternative, Phillips 66 could increase the delivery of North American crudes to the SMR by about 19,660 barrels per day, using the existing rail and truck system without requiring any new permits. Oil would be moved via rail to an existing rail unloading facility in Bakersfield. The oil would then be loaded on to trucks and moved to the Santa Maria Pump Station. The majority of the truck route would be along State Highway 166 in San Luis Obispo County. Movement of 19,600 barrels per day would require 2.5 crude oil unit trains per week.

Loop Rail Unloading Configuration
With this alternative a large circular track would be constructed at the SMR for the delivery and unloading of unit trains. This would eliminate the need to uncouple the train into sections for unloading, however, the area needed for the tracks would be much larger. Trains would pull into the track and twenty cars would be unloaded. The train would then pull forward and the next twenty cars would be unloaded. This process would continue until all eighty cars had been unloaded. The train would then be prepared for departure from the facility. The unloading operations would be the same as described for the proposed unloading operations.

Reduce Train Deliveries
With this option the Rail Spur Project would be built and operated as proposed, but the SMR would receive only a maximum of three unit trains per week instead of the proposed five per week. All of the construction and operational activities would be the same as the proposed project, which are discussed in Chapter 2 of the EIR.

F. Environmentally Superior Alternative

This section summarizes the advantages and disadvantages of each of the alternatives as compared to the Rail Spur Project. A more detailed comparison of the Rail Spur Project and the alternatives can be found in Section 5.4 of the EIR.

CEQA does not provide specific direction regarding the methodology of comparing alternatives to a proposed project. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas with significant long-term impacts are generally given more weight in comparing alternatives. Impacts that are short-term (e.g., construction-related impacts) or those that can be mitigated to less than significant levels are generally considered to be less important.

For the Rail Spur Project, the determination of the environmentally superior alternative is somewhat complicated by the preemption issue. The level and severity of a number of the mainline and locomotive impacts would vary depending upon whether mitigation can be applied to the Rail Spur Project or some of the Alternatives.

No Project Alternative
With the No Project Alternative, construction and operation of the Rail Spur Project would not occur. Since the No Project Alternative could occur without any new permits, mitigation measures could not be applied. If the County is preempted from requiring mitigation on the UPRR mainline and locomotives, The No Project Alternative offers a number of environmental advantages since fewer trains would be need to move the oil. Some of this advantage is offset by the additional truck transportation that would be needed with the No Project Alternative.

With fewer trains the level of public safety risk would be reduced but would likely remain significant. The trains would avoid the HUTAs of Los Angeles and the Bay Area since the trains would be routed to the San Joaquin Valley. However, they could pass through Sacramento (a HUTA), Davis, Stockton, Fresno, Bakersfield, etc.

Annual air and toxic emissions would be reduced with this alternative. However, the peak day emissions would increase due to the truck emissions. The Class I air toxic impact at the SMR would be eliminated, and the air toxic impacts at the Bakersfield rail facility would be less than significant (Class III) since the site is surrounded by agriculture and there are no sensitive receptors in close proximity to the facility. Annual GHG emissions would increase with the No Project Alternative due to the additional truck emissions and would remain significant and unavoidable (Class I).

The risk of impacting sensitive biological and water resources along the mainline rail would be reduced since the probability of a spill would decrease due to few annual trains. Some of this risk would be offset by the risk of a spill from trucks along State Highway 166. While the maximum spill volume for trucks is lower, the accident rate for trucks is higher than for trains. The risk of impacting agricultural resources in the event of an oil spill would increase since more of the mainline rail route would be in close proximity to prime agricultural land in the San Joaquin Valley.

If the County is not preempted from applying mitigation to the mainline rail and locomotive, then almost all of the advantages of the No Project Alternative would be eliminated since no mitigation could be applied to the No Project Alternative. In this case, the Rail Spur Project would have a number of environmental advantages over the No Project Alternative due to the benefits of mitigation.

The No Project Alternative would meet most of the basic objectives of the Rail Spur Project. However, it may not allow the SMR to operate at its permitted throughput capacity since less crude oil could be available to the refinery.

Loop Rail Unloading Configuration

This alternative would not reduce the impact classification of any of the impacts for the Rail Spur Project, and would not result in any new impacts that were not identified for the Rail Spur Project.

The alternative would reduce the air and toxic emissions of the rail operations at the SMR since less trains movements would be needed to unload the rail cars. However, this alternative would increase the severity of 21 impacts identified for the Rail Spur Project, but would not change the classification of any of these impacts (these are all Class II or Class III impacts). Most of these impacts would be related to construction activities. The loop track configuration would require a larger area of disturbance and more cut and fill, which increases the severity of some of the construction impacts. The loop track configuration would require a change in topography of the site that would increase the severity of the visual impacts. From an environmental standpoint, the slight reduction in air emission at the SMR would be offset by the increase in severity of a large number of construction related impacts, and increased visual impacts. This would be the case whether the County is preempted from applying mitigation on the mainline rail and locomotives.

The Loop Configuration Alternative would meet most of the basic objective of the Rail Spur Project and would allow for delivery of the same about of crude oil to the refinery as the proposed project.

Reduce Train Deliveries
All of the construction impacts would be the same as the Rail Spur Project. A reduction in crude oil deliveries to the SMR would affect some of the operational impacts associated with air quality, hazards and hazardous material, and to some degree noise. Operational impacts in all the other issue areas would remain essentially the same as the Rail Spur Project. This alternative would not result in any new impacts not identified as part of the Rail Spur Project.

If the County is preempted from applying mitigation to the mainline rail and locomotive, the public safety risk would be reduced since the probability of an oil release would be less due to fewer annual trains. Annual air, toxic and GHG emissions would be less due to fewer annual trains, but the peak day emissions would remain the same. It would also offer some advantage in term of 30-year cancer risk in the vicinity of the SMR and along the mainline routes since there would be less annual exposure to toxic air emissions due to fewer trains.

If the County is not preempted, the reduced rail delivery alternative would offer no advantage over the Rail Spur Project in terms of air and GHG emissions since these emissions could be fully mitigated. However, the reduced rail delivery alternative would offer some very minor advantages over the Rail Spur Project in terms of hazards, noise, and health risk. It would reduce the likelihood of a train accident due to less annual train miles, reduce the exposure of sensitive receptors to train unloading noise, and reduce localized air toxic emissions. The advantage in terms of 30-year cancer risk would be due to the reduction in localized air toxic emissions. It is unlikely that all the DPM emission reduction credits, which is a mitigation measure, would occur in the localized area of the SMR and mainline tracks.

All of these slight reductions would result since fewer trains would be delivered to the SMR. Therefore, even if the County is not preempted, the reduced rail delivery alternative would offer a very slight environmental advantage over the Rail Spur Project.

G. Vertical Coastal Access

As a condition of approval of the Phillips 66 Throughput Increase Project (approved by the County Board of Supervisors in February 2013), Phillips 66 was required to provide a vertical public right of coastal access at the SMR Site. The permit conditions require Phillips 66 to construct vertical public access from State Route 1 to their western property line to comply with the coastal access provisions of the County's Coastal Zone Land Use Ordinance (CZLUO).

The condition of approval for the Throughput Increase Project requires that the coastal accessway be developed within 10 years of permit issuance or at the time of any subsequent use permit approval at the project site, whichever occurs first. Therefore, if the Rail Spur Project is approved (presumably in less than 10 years), the Throughput coastal accessway requirement would have to be met at that time to be consistent with the County's conditions.

The County's condition of approval on the Throughput Project requires that the access be consistent with the standards of Section 23.04.420 of the Coastal Zone Land Use Ordinance, including provisions that a vertical right of access be provided for each mile of coastal frontage,

unless that access would be inconsistent with public safety, military security needs or the protection of fragile coastal resources.

The vertical coastal access analysis will be used by the County to assist in determining whether coastal access is appropriate for the SMR site consistent with the standards of Section 23.04.420 of the Coastal Zone Land Use Ordinance. If the County determines that coastal access at this location is appropriate, then Phillips 66 and the County could use the information in this EIR to assist in developing a final design for the coastal access (if substantial improvements would be required); or could rely on the information in this EIR to develop a coastal accessway (if only minor improvements are required).

If the County finds that coastal access for this location is consistent with the requirements of Section 23.04.420 of the Coastal Zone Land Use Ordinance, but substantial improvements are required to provide a higher intensity of access, then additional environmental review and an appropriate environmental determination may be required prior to final approval. An additional Coastal Development Permit would also be required based on the location of coastal access and resources found in the vicinity of the identified alignment.

Chapter 9 of this EIR contains a programmatic assessment the potential environmental impacts of various coastal access options for the SMR site. The information in the chapter is summarized below.

G.1 Vertical Coastal Access Project Description

The coastal access would be located in the southwestern corner of San Luis Obispo County, approximately one mile southwest of State Route 1, and approximately 3.5 miles west of the community of Nipomo, in the South County Coastal planning area.

The recently approved Throughput Increase Project at the SMR included a site-specific Conditions of Approval (COA) that required that the coastal access "*be located within or immediately adjacent to the existing maintenance road*". This access route alignment would follow an existing refinery truck entrance road from State Route 1 to a service road that is used by Phillips 66 to maintain an outfall pipeline. This is a practical alignment in that it follows the dune contours to provide a relatively gently sloping route, generally avoiding the steep unstable dune faces and the low-lying surface water features (e.g., Jack Lake, Lettuce Lake) and wetlands (dune slacks) throughout the area. This alignment would be approximately 2 miles in length from State Route 1 to the western SMR property line shared with the Oceano Dunes State Vehicle Recreation Area (ODSVRA). The location of the existing refinery service road is shown in Figure ES-4.

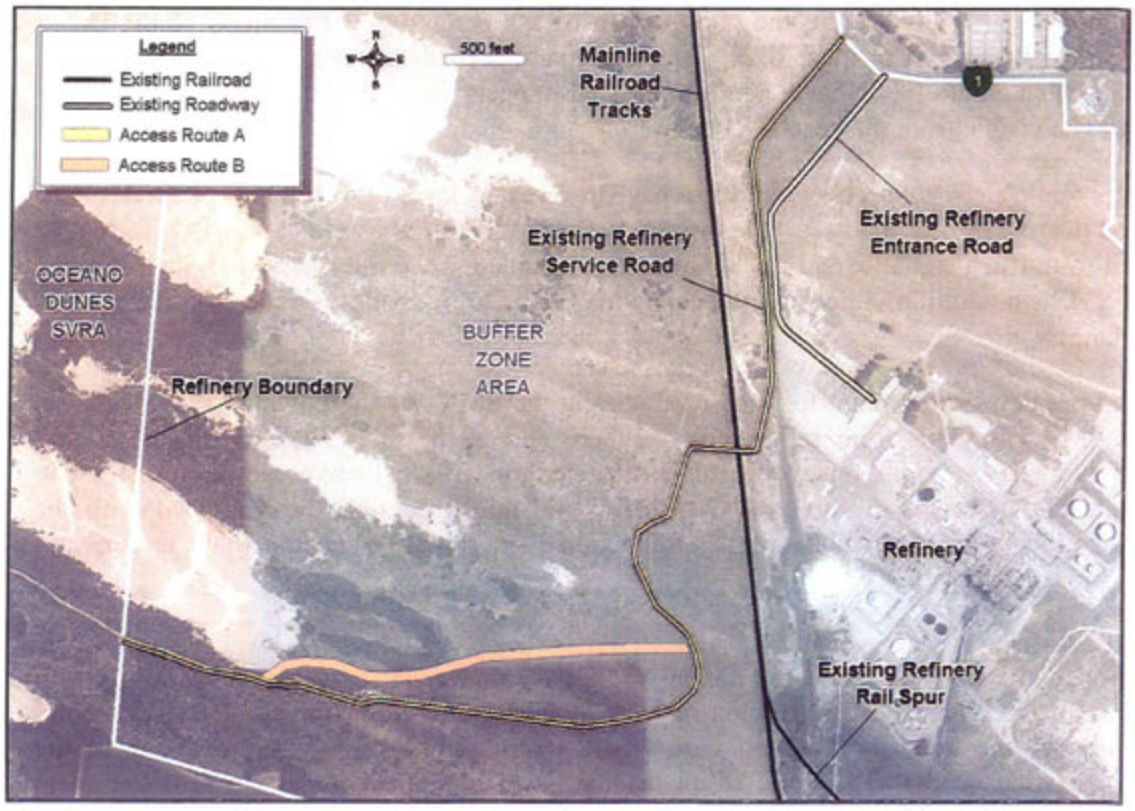
At the outlet of the route alignment across the SMR property, the public users would reach the ODSVRA, and would be approximately 1.5 miles from the ocean. It is assumed that users would continue to follow the existing service road to the beach and not short-cut through the vegetated dune areas and the large dune wetland area immediately west of the SMR property. The location and design of the access across ODSVRA would ultimately have to be determined by the California Department of Parks and Recreation.

No formal design for coastal access has been developed by Phillips 66 or the County. As such, the EIR had to develop conceptual designs for various coastal access options that have been used to assess the range of environmental impacts that could occur with development of coastal access at the SMR. If and when a final design is developed for a coastal access additional environmental review may be required depending upon the type of access, and the extent of improvements that would be required. Three possible options for use of this service road and the adjacent area were identified, which included the following:

- Motor Vehicle, Bicycle, and Pedestrian Access,
- Bicycle and Pedestrian Access, and
- Docent Led Access for Pedestrians Only.

These three options were chosen since they represent the full range of intensity for the coastal access.

Figure ES-4 Coastal Access Route at the SMR Property



Source: Adapted from Arcadis 2013

G.2 Summary of Vertical Coastal Access Assessment

The impacts identified in the coastal access assessment were based upon very limited conceptual designs, and therefore, represent potential impacts that could occur. The severity and significance of these impacts could change once detailed designs for each of the options were developed. However, the impact assessment can be used to gauge the type and possible extent of the impacts could occur with each of the coastal access options. A summary of the impacts for each of the options is provided below.

Motor Vehicle, Bicycle/Pedestrian Access
The motor vehicle coastal access would provide the highest intensity of public use, but would also have the greatest level of impacts on the environment. Construction of the motor vehicle access road could result in significant biological impact to sensitive plant species including the Nipomo Mesa lupine, sensitive terrestrial and semi-aquatic wildlife species, and wetlands. Impacts to sensitive biological and cultural resources could also occur from users straying from the designated path into sensitive areas.

This option would likely require the construction of a separated-grade crossing of the Union Pacific railroad tracks. The most likely type of separated-grade crossing would be a vehicle overpass, which would likely have significant visual impacts since it would be a large structure that would be visible from the beach.

The motor vehicle coastal access would also have the greatest level of traffic impacts. It has been estimated that 3,579 peak daily vehicles would possible use this coastal access road. To handle this level of traffic a signal would likely have to be installed at the intersection of State Route 1 and the SMR. In addition, other improvements may have to be made to State Route 1 such as turnout lanes.

Opening up a new access point for motor vehicles at the SMR has the potential to increase the level of PM_{10} emissions from sand at the southern end of the ODSVRA. While the overall baseline level of PM_{10} emissions would not be expected to increase, there could be an increase in the localized impacts in the area of the SMR. This might possibly be mitigated with the implementation of the Particulate Matter Reduction Plan (PMRP) that the State is currently preparing for the ODSVRA.

Bicycle/Pedestrian Access
The bicycle/pedestrian coastal access option would have the second lowest level of impacts on the environment. While the construction impacts of this option would be similar to the motor vehicle option, the intensity of public use would be substantially less. Construction of the bicycle/pedestrian access path could result in significant biological impact to sensitive plant species including the Nipomo Mesa lupine, sensitive terrestrial and semi-aquatic wildlife species, and wetlands. Impacts to sensitive biological and cultural resources could also occur from users straying from the designated path into sensitive areas.

If a new parking lot would have to be built, there could be impacts to Nipomo Mesa lupine, which would be a significant biological impact. This option would likely require the construction

of a separated-grade crossing of the Union Pacific railroad tracks. The most likely type of separated-grade crossing would be an elevated walkway.

Docent-Led Access
The docent-led coastal access option would have the lowest level of impacts on the environment. Minimal construction would be needed to implement this option. This option would have the lowest intensity of public use and access to the coastal trail would be supervised. However, this option would provide limited public access. If a new parking lot would have to be built, there could be impacts to Nipomo Mesa lupine, which would be a significant biological impact. It is also uncertain if a grade-separated crossing of the Union Pacific railroad tracks would be needed for this level of access. If the California Public Utilities Commission (CUPC) considers the docent-led access to be a public crossing, then it is possible that a grade-separated crossing could be required. This would increase some of the construction impacts associated with this option.

G.3 Key Issues Associated with the Vertical Coastal Access Project

Two key issues were identified for the Vertical Coastal Access Project. Each of these is discussed below.

Public Safety
The coastal access route evaluated in this assessment would pass within about 900 feet of the active refinery operations, and would parallel or use one of the two main access roads to the SMR. Opening up a public access route in close proximity to an active refinery presents a number of public safety issues. In the event of an incident at the SMR members of the public would be at greater risk of being injured or killed. There is also the potential for interference with emergency response activities at the refinery in the event of an incident.

While these types of incidents at the SMR are extremely unlikely, typically it is prudent to maintain an adequate buffer between the active refinery operations and the general public. To avoid these public safety issues a quantitative risk assessment (QRA) should be conducted to determine the minimum distance from the SMR operations the coastal access route should be located.

Relationship to Ongoing ODSVRA Evaluations
Construction of the coastal access across the SMR property would be for access to the ODSVRA. This would be particularly true for the motor vehicle access. The question of the best manner and location for access and staging for ODSVRA has not been completely resolved. It is a complicated question, and one that is informed by a long and involved permitting history. The question of access and staging for the ODSVRA may be resolved in the relatively near future (including in relation to an upcoming Habitat Conservation Plan for ODSVRA, ongoing Californian Coastal Commission (CCC) condition compliance and review efforts pursuant to CSPR CDP 4-82-300, and State Parks' current CDP application associated with dust control) (CCC 2013).

Conditions included in CDPR's CDP issued by the CCC (CDP 4-82-300, as amended) for ODSVRA operations require CDPR to determine a permanent access and staging location for

OHV activities that is the least environmentally damaging alternative and that incorporates all feasible mitigation measures. As a result, a number of studies have been conducted to examine potential alternative access routes into the ODSVRA. These studies have included a 1991 Environmental Impact Report for the ODSRVA Access Corridor Project, and a 2006 Alternative Access Study Oceano Dunes State Vehicle Recreation Area. Until the CDPR resolves the long standing issues associated with access and staging for the ODSVRA, the type of access for the SMR site is uncertain.

H. Known Areas of Controversy and Uncertainty

According to Section 15123 of the CEQA Guidelines, the EIR shall identify "areas of controversy known to the Lead Agency including issues raised by agencies and the public." A number of areas of controversy and uncertainty were raised during the preparation of the EIR. Each of these is briefly discussed below.

Assessment of Union Pacific Mainline Environmental Impacts
The operation of unit and manifest trains to and from the Rail Spur Project Site would be performed by UPRR, on UPRR property, and on trains operated by UPRR employees. The movements of those trains within San Luis Obispo County to and from the Project Site, while described in this section of the EIR, may be preempted from local and state environmental regulations by federal law under the Interstate Commerce Commission Termination Act of 1995.

While the potential impacts of those trains movements along the UPRR mainline within San Luis Obispo County are described in appropriate chapters of this EIR, the County as CEQA Lead Agency, and other state and local responsible agencies may be preempted from imposing mitigation measures, conditions or regulations to reduce or mitigate potential impacts of UPRR train movements on the mainline.

By contrast, all activities performed within the Rail Spur Project Site are not preempted by federal law since they would not occur on UPRR property and would not be operated by UPRR employees. The impacts of the activities that occur on the Rail Spur Project Site are described and evaluated in respective chapters of this EIR, and the County as CEQA Lead Agency, and other state and local responsible agencies have the authority to impose mitigation measures, conditions or regulations to reduce or mitigate potential impacts within the Rail Spur Project Site.

Train Unloading Sequence and Time
There is some uncertainty in the estimated time that each of the train unloading steps would require at the SMR. The EIR preparers worked with Phillips 66 to develop a detailed breakdown of the unloading operations that looked at how the locomotive would move while at the SMR and how long each operation would take. The results of this analysis are presented in Chapter 2 of the EIR. Changes in this unloading sequence or associated times could affect the noise and air quality impacts. If the times were shorter than the impact levels could decrease. If time are longer than the impacts could increase. What has been analyzed in the EIR is a reasonable worst case in term of train speeds, uncoupling times and tanker car unloading times. Given the

uncertainty, noise mitigation has been proposed that would limit the amount of time locomotives could operate at night east of the unlading rack.

Fugitive Dust Emissions

Exeededences of fugitive dust standards has been an issue on the Nipomo Mesa. A study performed by the SLOCAPCD, the South County Phase 2 Particulate Study, evaluated whether impacts from off-road vehicle activities at the ODSVRA, the Phillips 66 Refinery coke piles, and adjacent agricultural fields were contributing to the particulate problems on the Nipomo Mesa. The ODSVRA is upwind of the Nipomo Mesa; the study data includes the ODSVRA in the area that is the major source of particulates on the Nipomo Mesa. The study indicates that off-road vehicle activity on the dunes is known to cause de-vegetation, destabilization of dune structure, and destruction of the natural crust on the dune surface. All of these increase the ability of winds to entrain sand particles from the dunes and carry them to the Nipomo Mesa, representing an indirect emissions impact from the off-road vehicles. The study concluded that off-road vehicle activity is the primary cause of the high PM levels measured on the Nipomo Mesa during episode days.

Impacts of the Rail Spur Project on fugitive dust emissions are discussed in Section 4.3, Air Quality and Greenhouse Gases. The Rail Spur Project would generate about 1.32 lbs per day of fugitive dust emissions (PM_{10}). This is well below the SLOCAPCD threshold of 25 pound per day.

Relationship between the Recently Approved SMR Throughput Project and the Rail Spur Project

A number of people have raised the issue that the Rail Spur Project is directly related to the recently approved SMR Throughput Increase Project, and should have been evaluated in the same CEQA document.

The Rail Spur Project would not affect the amount (throughput volume) of material processed at the refinery. Throughput levels at the refinery are capped by the County of San Luis Obispo and by the SLOCAPCD. The ability of the SMR to operate at the maximum approved throughput level is based on the existing infrastructure and is not dependent on, or related to, the Rail Spur Project. However, if and when local crude oil production (the current major source of oil for the SMR) declines, the Rail Spur Project, if approved, would allow the SMR to maintain operating up to its permitted throughput levels.

The land use application for the SMR Throughput Project was submitted in 2008 and the Final EIR for the Throughput Project was certified by the County Board of Supervisors in March of 2013, which was approximately two months before the application for the Rail Spur Project was submitted to the County. Therefore, evaluation of these projects separately would not be considered "piece-mealing" under CEQA.

Federal and State Regulations on Crude Oil by Rail

Traditionally, pipelines and oceangoing tankers have delivered the vast majority of crude to U.S. refineries, accounting for approximately 93% of total receipts (in barrels) in 2012. Although other modes of transportation—rail, barge, and truck—have accounted for a relatively minor portion of crude oil shipments, volumes have been rising very rapidly. The volume of crude oil

carried by rail increased 423% between 2011 and 2012 (Congressional Research Service 2014). This increase in crude oil transportation by rail has resulted in a number of recent crude oil train derailments and release. As of a result of these incidents, the Federal Government and the State of California have begun taking action to improve crude by rail safety.

The movement of crude on the mainline rail within the United States is regulated by the Federal Railroad Administration (FRA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA), which are both part of DOT.

On July 23, 2014 the DOT issued a notice of proposed rulemaking covering enhanced tank car standards and operational controls for high-hazard flammable trains, which include crude oil trains. As part of the proposed DOT rulemaking, the PHMSA, in coordination with the FRA, is proposing: (1) new operational requirements for certain trains transporting a large volume of Class 3 flammable liquids[1]; (2) improvements in tank car standards; and (3) revision of the general requirements for offerors to ensure proper classification and characterization of mined gases and liquids. These proposed requirements are designed to lessen the frequency and consequences of train accidents/incidents (train accidents) involving certain trains transporting a large volume of flammable liquids.

In July of 2014 the DOT issued an advanced notice of proposed rulemaking covering oil spill response plans for high-hazard flammable trains. The advanced notice of proposed rulemaking would set a lower threshold for when a comprehensive Oil Spill Response Plan (OSRP) is required for crude oil trains. Some of the thresholds that are suggested in the notice are 1,000,000 gallons or more per train (approximately 35 car loads), 20 or more car loads, or 42,000 gallons per train. The notice also discusses the possibility conducting training, drills, and equipment testing, and placing oil spill response equipment along rail road tracks.

This advanced notice of proposed rulemaking is currently out for a 90-day comment period. It is expected that the DOT will eventually issue a notice of proposed rulemaking and adopt some final regulation regarding oil spill response plans for high-hazard flammable trains.

In 2014, Governor Brown expanded California's oil spill prevention and response program to cover all statewide surface waters at risk of oil spills. This expansion provided funding for industry preparedness, spill response, and continued coordination with local, state and federal government along with industry and non-governmental organizations. Senate Bill 861 authorized the Office of Spill Prevention and Response (OSPR) with the statewide expansion and regulatory oversight. The changes would apply to railroads, pipelines, and oil well/production facilities. These facilities will be required to have oil spill contingency plans. The legislation also requires announced and unannounced drills to test response and cleanup operations, equipment, contingency plans, and procedures. All elements of the plan must be excised at least one very three years. Operators of covered facilities must be able to demonstrate financial resources to pay for spill response and damages based upon a reasonable worst case spill volume.

[1] A flammable liquid having a flash point of not more than 141°F, or any material in a liquid phase with a flash point at or above 100°F, and would include crude oil.

The regulation requires a six and one-half cent per barrel tax on crude oil and petroleum products received at refineries or marine terminals within California to cover the cost of the expanded oil spill response program.

The final outcome of the Federal regulations and the implementation timing for SB 861 were unknown at the time of the writing of this Draft EIR. Full implementation of the final Federal regulations and SB 861 could affect the analysis and conclusions in this Draft EIR.