SANTA BARBARA COUNTY PLANNING COMMISSION

Staff Report for Orcutt Hill Resource Enhancement Plan

Hearing Date: May 11, 2016
Staff Report Date: April 20, 2016
Case No.: 13PPP-00000-00001
Environmental Document:
14EIR-00000-00001, SCH#2014021025

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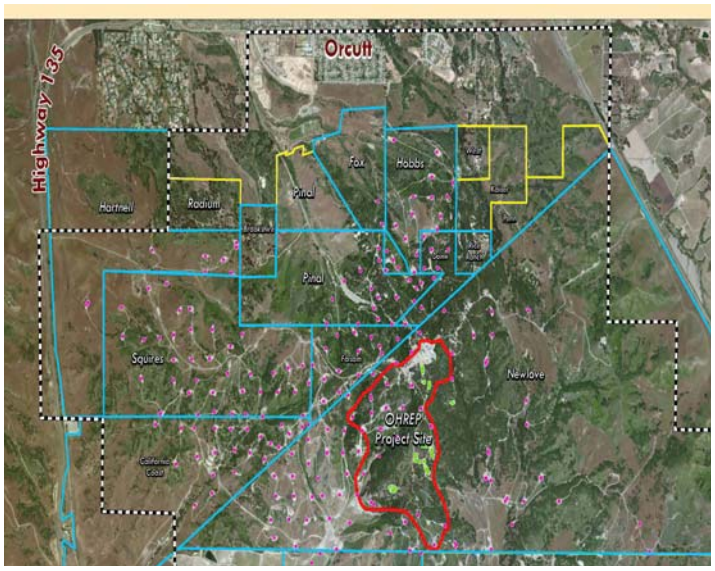


This site is identified as Assessor Parcel Number 101-020-074, located at 1555 Orcutt Hill Road, in the Orcutt area, 4th Supervisorial District.

Application Complete: September 13, 2013
Processing Deadline: 180 days from certification of EIR

1.0 REQUEST

Hearing on the request of Pacific Coast Energy Company to consider Case No. 13PPP-00000-00001 [application filed on February 15, 2013] for approval of an Oil Drilling and Production Plan to construct and operate 96 new oil wells in compliance with Section 35.53.040 of the County Land Use and Development Code, on property zoned AG-II-100; and to certify the Environmental Impact Report (14EIR-00000-00001) pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA). As a result of this project, significant and unavoidable effects on the environment are anticipated in the following categories: Biological Resources and Water Resources. Potentially significant but mitigable impacts are anticipated in the following categories:

Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Water Resources.

The EIR and all documents referenced therein may be reviewed at the Planning and Development Department, 123 East Anapamu Street, Santa Barbara. The EIR is also available for review at the Central Branch of the City of Santa Barbara Library, 40 East Anapamu Street, Santa Barbara.

The application involves Assessor Parcel No. 101-020-074 located at 1555 Orcutt Hill Road, in the Orcutt area, 4th Supervisorial District.

2.0 RECOMMENDATION AND PROCEDURES

Follow the procedures outlined below and conditionally approve Case No. 13PPP-00000-00001 marked "Officially Accepted, County of Santa Barbara May 11, 2016 County Planning Commission Attachments A-I", based upon the project's consistency with the Comprehensive Plan and based on the ability to make the required findings.

Your Commission's motion should include the following:

1. Make the required findings for approval of the project specified in Attachment A of this staff report, including CEQA findings.

2. Certify the Environmental Impact Report (14EIR-00000-00001), included as Attachment I of this staff report, and adopt the mitigation monitoring program contained in the conditions of approval.

3. Approve a modified project (13PPP-00000-00001), subject to the conditions included as Attachment B.

Refer back to staff if the County Planning Commission takes other than the recommended action for appropriate findings and conditions.

3.0 JURISDICTION

This project is being considered by the County Planning Commission based on Section 35.53.404C of County Land Use and Development Code which states:

> *The Commission shall consider the Oil Drilling and Production Plan at a noticed public hearing and approve, conditionally approve, or disapprove the plan. The action of the Commission is final subject to appeal in compliance with Chapter 35.102 (Appeals).*

4.0 ISSUE SUMMARY

The proposed Project includes an Oil Drilling and Production Plan (Production Plan) (Case No. 13PPP-00000-00001) which would replace and supersede the Pacific Coast Energy Company's (PCEC) existing Production Plan (05PPP-00000-00001), permit an expanded cyclic steaming operation with 96 new wells and 48 "replacement" wells, and incorporate the previously-issued Emergency Permits for oil seep receptacles (seep cans) and associated French drains. The project site is located in a State-designated oilfield and has produced oil for more than 100 years.

The following summary highlights key issues associated with this project, including oil seeps, environmental impacts, and staff recommendations.

Oil Seeps

PCEC currently operates 96 cyclic steamed oil wells on the project site. Oil seeps have historically occurred throughout the project site, increasing in frequency since the beginning of steaming activities in 2007. Seeps are releases of crude oil from the ground surface originating from an oil bearing zone in the shallow Careaga Formation (located above the diatomite portion of the Sisquoc Formation, which is the target formation for oil production). Although able to flow to the surface on their own, seeps increase in frequency of occurrence and volume with the addition of steam. The frequency of new oil seeps occurring at the site increased substantially once PCEC started their steam injection program in 2007, but has since subsided due to the implementation of revised field practices. Although seeps are associated with the Careaga Formation, the specific location of individual seeps is unpredictable.

PCEC has implemented a system of seep cans and French drains to collect seep oil. A seep can is a temporary receptacle consisting of a perforated galvanized culvert placed vertically in the ground to collect and contain seep oil to prevent it from further damaging the environment. While installation of seep cans limits the direct impacts of oil on the environment, installation of the cans and associated access roads have been documented to result in the removal of native vegetation and impacts to sensitive species. Installation of the existing seep cans began in 2008; as of April 2016, 99 seep cans have been installed at the Project Site. To date, the existing 99 seep can installations have resulted in the direct removal of 6.09 acres of sensitive habitat and approximately 360 individual Lompoc yerba santa (E*riodictyon capitatum*), a federally listed endangered plant species.

Significant Environmental Impacts

Although the quantity and location of future seeps is impossible to predict, the proposed project is predicted to increase the incidence of seeps relative to continued existing operations. In addition, oil leaks or spills could occur from project pipelines and facilities. Seeps and spills are the primary drivers for the significant and unavoidable (Class I) impacts to biological resources and water resources identified in the project EIR. Seeps, and their resulting cleanup efforts, have the potential to contribute to the degradation or loss of habitat for sensitive species, including endangered California tiger salamander (CTS, *Ambystoma californiense*), and direct loss of sensitive plants, including the endangered Lompoc yerba santa. Because of the unpredictable nature of seep incidence, it is possible that seeps could occur in drainages and adversely impact

water resources. Proposed mitigation measures would lessen the predicted impacts from seeps, but they would continue to occur and their impacts would remain significant and unavoidable.

Oil spills from pipelines and facilities are unlikely to occur, but if they do occur then the impacts would be significant. Therefore, the County has always classified environmental impacts from these facilities as Class I, because although remote in probability, the risk cannot be eliminated. Impacts from oil spills would be similar to those from seeps.

Staff Recommended Alternative
The proposed project includes 96 new wells and 48 "replacement" wells on eight well pads (referred to as pods). The project EIR identifies an alternative, the Careaga Exclusion Alternative, which limits drilling to areas outside the Careaga tar zone, where seeps are known to originate. The Careaga tar zone is shown on Attachment H. This would effectively limit drilling of any of the 96 wells or 48 "replacement" wells to seven of the eight proposed pods. The Careaga Exclusion Alternative is identified in the EIR as the Environmentally Superior Alternative. While seeps would likely continue to occur under this alternative, they would be expected to occur at a significantly reduced rate relative to the proposed project. By lowering the expected rate of future seep activity, this alternative would contribute to mitigating the potential biological and water resources impacts of the proposed project to the maximum extent feasible, while still allowing the project substantially to move forward.

Staff recommends imposing a condition on the project that prohibits drilling new and replacement wells in the Careaga tar zone. Impacts associated with oil seep activity and impacts on biological and water resources would remain Class I, but incorporation of this project condition would substantially lessen the Class I impacts. The Careaga Exclusion limitation, if approved, would be implemented by Condition No. 41, and is discussed further in Section 6.1.3.

5.0 PROJECT INFORMATION

5.1 Site Information

Site Information	
Comprehensive Plan Designation	Agricultural Commercial (AC)
Ordinance, Zone	County Land Use and Development Code, Agriculture II - 100 acre minimum lot size (AG-II-100)
Site Size	285 acres of the approximately 4,000 acre Newlove parcel within the Orcutt Oil Field (with new development occurring on 3.1 acres of the 285 acre project site).
Present Use & Development	The Applicant's operations within the Orcutt Oil Field include approximately 300 active oil wells, including both conventional and cyclic steam wells. Other uses on the Newlove Lease consist of grazing and open space.
Surrounding Uses/Zone(s)	North: Oil and gas production, grazing/ AG-II-100. South: Oil and gas production, grazing/ AG-II-100. East: Oil and gas production, grazing/ AG-II-100.

Site Information	
	West: Oil and gas production, grazing/ AG-II-100
Access	Access to the Project area is provided from East Rice Ranch Road to Orcutt Hill Road, then along existing oil field roads. Access to the Project area is also provided from U.S. Highway 101 by an existing oil field road located approximately 1.2 miles south of Clark Road, and from Highway 135 by Graciosa Road and existing oilfield roads.
Public Services	Water Supply: Water for steam generation would continue to be supplied by brine water produced from the Monterey and Point Sal formations from existing oil well operations. Fresh water is supplied by the Applicant's private water wells located on Assessor Parcel Numbers 105-330-001 and 105-380-020 and used for cattle grazing, landscaping, fire protection, office use, ancillary operations (i.e., not steam generation), and drilling of new wells. Sewage: Private Septic Fire: Santa Barbara County Fire Dept. Station 21 Police Services: County Sheriff

5.2 Setting

The proposed Project would be located within the Orcutt Oil Field, which covers more than 10,000 acres and contains approximately 300 active oil wells. The Orcutt Oil Field is located in the Solomon Hills south of the community of Orcutt in northern Santa Barbara County. The proposed Project Site is approximately two miles west of U.S. Highway 101 and 2.4 miles east of State Route 135. Regional access to the proposed Project Site is provided by East Rice Ranch Road, U.S. Highway 101 and State Route 135. Local access is via existing oil field roads. The oil field is fenced and gated and is not open to the public. The Orcutt Oil Field is a State-designated oil field defined by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR). Land uses surrounding the proposed Project Site include oil and gas production, cattle grazing, and agriculture (vineyard). The southern boundary of the Rice Ranch Specific Plan area is approximately 1.2 miles north of the Project area.

5.3 Project Description

The following project description is a summary of the complete project description, which can be found in Condition No. 1 in Attachment A. This summary omits technical details and instead provides a general overview of project construction, operations, and maintenance. The project description contained in Condition No. 1 is modified by Condition No. 41 which, if approved, would limit drilling locations to areas outside the Careaga tar zone as described in the Careaga Exclusion Alternative in the project EIR summary (see Section 6.1.3). Where there is a conflict, the conditions of approval apply and supersede the project description.

The proposed Project includes the installation and operation of 96 new wells (for a total of 192, including the existing 96 wells) and ancillary equipment on eight previously disturbed drill pads (from prior operations) referred to as pods, the installation and operation of approximately 10,000 linear feet of new interconnecting above ground pipelines along existing oil field roads and/or existing pipeline corridors, and the installation and operation of an equipment pad and a multiphase booster pad on currently undisturbed locations. In addition, the proposed Project includes the drilling of up to 48 additional "replacement" wells at alternate locations on any of the approved pods if any of the 96 existing and 96 proposed wells prove to be uneconomic. Estimated crude oil production from the field after the proposed Project would total 3,600 barrels per day (bpd).

An equipment pad adjacent to Pod 9 would be developed to accommodate a pipeline manifold and automatic well tester equipment. This equipment would be used to isolate well streams and allow for testing and switching of wells between oil production and steam injection. An area to the immediate northeast of Pod 14 is proposed to contain a multiphase booster pump pad and electrical pad. A multiphase booster pump is a pump that can boost the pressure of the oil, water and gas mixture and push the mixture to the central processing facilities which are located uphill from the well pods.

Produced fluids and gases would be transported between the new wells and equipment and the existing processing facility via above ground pipelines. Approximately 10,000 linear feet of new above ground pipeline would be constructed along existing oil field roads or in existing pipeline corridors. Each pipeline corridor would contain crude oil, gas, water and steam pipelines. All oil produced by the proposed cyclic steaming operation would be transported to the central processing site and then transported from the oil field by the existing Oil Sales Pipeline.

Other than the new components described above, the Project would rely on existing infrastructure currently in place as part of the existing operations and approved under the previously approved Production Plan (05PPP-00000-00001). No new additional steam generators or processing facilities would be required. The Project would not require any additional buildings or roads. A proposed Supplemental Pollution Control Plan is included with the project and would serve as a comprehensive set of best practices for responding to future onsite seeps. Addressing future seeps would require additional grading, which may include temporary roads to access seep areas. Measures to address future seeps and implementation of the Supplemental Pollution Control Plan are included in the proposed Project.

Condition of Approval No. 41 prohibits the drilling of any wells on wells through or underneath the Careaga Tar Zone, which would eliminate Pod 8.

5.4 Background Information

The proposed Project would be located within the Orcutt Oil Field in northern Santa Barbara County near the community of Orcutt and the City of Santa Maria. The Orcutt Oil Field is a State-designated oil field, the boundaries of which are defined by the DOGGR. PCEC owns both the surface rights and subsurface mineral rights on the Project Site. The Orcutt Oil Field has been used for oil production purposes for more than 100 years, and has to date produced approximately 180 million barrels of oil. Existing oil well pods and access roads have been developed throughout the Project Site and surrounding area.

Existing diatomite operations consisting of 96 cyclic steam wells were permitted under the existing Production Plan (05PPP-00000-00001). PCE also operates non-diatomite oil wells which produce oil from the Monterey, Point Sal and Sisquoc geologic formations. There are approximately 23 wells producing from these formations within the 285-acre Project Site. PCEC also operates approximately 300 wells within the Orcutt Oil Field outside of the Project Site. These non-diatomite wells are not part of the proposed Project. However, some of the brine water and most of the gas produced from these wells is used for the production of steam, which is used for the diatomite production. Production from the non-diatomite wells is comingled with the diatomite production for transportation by pipeline to its refinery destination in San Luis Obispo County.

The Orcutt Hill Area has historically had naturally occurring oil seeps. The shallow Careaga geologic formation contains oily sands and is exposed in the project area. The Careaga sandstone sometimes contains a considerable amount of heavy oil, and it is this oil that can create seeps at the surface. Both DOGGR and the County require that the Applicant control and contain the flow of oil on the ground and remove and dispose of all such material. The Applicant conducts daily visual inspections of the oil field and has implemented a system of seep receptacles and French drains to collect seep oil in compliance with DOGGR and County requirements. Oil that is collected is removed from seep receptacles via pump or vacuum truck and sent to existing onsite facilities for processing and shipping through the Oil Sales Pipeline. Any contamination of soil resulting from the initial appearance of a seep is also immediately remediated as required by State and County regulations.

A seep can is a temporary receptacle consisting of a perforated galvanized pipe placed vertically in the ground to collect and contain seep oil. In some cases, an electric pump is attached to the seep can. Seep cans are generally between 15 and 20 feet deep, and between 24 and 48 inches in diameter. A seep can is not a production well.

Installation of the existing seep cans began in 2008; as of April 20, 2016, 99 seep cans (numbered 1 to 100) have been installed at the Project Site (number 80 is not used). The most recent seep can was installed on March 18, 2016, in the southern portion of the Project Site. Approximately 58 of the 99 seep cans are actively collecting oil. The County has addressed the initial permitting of the existing seep cans through an Emergency Permit process and has issued Emergency Permits for the installation of all seep cans to date.

In compliance with County and United States Environmental Protection Agency requirements, PCEC has a Spill Prevention Control and Countermeasure (SPCC) Plan on file with DOGGR and the County. The SPCC Plan contains operating procedures to prevent oil spills, control measures to prevent a spill from reaching navigable waters, and countermeasures to contain, clean up and mitigate the effects of an oil spill.

6.0 PROJECT ANALYSIS

6.1 Environmental Review

An Environmental Impact Report (14EIR-00000-00001) has been prepared to analyze the environmental impacts of the proposed project under the requirements of CEQA. The Draft EIR was circulated for public review from February 9, 2015 through March 26, 2015. A public

comment hearing on the Draft EIR was held on March 5, 2015. Written comments on the Draft EIR were received from public agencies and members of the public. These comments, and responses to them, are included in Section 10.0 of the Final EIR. The most notable issues raised in the comments pertain to the analysis of biological impacts and the incidence of seeps. All comments were considered and the proposed Final EIR was revised in response to the comments.

The EIR identified Class I (significant and unavoidable) impacts related to oil spills and seeps in two issue areas: biological resources and water resources (hydrology and water quality). Biological impacts include impacts to habitats for sensitive species, and impacts to individual Lompoc yerba santa. Water resources impacts include impacts from a pipeline leak or rupture, or from a seep occurrence in a drainage. All other impacts were considered to be either Class II (significant but mitigable to less than significant levels) or Class III (adverse but not significant). The Class I and Class II impacts identified in the EIR are summarized in the Executive Summary, Tables ES-1 and ES-2 (see Attachment C to this staff report). A summary of the environmental impacts and associated mitigation measures discussed in the EIR and raised as issues of concern in public comments is presented below.

The EIR includes a description of PCEC's Project objectives, which include the following:

- Explore, develop, and optimize the reserves of the State-designated Orcutt Oil Field, which is a natural resource found in limited areas of the County, to help meet domestic energy needs.
- Leverage technological advances in the oil extraction method known as cyclic steaming to efficiently develop the resource from the diatomite formation while efficiently using existing steam generation equipment already in operation at the Project Site.
- Utilize brine water produced as part of existing oil field operations to provide water for steam generation to reduce demand for groundwater resources.
- Promote a strong local economy by increasing employment in the region and by investing $100 million in local oil field development.
- Promote the fiscal health of the County and State by promoting development that would increase tax revenues.
- Reduce the need for importing foreign oil.

6.1.1 Class I Impacts

Impacts to sensitive species' habitats

The EIR concluded that seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential future pipeline spills have the potential for degradation or loss of habitat for sensitive species including CTS, sensitive plants including Lompoc yerba santa (federally listed as endangered), and other sensitive plant and wildlife species (Impact BIO-1). Sensitive species' habitats have been and would continue to be affected by oil seep management, including oil seep cleanup and seep can installations. Future potential oil seeps could occur at the project site in any habitat type, and these cleanup and seep can installation activities would continue to impact sensitive habitats. Proposed mitigation measures include: a Habitat Restoration Plan (Condition No. 7, MM Bio-1a); pre-construction surveys for sensitive species habitats (Condition No. 8, MM Bio-1b); restoration of sensitive species habitat

(Condition No. 9, MM Bio-1c); on-site environmental monitoring (Condition No. 10, MM- Bio 1d); adaptive management (Condition No. 11, MM Bio-1e); and, annual reporting (Condition No. 12, MM Bio-1f). Implementation of these measures would reduce, but not fully eliminate, the potential for seeps or an oil spill to significantly impact sensitive species' habitats. These impacts would remain significant and unavoidable.

Impacts to individual Lompoc yerba santa

Expansion of Project pods, pipeline installation, seeps, surface expressions (well mechanical failures resulting in releases of oil, fluids and/or steam to the surface), the installation and maintenance of existing and new oil seep cans, and pipeline spills have resulted and would potentially continue to result in the loss of individual Lompoc yerba santa plants, a significant impact (Impact Bio.2). Proposed mitigation measures include the following: a biological resources training program (Condition No. 13, MM Bio-2a); delineation of sensitive species prior to construction (Condition No. 14, MM Bio-2b); biological monitoring (Condition No. 15, MM Bio-2c); modification of pipeline routes (Condition No. 16, MM Bio-2d); rare plant salvage and transplant plan (Condition No. 17, MM Bio-2e); replacement of impacted plants (Condition No. 18, MM Bio-2f); and, preconstruction surveys (Condition No. 19, MM Bio-2g). Implementation of these mitigation measures would reduce, but not fully eliminate, the potential for significant impacts to Lompoc yerba santa individuals. These impacts would remain significant and unavoidable.

Impacts to hydrology and water quality

Similarly, oil seeps and surface expressions as a result of steam injection could impact hydrology and water quality (Impact WR.2). Mitigation includes development of a Supplemental Pollution Control Plan (Condition No. 21, MM Bio-3). A rupture or leak from the PCEC oil production facilities and/or pipelines could substantially degrade surface or groundwater quality (Impacts WR.3). Mitigation includes pipeline integrity and valve leak surveillance and testing consistent with an updated SPCC (Condition No. 40, MM Bio-3). These mitigation measures would reduce the frequency or severity of an oil spill reaching a drainage or waterway, but impacts would remain significant and unavoidable.

Restriction on drilling locations

In addition to the mitigation measures listed above, Condition No. 41 prohibits drilling oil wells through or underneath the Careaga tar zone, which would reduce the incidence of seeps relative to the proposed Project. Impacts associated with oil seep activity and impacts on Biological Resources and Water Resources would remain Class I, but incorporation of this condition would substantially lessen the Class I impacts. This condition implements the EIR-identified Careaga Exclusion Alternative, which is discussed further in Section 6.1.3.

A statement of overriding considerations is included with the project findings (Attachment A) pursuant to Pursuant to Public Resources Code Section 21081(b) and CEQA Guidelines Sections 15043, 15092 and 15093. The statement of overriding considerations generally concludes that the economic benefits of the proposed project outweigh the significant effects on the environment and that there is no feasible way to further lessen or avoid the significant effects.

6.1.2 Class II Impacts

The EIR concluded that the Project would result in potentially significant but mitigable (Class II) impacts to Air Quality, Biological Resources, Cultural Resources, Geological Resources, and Water Resources. Mitigation measures would reduce these impacts to less than significant levels. These Class II impacts and their respective mitigation measures are discussed in more detail in the Executive Summary, Table ES-2 (see Attachment C to this staff report).

Air Quality: Criteria Pollutant Emissions

The EIR identified one Class II impact to air quality. The EIR concludes that development and operation of the proposed project could result in significant emissions of odors (Impact AQ.3). Mitigation measures include a tank detection system (Condition No. 4, MM AQ-3a) and an odor minimization plan (Condition No. 5, MM AQ-3b). With implementation of these mitigation measures, impacts would be less than significant.

Air Quality: Greenhouse Gas Emissions

The EIR identified one Class II impact to air quality as a result of greenhouse gas (GHG) emissions (Impact GHG.1). These emissions would be mitigable through implementation of a greenhouse gas reporting and mitigation plan (Condition No. 6, MM GHG-1). This plan requires the annual quantification and reporting of GHG emissions under state law (AB 32). It also requires reductions in or offsets of GHG emissions in amounts that would achieve reduction below the County's 1,000 metric ton CO_2-equivalent ($MTCO_2e$) per year threshold.

The County is also considering an alternative mitigation option through payment of a fair share cumulative impact mitigation fee. It is possible a fee mitigation study could be prepared that would support the assessment of mitigation fees on GHG emissions to fund hydrogen fuel cells in Santa Barbara County, specifically hydrogen fueling stations and perhaps hydrogen fueled vehicles. Such a program would provide GHG mitigation locally and could be instrumental in jump-starting the use of hydrogen-fueled vehicles in the State of California. The pursuit of hydrogen-fueled vehicles is one of the State's key measures to reduce GHG by switching from fossil-fueled vehicles to zero-emission vehicles and the implementation of this fee mitigation program could provide a synergistic benefit in achieving that goal. The Air Pollution Control District is considering such a study which, if it goes forward, may be available later this year. Alternatively, the County could prepare such a study. With implementation of the emissions reductions and offset requirements identified in the EIR, or an appropriate fair share mitigation fee for a hydrogen infrastructure program, the project's GHG emissions would be less than significant.

Biological Resources

The EIR identified several Class II impacts to biological resources. Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline spills have the potential to result in the loss of individual California tiger salamander (federally listed as endangered and State listed as threatened), and other non-listed special-status species or species protected by the Migratory Bird Treaty Act (Impact BIO.2). Mitigation measures include: a biological resources training program (Condition

No. 13, MM Bio-2a); delineation of sensitive species and habitats prior to construction (Condition No. 14, MM Bio-2b); biological monitoring (Condition No. 15, MM Bio-2c); modification of pipeline routes (Condition No. 16, MM Bio-2d); rare plant salvage and transplant plan (Condition No. 17, MM Bio-2e); replacement of impacted plants (Condition No. 18, MM Bio-2f); preconstruction surveys (Condition No. 19, MM Bio-2g); and, nesting bird surveys (Condition No. 20, MM Bio-2f).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential pipeline leaks and ruptures have the potential to result in permanent loss of biological functions of sensitive habitats including central maritime chaparral, iris-leak rush seep, valley needlegrass grassland, southern Bishop pine forest, oak woodland, coastal scrub, arroyo willow thicket, habitats for rare plants and animals, and other sensitive biotic communities (Impact BIO.3). Mitigation measures include preparation of a Supplemental Pollution Control Plan (Condition No. 21, MM Bio-3).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline leak or rupture have the potential to affect federal wetlands (Impact BIO.4). Mitigation measures include restoration of Waters of the U.S. at a 3:1 replacement ratio (Condition No. 22, MM Bio-4a), implementation of a construction staging buffer (Condition No. 23, MM Bio-4b), and preparation of an Emergency Response Action Plan (Condition No. 24, MM Bio-4c).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential pipeline leaks and ruptures have the potential to result in reduced size and diversity of plant and animal populations at the Project Site (Impact BIO.6). Mitigation measures include pre-construction surveys, monitoring, wildlife relocation (Condition No. 25, MM Bio-6a), and minimization of nighttime traffic (Condition No. 26, MM Bio-6b).

Cultural Resources

The EIR identified several Class II impacts to cultural resources. Continued use of the access road to seep can location 88 has the potential to disrupt, alter, or destroy SBA-4069/H, a significant prehistoric and historic archaeological site (Impact CR.1). Implementation of a Phase 3 Data Recovery Plan (Condition No. 27, MM CR-1) to preserve this resource would reduce this impact to a less than significant level.

Removal of contaminated soils, creation and maintenance of new seep can locations and associated French drains, and new access roads could impact unknown subsurface cultural or ethnic resources (Impacts CR.1, and C2.2). This potentially significant effect would be mitigated to less than significant levels through implementation of supplemental archaeological surveys (Condition No. 28, MM CR-2) and a stop-work requirement (Condition No. 29, MM CR-2) if cultural resources are encountered.

Geological Resources

The EIR identified several Class II impacts to Geological resources. Seismic activity along regional active faults could produce seismic ground shaking or other seismically induced ground failure that would expose people and structures to greater than normal risk (Impact Geo.1). Implementation of seismic design (Condition No. 30, MM Geo-1a), equipment restraints (Condition No. 31, MM Geo-1b), a grading plan (Condition No. 32, MM Geo-1c), and post-earthquake inspections (Condition No. 33, MM Geo-1d) would reduce this impact to a less than significant level.

Potential grading required to access and control existing and/or future oil seeps could occur on slopes steeper than 20 percent, resulting in potential slope instability (Impact Geo.2). Implementation of geologic monitoring (Condition No. 34, MM Geo-2a) would reduce this impact to a less than significant level.

Water Resources

The EIR identified one Class II impact to water resources. Project grading, construction, and excavations for potential new oil seeps could degrade surface water quality (Impact WR.1). Through implementation of a Stormwater Pollution Prevention Plan (SWPPP) (Conditions 36 through 39, MM WR-1a through -1d) potential water quality impacts would be reduced to a less than significant level.

6.1.3 Alternatives

In addition to the No Project Alternative, the EIR evaluated a range of alternatives for the purpose of avoiding or substantially lessening significant environmental effects associated with the proposed Project. Several alternative project configurations were considered, and three were retained for further analysis. Other alternatives were not retained because they were found to be infeasible and/or would not lessen significant environmental impacts. The EIR alternatives retained for further analysis are described in detail in Section 5 of the EIR and are summarized below. Staff recommends the Careaga Exclusion Alternative for approval; it is implemented by Condition of Approval No. 41.

No Project Alternative

Under the No Project Alternative, the proposed additional wells would not be constructed or operated. The Orcutt Oil Field would continue to produce crude oil from the existing wells, both diatomite and non-diatomite. Crude oil production would stay the same or similar to current levels.

Impacts related to aesthetics, fire protection, land use and public services would stay the same as those under the proposed Project, as these issue areas are not impacted by the proposed Project. While there would be additional potential for releases of toxic materials associated with the proposed Project, none of these releases have the potential to impact areas offsite. Therefore, the No Project Alternative would have the same safety impacts as the proposed Project operations. New oil spill-related impacts to biological resources, hydrology and cultural resources would be eliminated under the No Project Alternative, as additional crude oil would not be transported

through the existing infrastructure and no increase in spill risk would occur. Construction-related impacts to air quality, biological resources, cultural resources, geological resources, water resources, and transportation would be eliminated under the No Project Alternative, as no construction would occur. None of PCEC's proposed Project objectives would be met with this alternative.

Seep Can Only Alternative

This alternative involves the permitting of existing and future seep cans only. No new wells would be drilled and the field would continue to be developed with the existing 96 diatomite wells. Impacts related to the construction and operation of additional wells would be avoided. Impacts related to aesthetics, air quality, energy, fire protection, land use, public services and transportation are also avoided as these issue areas are not impacted by the installation of seep cans. Oil seeps and the installation of the seep cans has the potential to impact biological resources, geological resources, and hydrology and water quality and would be significant and unavoidable (Class I), but less severe than the proposed Project. While this alternative would address future seeps, none of PCEC's proposed Project objectives would be met with this alternative.

Careaga Exclusion Alternative (Staff Recommended Alternative)

Under the Careaga Exclusion Alternative, the proposed additional 96 wells would be constructed and operated entirely outside of the Careaga tar zone. The 48 "replacement" wells would be allowed, but would be prevented from drilling in areas that lie above the Careaga tar zone or from drilling into the diatomite portion of the Sisquoc Formation below the Careaga tar zone.

Under this alternative, there would be an approximate 20 percent reduction in the amount of crude oil that could be obtained, because the estimated 20 percent of the wells proposed to be drilled to areas that lie beneath the Careaga tar zone would not be installed. The estimated 20 percent reduction in crude production would lead to reductions in the severity of crude oil pipeline spill impacts to biological and hydrological resources, due to the reduced spill sizes associated with lower volumes of crude oil being transported. However, potential oil spill impacts would remain Class I. Prohibiting drilling in the Careaga tar zone would most likely reduce future oil seep activity compared to the proposed project. There is some uncertainty associated with this conclusion as some oil seeps have historically been produced outside of the Careaga tar zones and the exact mechanisms for seep occurrence and extent of the Careaga tar zone are not entirely understood. Most likely some oil seep activity would continue, but at a reduced level compared to the proposed Project. Impacts associated with oil seep activity and impacts on biological and water resources would remain Class I, but this alternative would substantially lessen the Class I impacts.

California Tiger Salamander (CTS) Exclusion Alternative

The CTS Exclusion Alternative would group well locations on fewer pods and eliminate any pods that are located within 2,200 feet of CTS ponds. By combining the wells located within 2,200 feet of CTS ponds (Pods 10, 11, and 12) into Pod 9, no Pods would be located within 2,200 feet of CTS ponds. Pods 8, 13, 14, and 15 would remain as under the proposed project.

Impacts associated with the CTS Exclusion Alternative would be less severe than those associated with the proposed Project (related to CTS and oil spill impacts), but the allowed wells would most likely not be able to reach all of the target crude oil deposits and the Project would experience a 20-30 percent reduction in crude oil production, thereby only partially meeting the Project objectives. Potentially significant and unavoidable (Class I) impacts to biological resources and water resources related to oil spills would be less severe than those under the proposed Project if less crude oil is produced. These impacts would not be eliminated and would remain significant and unavoidable (Class I), but with less severity. Impacts to CTS would be less severe than the proposed Project as all construction and operational activity would occur outside of the 2,200 foot CTS dispersal buffer. This alternative would therefore substantially lessen the Class I impacts related to disturbance of CTS habitat. However, as project activities would remain within the potential range for CTS, impacts to CTS habitat would remain Class I. Oil seep activity would be similar to the proposed Project under the CTS Exclusion Alternative, as oil would be produced from within the Careaga tar zones. Impacts would remain Class I as the potential for seeps would still exist. There would be some reduction of Class II impacts to biological resources and hydrology due to the reduced pod area footprints.

Careaga and CTS Exclusion Alternative

Under the Careaga and CTS Exclusion Alternative, project wells would be constructed and operated entirely outside of the Careaga tar zone and surface activities would be limited to areas outside of the 2,200-foot CTS dispersal buffer. This would consolidate Pods 8, 10, 11 and 12 into Pod 9 while leaving Pods 13, 14 and 15 the same as the proposed Project. The limitation of wells to non-Careaga tar zone areas and non-CTS dispersal zone areas would achieve some of the objectives of the proposed Project, since well drilling could still take place, but would most likely produce 40 percent less crude oil.

As this alternative would involve the elimination of four pods, there would be a net reduction in the acreage required to be cleared for development. Fewer in-field pipelines would be installed than under the proposed Project as pipeline segments 2 and 3 would not be built, yet it would still be necessary for Pod 9 to connect to the existing pipelines at Pod 6. Impacts related to the Careaga and CTS Exclusion Alternative would be reduced over the proposed Project as well as the other alternatives, as this alternative would both reduce the potential for future oil seeps, which substantially lessens the severity of a Class I impacts associated with oil seeps, and reduce the potential for CTS impacts by keeping all surface activities out of the CTS dispersal zone, and thereby also substantially lessening the severity of the CTS-related Class I impact. However, as this alternative would reduce crude oil production by up to 40 percent, it has the potential to only partially achieve the objectives of the Project.

Environmentally Superior Alternative

The No Project Alternative and the Seep Can Only Alternative would be environmentally preferable to the proposed Project, but PCEC's Project objectives would not be realized. CEQA Guidelines Section 15126 (d)(2) state that if the environmentally superior alternative is the No Project Alternative, then the next most environmentally preferred alternative must be identified. Although the CTS Exclusion Alternative, the Careaga Exclusion Alternative, and the Careaga and CTS Exclusion Alternative would reduce the impacts from pipeline spills due to a reduction

in crude volume produced, only the Careaga Exclusion Alternative and the Careaga and CTS Exclusion Alternative would reduce the potential for oil seeps to occur in the future. As the potential for CTS impacts is limited, the reduction in severity to CTS habitat impacts from the CTS Exclusion Alternative is considered to be less advantageous than the reduction in oil seep potential associated with the Careaga Exclusion Alternative and the Careaga and CTS Exclusion Alternative. This is due to the high historical frequency of oil seeps, the substantial impact on plants and habitat associated with oil seep can installation, which has a very high probability of occurring under the proposed project, compared to the less likely potential of impacting CTS resources. As the Careaga and CTS Exclusion Alternative would lessen both the impacts to CTS as well as those from from oil seeps, it is the next most Environmentally Superior Alternative. However, the Careaga and CTS Exclusion Alternative has the potential to not achieve the project objectives due to a potential 40 percent reduction in crude oil production. Therefore, the Careaga Exclusion Alternative is the Environmentally Superior Alternative and this alternative would be environmentally superior to the proposed Project. It would also achieve most of PCEC's stated Project objectives.

6.2 Comprehensive Plan Consistency

The following policy consistency analysis evaluates the project as conditioned by staff to correlate to the recommended alternative.

REQUIREMENT	DISCUSSION
LAND USE ELEMENT	
Land Use Development Policy 4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development.	The recommended alternative does not require the installation of new permanent services, with the exception of increased purchase of natural gas and electricity from public utilities. As there would be limited additional workers onsite, no additional domestic water or sanitary services are required. The existing onsite water well and septic system are adequate to supply potable water and domestic waste disposal for the project. Condition No. 54 requires implementation of Fire Department requirements to specify vehicular access improvements and maintenance as well as the demonstration of adequate fire-fighting water facilities (see Departmental Conditions Letter dated November 20, 2014 included in Condition No. 54). The project is also consistent with Circulation Element Policy E (see discussion below) which constitutes consistency with the roadway and intersection capacity component of Land Use Policy 4. Based on the foregoing, the project is

	consistent with this policy.
Hillside and Watershed Policy 1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain. *Hillside and Watershed Policy 2.* All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space. *Hillside and Watershed Policy 4.* Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location. *Hillside and Watershed Policy 6.* Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater recharge.	**Consistent:** Earthwork associated with the project entails approximately 1,010 cubic yards of cut and 1,870 cubic yards of fill in order to develop the 7 well pods. The project has been designed to consolidate 96 wells on a minimal number of pods and to locate the well pods and ancillary facilities on previously disturbed areas within the site to minimize the amount of grading necessary. The grading associated with well pod preparation may result in the temporary exposure of soils and therefore increase the probability of erosion during storm events. Conditions No. 36-39 (MM WR-1a through 1d) require compliance with the provisions of a Storm Water Pollution Prevention and Control Plan (SWPPP). The SWPPP includes implementation of erosion control measures, including preservation of existing vegetation, earth dikes and drainage swales, velocity dissipation devices, slope drains, silt fences, fiber rolls, and gravel bag berms). Best Management Practices (BMPs) include stabilized construction entrance/exit, exit tire wash, wind erosion control, stockpile management, controlled areas for vehicle and equipment cleaning, fueling, and maintenance; specifications for concrete curing and finishing; proper hazardous materials storage and use; spill prevention and control; and control of solid waste, hazardous waste, sanitary/septic waste, and liquid waste. The SWPPP would include implementation of non-storm water management and materials/waste management activities, including monitoring discharges (dewatering, diversion devices), general site cleanup, spill control, and ensure that no materials other than stormwater (including sediment) are discharged in quantities that would have an adverse effect on receiving waters. Based on the foregoing, the project is

	consistent with these policies.
Hillside and Watershed Policy 3. For necessary grading on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season. *Hillside and Watershed Policy 5.* Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with accepted landscaping practices. *Hillside and Watershed Policy 7.* Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.	**Consistent:** During construction, excavation and other earthwork could result in an increase in soil erosion and sediment transport into surrounding surface waters due to runoff entering drainages located within the site. Some increased runoff over the long-term could occur due to the increase in impervious surfaces within the project site. Condition Nos. 36-39 require preparation of an updated SWPPP, implementation of erosion control measures, and implementation of construction Best Management Practices (BMPs). Condition No. 32 (MM Geo-1c), requires preparation of a grading plan, which would be required to conform to County standards for erosion control and slop stabilization. The Habitat Restoration Plan (Condition No. 7 MM Bio-1a) requires restoration of disturbed areas with native plants. Operational discharges, including oil spills, are addressed through implementation of the project Spill Prevention Control and Countermeasures (SPCC) Plan. The SPCC Plan is administered by DOGGR. The existing SPCC for current operations on the project site includes provisions for secondary containment structures, maintenance of spill response equipment and inspection for leaks, among others. As a requirement of Condition WR-3 (MM WR-3), this SPCC would be updated to require pipeline integrity and valve leak surveillance and testing. With implementation of these measures, the project is consistent with these policies.
Streams and Creeks Policy 1: All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased run-off, sedimentation, biochemical degradation or	**Consistent:** No construction or grading is proposed within stream corridors or floodways. However, there is a possibility that seeps may occur within a stream corridor. In the case that seep can activities are necessary within stream

thermal pollution. *Flood Hazard Area Policy 1:* All development, including construction, excavation, and grading, except for flood control projects and non-structural agricultural uses, shall be prohibited in the floodway unless off-setting improvements in accordance with federal regulations are provided. If the proposed development falls within the floodway fringe, development may be permitted, provided creek setback requirements are met and finished floor elevations are two feet above the projected 100-year flood elevation, and the other requirements regarding materials and utilities as specified in the Flood Plain Management Ordinance are in compliance.	corridors, Conditions No. 36-39 require preparation of an updated SWPPP, implementation of erosion control measures, and implementation of construction BMPs. Therefore, the project is consistent with these policies.
Flood Hazard Area Policy 3: All development shall be reviewed in accordance with the requirements of *County Code Chapter 15A-Floodplain Management* and *15B-Development Along Watercourses.*	**Consistent:** The project is designed in accordance with Flood Control District requirements. The Flood Control District reviewed the project and did not require additional permit conditions. Therefore, the project is consistent with this policy.
Parks/Recreation Policy 4: Opportunities for hiking and equestrian trails should be preserved, improved, and expanded whenever compatible with surrounding uses.	**Consistent:** There are no existing or proposed trails within the project boundaries or on the private property within which the proposed project is located. The project is located within an existing State-designated oilfield. There are no known opportunities for hiking and equestrian trails within the vicinity of the project and with which the project would interfere. Therefore, the project is consistent with this policy.
Visual Resource Policy 2: In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise.	**Consistent:** The height, scale and design of the proposed project would be compatible with the character of the surrounding environment, taking into account technical requirements such as drilling rig height. The majority of the site is not visible from any public roadway or

Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as to not to intrude into the skyline as seen from public viewing places.	viewing point. Due to the topography of the project site in relation to the scale of the structures (wells, drilling rigs, piping) and existing and surrounding oil field development, the proposed new structures would not obstruct or intrude upon any public viewing points or vistas. In addition, Condition No. 45 requires that permanent structures and equipment be painted a neutral color, and Condition No. 46 requires that night lighting be low intensity, low glare and directed downward. Therefore, the proposed project is consistent with this policy.
Historical and Archaeological Sites Policy 2: When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.	**Consistent:** Continued use of the access road to seep can location 88 has the potential to disrupt, alter, or destroy SBA-4069/H, a significant prehistoric and historic archaeological site. Condition No. 27 requires a Phase 3 Data Recovery Excavation to protect this resource from impacts. Condition No. 28 requires supplemental archaeological surveys of areas affected by new seeps, and Condition No. 29 requires that the applicant stop work immediately if cultural resources are encountered during project-related activities. Therefore the project is consistent with this condition.
Historical and Archaeological Sites Policy 5: Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.	**Consistent:** Native American groups and individuals in the County were notified of the preparation of the EIR and invited, via the EIR Notice of Preparation and Notice of Completion, to provide comments on the scope and content of the EIR. The Santa Ynez Band of Chumash Indians Elder's Council provided comments on the Draft EIR (see EIR Section 10.0, Response to Comments SYBCI-1 through SYBCI-4). These groups and individuals also were notified of the Planning Commission hearing on the project. A formal Native American consultation was not required or requested for the project. Therefore, the project is consistent with this policy.

AGRICULTURAL ELEMENT	
GOAL III: Where it is necessary for agricultural lands to be converted to other uses, this use shall not interfere with remaining agricultural operations. *Policy I.D.* The use of the Williamson Act (Agricultural Preserve Program) shall be strongly encouraged and supported. The County shall also explore and support other agricultural land protection programs. *Policy II.D.* Conversion of highly productive agricultural lands whether urban or rural, shall be discouraged. The County shall support programs which encourage the retention of highly productive agricultural lands.	**Consistent:** The proposed project facilities would be located in areas previously disturbed and used for oil development purposes and would not result in the conversion of any grazing area to a non-agricultural use. The proposed Project would result in activities similar to existing oilfield operations and would not conflict with ongoing agricultural activities in other areas of the approximately 4,000-acre Newlove parcel. Additionally, the project would not impact or remove land from active cultivation and would not convert highly productive agricultural lands to other uses. The existing cattle operations would continue unimpeded by the project, as would adjacent cattle grazing operations. The subject parcel is not under Williamson Act (Agricultural Preserve) contract. Therefore, the project is consistent with Goal III and Policies I.D and II.D.
SAFETY ELEMENT SUPPLEMENT	
Policy Hazardous Facility Safety 1-A - Risk Estimates: The County shall employ accurate estimates of risk associated with hazardous facilities to inform discretionary land-use decisions where substantial, preliminary evidence indicates involuntary public exposure to significant risk may result from the land-use decision. *Policy Hazardous Facility Safety 2-A-Unacceptable Risk Involving New Development:* Proposed new development that meets either of the following two criteria shall represent an unacceptably high level of risk and constitute a prima facie standard for denial of the proposed development. 1) All proposed development that registers mitigated risk in the red zone of the County's risk thresholds unless the proposed development is determined to be urban dependent as defined in this supplement, it avoids exposure of highly sensitive land uses	**Consistent:** A risk analysis was prepared for the proposed project and presented in Section 4.4 of the EIR. This analysis shows that the risks posed by the project register in the green zone of the County's risk thresholds. Thus, pursuant to the County's public safety thresholds, the project does not pose a significant risk to public safety. Therefore, the project is consistent with these policies.

to significant risk, and no other feasible location is available. 2) All new development that registers mitigated risk in the amber zone of the County's risk thresholds if exposure of a highly sensitive land use would occur as result of project approval.	
CIRCULATION ELEMENT POLICY	
Policy E: A determination of project consistency with the standards and policies of this Element shall constitute a determination of project consistency with the Land Use Element's Land Use Development Policy #4 with regard to roadway and intersection capacity.	**Consistent:** The County Fire Department has reviewed the proposed project, and with the completion of access road improvements, adequate emergency ingress and egress would exist to serve the project site. In addition, based on the results of the traffic analysis prepared for the project, the traffic generated as a result of the project would not significantly affect nearby intersections (see EIR Section 4.11). Therefore, the project is consistent with this policy.

6.3 Zoning: Land Use and Development Code Compliance

The proposed project is subject to the requirements of §35.52.050.B (*Oil and Gas Drilling and Production)* of the County's Land Use and Development Code (LUDC), discussed below.

§35.52.050.B. Development standards for oil and gas drilling and production.

1. Standards applicable to all drilling and production. The following standards shall apply to all projects:

a. Zone regulations not applicable. The regulations in Article 35.2 (Zones and Allowable Land Uses), for the applicable zones in which oil and gas drilling and production are allowed, shall not apply to the oil and gas drilling and production activities and uses.

b. Setbacks. In addition to the well spacing and setback requirements of County Code Chapter 35 (Oil and Petroleum Wells), Section 25-21 (Spacing), oil or gas drilling or related facilities shall not be allowed within 500 feet of an occupied residence within a residential or commercial zone.

Discussion (a,b) The project site is located on a parcel zoned AG-II-100, in a designated Rural area, more than 500 feet from the nearest residence. The project would be located within an existing oil field currently producing oil and gas.

c. Maximum site size. In order to minimize the area disturbed for drilling, the drill site shall not exceed one acre in size unless review authority finds that additional area is necessary.

d. Consolidation or collocation. Oil and gas production and related facilities shall be consolidated or collocated to the maximum extent feasible in order to minimize the area of disturbance.

e. Grading. Grading and alteration of natural drainage patterns shall be minimized to preserve the natural contour of the lands.

Discussion (c,d,e) None of the new wells pods would be greater than one acre in size. The project has been designed to consolidate 96 wells on a minimal number of pods and to locate the well pods and ancillary facilities on previously disturbed areas within the site to minimize the area of disturbance, the amount of grading, and the alteration of natural drainage patterns. No new processing facilities would be constructed.

f. Outdoor lighting. Lights shall be shielded to ensure that lighting is confined to the project site.

Discussion (f) Any night lighting would be shielded and directed downward so as to confine it to the project site (Condition No. 46).

g. Noise. Drilling or production operations that are within or adjacent to a lot zoned residential or commercial shall not exceed a maximum daytime noise level of 65 dB(A) and shall not be conducted between the hours of 9 p.m. and 7 a.m. of the next day, unless noise generating facilities are sufficiently insulated to reduce the outside night time level to 50 dB(A) at or beyond the project property boundary.

h. Noise sensitive locations. Production facilities shall be designed and housed to ensure the noise generated by the facilities as measured at any noise sensitive location shall be equal to or below the existing noise level of the that noise sensitive location. Measures to reduce adverse impacts (due to noise, vibration, etc.) to the maximum extent feasible shall be used for facilities located adjacent to noise sensitive locations as identified in the Noise Element of the Comprehensive Plan (e.g., use of electrical hydraulic surface pumping units).

Discussion (g, h): The project site is not adjacent to any residential or commercial zone districts. The nearest existing sensitive receptors are residences in Orcutt, approximately 1.4 miles north of the Project area. The project EIR identified no impacts related to noise.

i. Truck operation hours and routes. It shall be prohibited to operate trucks exceeding one and a half tons for use in oil and gas operations between the hours of 9 p.m. and 7 a.m. upon streets within a residential neighborhood. This prohibition shall not apply in an emergency as determined by the County Sheriff, Fire Department, or Petroleum Administrator. This regulation shall go into effect and apply to streets and parts of streets only after signs giving notice of the prohibition are posted at entrances to the affected streets or parts of streets. Truck routes shall be reviewed for proposed oil and gas facilities to ensure that oil field support traffic is not routed through residential neighborhoods, unless alternative routes do not exist.

Discussion (i): Condition No. 47 prohibits operation of trucks exceeding one and a half tons for use in oil and gas operations between the hours of 9 p.m. and 7 a.m. upon East Rice Ranch Road, which is within a residential neighborhood.

j. Screening from designated scenic highway. Production equipment and facilities shall

be recessed, covered, or otherwise screened from view from a designated Scenic Highway that is indicated on the Scenic Highway Element Map (GP-23).

Discussion (j): Screening and fencing of the proposed facilities are not required as the site is in a remote location and is not visible from designated Scenic Highways.

k. Odors. Noxious odors associated with the project shall not be detectible at the project property boundary.

Discussion (k): Condition No. 4 requires that the applicant develop an odor minimization plan to ensure that odors associated with the project would not be detectible at the project property boundary.

l. Abandonment. In addition to the requirements for abandonment and removal of equipment in County Code Chapter 25 (Oil and Petroleum Wells) Sections 25-32 (Abandonment procedure) and 25-33 (Removal of equipment), the site upon well abandonment shall be recontoured, reseeded, and landscaped to approximate original conditions or other conditions recommended by the applicant or property owner and approved by review authority. The Department shall determine compliance with this provision.

Discussion (l): This requirement is included in Condition No. 1. The site upon well abandonment shall be recontoured, reseeded, and landscaped to approximate original conditions or other conditions recommended by the applicant or property owner and approved by review authority.

2. Additional standards applicable to production operations. In addition, the following development standards may be applied to production operations to the extent deemed necessary by the review authority:

a. Screening and landscaping. Following drilling and testing of the reservoir, production equipment and facilities shall be recessed, covered, or otherwise screened from view. Trees or shrubbery shall be planted and maintained to develop attractive landscaping and to screen the site and production equipment, structures, tanks, and facilities on the site from public view, unless the equipment, structures, tanks, and facilities are screened from public view by reason of an isolated location, existing trees or shrubbery, intervening surface contours, or a wall constructed as required in this Subsection.

b. Prevention of access. The site shall be enclosed with an adequate noncombustible type fence, wall, screen, or housing sufficient to prevent unauthorized access to the site and having a height of at least six feet, unless public access is prevented by reason of an isolated location.

c. Monitoring system. A monitoring system to measure off-site impacts, including noise, vibration, odor, and air or water quality degradation, may be required as a condition of approval.

d. Exterior color. Permanent structures and equipment shall be painted a neutral color in order to ensure they blend in with natural surroundings.

Discussion (a-d): Screening and fencing of the proposed facilities are not required as the site is in a remote location and is not generally visible from public viewing places due to

topography and extensive native vegetation. The existing oil field is fenced and gated and is not open to the public. Condition No. 4 requires that the applicant develop an odor minimization plan to ensure that odors associated with the project would not be detectible at the project property boundary. Condition No. 45 requires that permanent structures and equipment be painted a neutral color.

As discussed above and with implementation of the conditions of approval, the construction and operation of the proposed project would comply with the applicable requirements of the County's LUDC.

6.4 Subdivision/Development Review Committee

The proposed Project was reviewed by the Subdivision/Development Review Committee (SDRC) on March 7, 2013. The Fire Department issued a condition letter on November 20, 2014. The APCD provided a condition letter dated April 15, 2016. The Fire Department and APCD condition letters are included as conditions of approval (Condition No. 53). Building and Safety noted that a grading permit, electrical permit, and building and petroleum permits would be required for construction of tanks and vessels. Environmental Health Services, Project Clean Water, Flood Control, Surveyor, Agricultural Planning, Public Works/Roads, and Parks Department had no conditions for the project.

7.0 APPEALS PROCEDURE

The action of the Planning Commission may be appealed to the Board of Supervisors within 10 calendar days of said action. The appeal fee to the Board of Supervisors is $648.26.

ATTACHMENTS

A. Findings
B. Conditions of Approval, 13PPP-00000-00001
C. EIR Summary Table
D. APN Sheet
E. Site Location Map
F. Applicant Proposed Project Well Pod Map
G. Seeps Map
H. Careaga Tar Zone Map (staff-recommended alternative)
I. Project EIR (14EIR-00000-00001) - http://www.sbcountyplanning.org/energy/projects/PCEC.asp

ATTACHMENT A: FINDINGS

1.0 CEQA FINDINGS

1.1 ENVIRONMENTAL IMPACT REPORTS

FINDINGS PURSUANT TO PUBLIC RESOURCES CODE SECTION 21081 AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES SECTIONS 15090 AND 15091:

1.1.1 CONSIDERATION OF THE ENVIRONMENTAL IMPACT REPORT

The Final Environmental Impact Report (14EIR-00000-00001) was presented to the Planning Commission and all voting members of the Planning Commission have reviewed and considered the information contained in the Final EIR (14EIR-00000-00001) and its appendices prior to approving the project. In addition, all voting members of the Planning Commission have reviewed and considered testimony and additional information presented at or prior to public hearing on May 11, 2016. The Final EIR reflects the independent judgment and analysis of the Planning Commission and is adequate for this proposal.

1.1.2 FULL DISCLOSURE

The Planning Commission finds and certifies that the Final EIR (14EIR-00000-00001) constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Planning Commission further finds and certifies that the Final EIR has been completed in compliance with CEQA.

1.1.3 LOCATION OF RECORD OF PROCEEDINGS

The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of the Planning and Development Department located at 123 East Anapamu Street, Santa Barbara, CA 93101.

1.1.4 FINDINGS THAT CERTAIN UNAVOIDABLE IMPACTS ARE MITIGATED TO THE MAXIMUM EXTENT FEASIBLE

The Final EIR (14EIR-00000-00001) for the Orcutt Hill Resource Enhancement Plan project identifies significant environmental impacts which cannot be fully mitigated and are therefore considered unavoidable (Class I). The EIR identified Class I impacts related to oil spills and seeps in two issue areas: biological resources and water resources (hydrology and water quality). To the extent the impacts remain significant and unavoidable, such impacts are acceptable when weighed against the overriding social, economic, legal, technical, and other considerations set forth in the Statement of Overriding Considerations included herein. For each of these Class I impacts identified by the Final EIR, feasible changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect, as discussed below:

Impacts to sensitive species' habitats

The EIR concluded that seeps, surface expressions, the installation and maintenance of

existing and new oil seep cans, and potential future pipeline spills have the potential for degradation or loss of habitat for sensitive species including CTS, sensitive plants including the federally listed Lompoc yerba santa, and other sensitive plant and wildlife species (Impact BIO.1). Sensitive species' habitats have been and would continue to be affected by oil seep management, including oil seep cleanup and seep can installations. Future potential oil seeps and/or oils spills could occur at the project site in any habitat type, and necessary response activities could continue to impact sensitive habitats. Proposed mitigation measures include the implementation of a Habitat Restoration Plan with restoration of CTS habitat at a 3:1 ratio (Condition No. 7, MM Bio-1a); pre-construction surveys for sensitive species habitats to evaluate impacts prior to seep can installation (Condition No. 8, MM Bio-1b); restoration of sensitive species habitat including habitat for Lompoc yerba santa, La Purisima manzanita, mesa horkelia, and black-flowered figwort (Condition No. 9, MM Bio-1c); on-site independent environmental monitoring (Condition No. 10, MM Bio 1d); adaptive management to ensure successful restoration (Condition No. 11, MM Bio-1e); and, annual reporting of monitoring results (Condition No. 12, MM Bio-1f). In addition, implementation of the Careaga Exclusion Alternative (Condition No. 41) limits drilling to areas outside the Careaga tar zone. The Careaga tar zone contains a heavy oil that can and has risen to the surface in the form of seeps. The Final EIR, Sections 4.3 and 4.8, details the number and severity of seeps and the resultant environmental impacts. The applicant has used chemical testing to determine that this zone is the source of the oil seeps. Prohibiting drilling in the Careaga tar zone would therefore likely reduce future oil seep activity. There is some uncertainty associated with this conclusion as some oil seeps have historically been produced outside of the Careaga tar zones and the exact mechanisms and extent of the Careaga tar zone are not entirely understood. It is likely that some oil seep activity would continue under the Careaga Exclusion Alternative, but at a reduced level when compared to the proposed project. Class I impacts associated with oil seep activity and impacts on biological resources and water resources would remain Class I, but this alternative would substantially lessen the Class I impacts. Implementation of these measures would reduce, but not fully eliminate, the potential for seeps or an oil spill to significantly impact sensitive species' habitats. These impacts would remain significant and unavoidable.

Impacts to individual Lompoc yerba santa

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline spills have resulted and would potentially continue to result in the loss of individual Lompoc yerba santa plants, a significant impact (Impact Bio.2). Proposed mitigation measures include the following: a biological resources training program to minimize impacts during construction (Condition No. 13, MM Bio-2a); delineation of sensitive species prior to construction to facilitate avoidance (Condition No. 14, MM Bio-2b); biological monitoring during construction (Condition No. 15, MM Bio-2c); modification of pipeline routes to avoid Lompoc yerba santa (Condition No. 16, MM Bio-2d); preparation of a rare plant salvage and transplant plan (Condition No. 17, MM Bio-2e); replacement of impacted Lompoc yerba Santa at a 10:1 ratio for past impacts and a 3:1 ratio for future impacts (Condition No. 18, MM Bio-2f); and, preconstruction surveys

of the entire project site to better determine future impacts (Condition No. 19, MM Bio-2g). As described previously, implementation of the Careaga Exclusion Alternative prohibiting drilling in the Careaga tar zone (Condition No. 41) would likely reduce future oil seep activity and resultant impacts to Lompoc yerba santa. Implementation of these mitigation measures would reduce, but not fully eliminate, the potential for significant impacts to Lompoc yerba santa individuals. These impacts would remain significant and unavoidable.

Impacts to hydrology and water quality

Similarly, oil seeps and surface expressions as a result of steam injection could impact hydrology and water quality (Impact WR.2). If oil were to reach sensitive resources including a drainage or waterway it would substantially degrade surface water quality. Mitigation includes development of a Supplemental Pollution Control Plan to establish procedures for the discovery, assessment, response, monitoring, control, reporting and mitigation of seeps (Condition No. 21, MM Bio-3). A rupture or leak from the PCEC oil production facilities and/or pipelines would substantially degrade surface or groundwater quality by flowing to a drainage or waterway (Impact WR.3). Mitigation includes pipeline integrity and valve leak surveillance and testing consistent with an updated SPCC (Condition No. 40, MM Bio-3). Implementation of the Careaga Exclusion Alternative prohibiting drilling in the Careaga tar zone (Condition No. 41) would likely reduce future oil seep activity, as described previously. These mitigation measures would reduce the frequency or severity of an oil spill reaching a drainage or waterway, but impacts would remain significant and unavoidable.

With implementation of the Careaga Exclusion Alternative through Condition No. 41 and the mitigation measures described in the Final EIR, the Planning Commission finds that the unavoidable impacts to biological resources and water resources would be mitigated to the maximum extent feasible.

1.1.5 FINDINGS THAT CERTAIN IMPACTS ARE MITIGATED TO INSIGNIFICANCE BY CONDITIONS OF APPROVAL

The Final EIR (14EIR-00000-00001) identified several subject areas for which the project is considered to cause or contribute to potentially significant, but mitigable environmental impacts (Class II). For each of these Class II impacts identified by the Final EIR (14EIR-00000-00001), feasible changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect, as discussed below:

Air Quality: Criteria Pollutant Emissions

The Final EIR concludes that development and operation of the proposed project could result in significant emissions of odors related to drilling or processing of oil and gas with high levels of hydrogen sulfide (Impact AQ.3). Mitigation measures include a tank detection system to notify operators of a potential odor event (Condition No. 4, MM AQ-3a) and an odor minimization plan to identify and minimize potential sources of odors from all oil field equipment (Condition No. 5, MM AQ-3b). With implementation of these mitigation measures, impacts would be less than significant.

Air Quality: Greenhouse Gas Emissions

The Final EIR concludes that the proposed project would result in significant greenhouse gas (GHG) emissions (Impact GHG.1), with peak emissions of 44,675 $MTCO_2e$. These emissions would be mitigable through implementation of a greenhouse gas reporting and mitigation plan (Condition No. 6, MM GHG-1). This plan requires the annual quantification and reporting of GHG emissions under state law (AB 32). It also requires either reductions in or offsets to GHG emissions in amounts that would achieve reduction below the County's 1,000 metric ton CO2-equivalent (MTCO2e) threshold or payment of a fair share mitigation fee to support a hydrogen infrastructure program for the County. With implementation of the emissions mitigation measures, the project's GHG emissions will be less than significant.

Biological Resources

The Final EIR identified several Class II impacts to biological resources.

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline spills have the potential to result in the loss of individual California tiger salamander (federally listed as endangered and State listed as threatened), and other non-listed special-status species or species protected by the Migratory Bird Treaty Act (Impact BIO.2). Proposed mitigation measures include the following: a biological resources training program to minimize impacts during construction (Condition No. 13, MM Bio-2a); delineation of sensitive species and habitats prior to construction to facilitate avoidance (Condition No. 14, MM Bio-2b); biological monitoring during construction (Condition No. 15, MM Bio-2c); modification of pipeline routes to avoid sensitive plants (Condition No. 16, MM Bio-2d); preparation of a rare plant salvage and transplant plan (Condition No. 17, MM Bio-2e); replacement of impacted individual sensitive plants at a specified ratios (Condition No. 18, MM Bio-2f); preconstruction surveys of the entire project site to better determine future impacts (Condition No. 19, MM Bio-2g); and pre-construction nesting bird surveys to minimize impacts to nesting birds (Condition No. 20, MM Bio-2h).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential pipeline leaks and ruptures have the potential to result in permanent loss of biological functions of sensitive habitats including central maritime chaparral, iris-leak rush seep, valley needlegrass grassland, southern Bishop pine forest, oak woodland, coastal scrub, arroyo willow thicket, habitats for rare plants and animals, and other sensitive biotic communities (Impact BIO.3). Mitigation includes development of a Supplemental Pollution Control Plan to establish procedures for the discovery, assessment, response, monitoring, control, reporting, and mitigation of seeps (Condition No. 21, MM Bio-3).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline leak or rupture have the potential to affect federal wetlands (Impact BIO.4). Mitigation

measures include: restoration of waters of the U.S. at a 3:1 replacement ratio. (Condition No. 22, MM Bio-4a); implementation of a construction staging buffer to minimize potential for releases into surface water or wetland habitat (Condition No. 23, MM Bio-4b); and, preparation of an Emergency Response Action Plan that addresses protection of sensitive biological resources and revegetation of any areas disturbed during an oil spill or cleanup activities (Condition No. 24, MM Bio-4c).

Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential pipeline leaks and ruptures have the potential to result in reduced size and diversity of plant and animal populations at the Project Site (Impact BIO.6). Mitigation measures include pre-construction surveys to facilitate avoidance, wildlife monitoring during construction, and wildlife relocation to safe areas (Condition No. 25, MM Bio-6a); and, minimization of nighttime traffic to minimize the potential for road mortality of wildlife (Condition No. 26, MM Bio-6b).

Implementation of these mitigation measures would reduce impacts to a less than significant level.

Cultural Resources

The Final EIR identified several Class II impacts to cultural resources. Continued use of the access road to seep can location 88 has the potential to disrupt, alter, or destroy SBA-4069/H, a significant prehistoric and historic archaeological site (Impact CR.1). Implementation of a Phase 3 Data Recovery Plan (Condition No. 27, MM CR-1) to preserve this resource would reduce this impact to a less than significant level.

Removal of contaminated soils, creation and maintenance of new seep can locations and associated French drains, and new access roads could impact unknown subsurface cultural or ethnic resources (Impacts CR.1, and C2.2). This potentially significant impact will be mitigated to a less than significant level through implementation of supplemental archaeological surveys of areas affected by new seeps to determine the presence of cultural resources (Condition No. 28, MM CR-2) and a stop-work requirement (Condition No. 29, MM CR-2) if cultural resources are encountered.

Geological Resources

The Final EIR identified several Class II impacts to Geological resources. Seismic activity along regional active faults could produce seismic ground shaking or other seismically induced ground failure that would expose people and structures to greater than normal risk (Impact Geo.1). Implementation of seismic design based on the anticipated ground acceleration in the project area (Condition No. 30, MM Geo-1a); installation of appropriate foundations, anchoring, and equipment restraints (Condition No. 31, MM Geo-1b); preparation of a grading plan conforming to County Grading and Building Codes (Condition No. 32, MM Geo-1c); and post-earthquake inspections of facilities, equipment, and pipelines (Condition No. 33, MM Geo-1d) would reduce this impact to a less than significant level.

Potential grading required to access and control existing and/or future oil seeps could occur on slopes steeper than 20 percent, resulting in potential slope instability (Impact Geo.2). Implementation of geologic monitoring for seeps on slopes exceeding 20 percent (Condition No. 34, MM Geo-2a) would reduce this impact to a less than significant level.

Water Resources

The EIR identified one Class II impact to water resources. Project grading, construction, and excavations for potential new oil seeps could cause increased sedimentation of adjacent creeks or cause a construction-related release of contaminants that would degrade surface water quality (Impact WR.1). Mitigation would include Conditions No. 36-39 (MM WR-1a through 1d), which require compliance with the provisions of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP includes implementation of erosion control measures, including preservation of existing vegetation, earth dikes and drainage swales, velocity dissipation devices, slope drains, silt fences, fiber rolls, and gravel bag berms. Best Management Practices include stabilized construction entrance/exit, exit tire wash, wind erosion control, stockpile management, controlled areas for vehicle and equipment cleaning, fueling, and maintenance; specifications for concrete curing and finishing; proper hazardous materials storage and use; spill prevention and control; and control of solid waste, hazardous waste, sanitary/septic waste, and liquid waste. The SWPPP would include implementation of non-storm water management and materials/waste management activities, including monitoring discharges (dewatering, diversion devices), general site cleanup, spill control, and ensure that no materials other than stormwater (including sediment) are discharged in quantities that would have an adverse effect on receiving waters. These measures would reduce this impact to a less than significant level.

1.1.6 FINDINGS THAT IDENTIFIED PROJECT ALTERNATIVES OR MITIGATION MEASURES ARE NOT FEASIBLE

The Final EIR (14EIR-00000-00001) prepared for the project evaluated a No Project Alternative, a Seep Can Only Alternative, a CTS Exclusion Alternative, a Careaga Exclusion Alternative, and a CTS and Careaga Exclusion Alternative as methods of reducing or eliminating potentially significant environmental impacts. The Careaga Exclusion Alternative was determined to be feasible. The Planning Commission finds that the following alternatives are infeasible for the reasons stated:

No Project Alternative

Under the No Project Alternative, the proposed additional wells would not be constructed or operated. The Orcutt Oil Field would continue to produce crude oil from the existing wells, both diatomite and non-diatomite. Crude oil production would stay the same or similar current levels. This alternative would not achieve any of PCEC's project objectives and would not comprehensively address seeps.

Seep Can Only Alternative

The Seep Can Only Alternative involves the permitting of existing and future seep cans

only. No new wells would be drilled and the field would continue to be developed with the existing 96 wells. Because none of PCEC's proposed Project objectives would be met with this alternative, the Planning Commission therefore finds this alternative is infeasible and declines to adopt it.

CTS Exclusion Alternative

The CTS Exclusion Alternative would group well locations on fewer pods and eliminate any pods that are located within 2,200 feet of CTS ponds (either known or undetermined). The new proposed Project well locations are essentially grouped into two areas: Pods 8, 9, 10, 11 and 12; and Pods 13, 14 and 15. By combining the wells located within 2,200 feet of CTS ponds (Pods 10, 11 and 12) into Pod 9, no pods would be located within 2,200 feet of CTS ponds. Pods 8, 13, 14 and 15 would remain as under the proposed Project. Under this alternative PCEC would most likely not be able to reach the entire targeted crude oil reservoir and may experience up to a 20-30 percent reduction in crude oil production, thereby only partially meeting the project objective of exploring, developing, and optimizing the reserves of the State-designated Orcutt Oil Field. This alternative would still allow drilling in the Careaga tar zone and would therefore not reduce the potential occurrence of seeps and seep-related impacts relative to the proposed project. The Planning Commission finds that this alternative should not be adopted as it would not substantially lessen significant impacts and would only partially meet the project objectives and therefore declines to adopt it.

Careaga and CTS Exclusion Alternative

Under the Careaga and CTS Exclusion Alternative, project wells would be constructed and operated entirely outside of the Careaga tar zone and surface activities would be limited to areas outside of the 2,200 foot CTS dispersal buffer from ponds located east of the project area. This would consolidate Pods 8, 10, 11, and 12 into Pod 9 while leaving Pods 13, 14 and 15 the same as the proposed Project. The limitation of wells to non-Careaga tar zone areas and non-CTS dispersal zone areas would achieve some of the objectives of the proposed Project, since well drilling could still take place, but would most likely produce 40 percent less crude oil. Additionally, areas to the east and south would not be able to be reached from the newly consolidated Pod 9. As this alternative may reduce crude oil production by up to 40 percent, it has the potential to only partially achieve the project objective of exploring, developing, and optimizing the reserves of the State-designated Orcutt Oil Field. The Planning Commission therefore finds this alternative is infeasible and declines to adopt it.

1.1.7 STATEMENT OF OVERRIDING CONSIDERATIONS

The Final EIR (14EIR-00000-00001) for the Orcutt Hill Resource Enhancement Plan project identifies significant and unavoidable impacts to biological resources and water resources due to potential oils seeps and oil spills/leaks. Several mitigation measures have been adopted as conditions of approval to reduce these impacts, but the impacts cannot be reduced to less than significant levels. The Planning Commission therefore makes the following Statement of Overriding Considerations which warrants approval of the project notwithstanding that all identified effects on the environment are not fully mitigated. With respect to each of the environmental effects of the project listed

below, the Planning Commission finds that the stated overriding benefits of the project outweigh the significant effects on the environment and that there is no feasible way to lessen or avoid the significant effects. Pursuant to Public Resources Code Section 21081(b) and CEQA Guidelines Sections 15043, 15092 and 15093, any remaining significant effects on the environment are acceptable due to these overriding considerations:

Economic Benefit – Domestic Oil & Gas Production:
The proposed project will contribute to domestic oil and gas production to help meet demand for fossil fuels as the State continues to develop and refine strategies to reduce its carbon footprint through use of clean-energy alternatives, energy conservation, and efficient use of existing energy supplies.

Economic Benefit – Addition of Temporary Construction and Drilling Jobs:
The project would provide temporary work to approximately 35 to 75 contractors during construction of the project and drilling of the wells as follows: 5 to 15 people for grading, 20 to 40 jobs for installation of pipelines and equipment, and 10 to 20 jobs for drilling of wells. Additional contract employees that provide oil-field support services will be used periodically throughout the life of the project

Economic Benefit – Addition of Direct Permanent Jobs:
The oil and gas extraction industry is more capital intensive, rather than labor intensive. Nonetheless, the permanent jobs created by the local oil and gas extraction industry are among the higher paid when compared to other employment sectors in Santa Barbara County with average annual wages above $90,000, according to Professor Peter Rupert.[1] The total number of PCEC employees for existing and new operations on Orcutt Hill is approximately 50 to 55, with the balance of the positions filled by contractors. The ongoing operations also involve work with numerous local firms, including over 200 contractors and vendors. Overall, PCEC Orcutt Hill operations provide approximately 20 to 23 12-hour work shifts per day, 7 days each week. This includes day shifts with 16 to 18 field workers and night shifts with 4 to 5 field workers. In addition, the PCEC operations provide approximately 18 to 20 8-hour work shifts per day, 5 days per week for operations support field workers. Existing and new operations also provide 16 to 18 8-hour office jobs per day, 5 days per week.

Economic Benefit – Indirect and Induced Job Creation:
The oil and gas extraction industry creates both backward and forward linkages in the economy; for example, the proposed project will require assistance periodically from the oil-field service industry, office supplies, and so forth. These linkages create additional jobs, called indirect job creation. Additionally, every direct and indirect job created or partially created stimulates individual employee expenditures into the economy. These expenditures lead to induced job growth. A recent study estimates the beneficial impact of the local onshore oil and gas industry on employment as follows:

[1] Rupert, Peter, University of California at Santa Barbara. "UCSB Santa Barbara County Onshore Oil and Gas Economic Study." Presentation delivered at the Economic Alliance of Northern Santa Barbara County, California Energy Action Summit, April 12, 2013.

715.2 direct jobs, 280.5 indirect jobs, and 632.6 induced jobs, for a total beneficial effect of 1,628.3 jobs, including direct employment.[2]

Economic Benefit – Increase Property Tax to County:
An estimate of the annual property tax revenue generated by this project cannot be reliably developed at this time. Rather, the County Assessor assesses the value of oil and gas reserves and improvements each year. The assessed value of petroleum interest (i.e., taxable reserves) may be increased over the previous year's value based on addition of reserves by discovery, construction of improvements, or changes in economic conditions (mainly price of oil and gas). Alternatively, the Assessor may decrease the assessed value of petroleum interest over the previous year's assessment, based on depletion of reserves and changes in economic conditions (e.g., decrease in price of oil and gas). The property tax rate is 1 percent of the annually assessed value.

PCEC estimates that its oil production would peak at 3,600 barrels per day; however, the project's production curve that typically depicts a sharp increase in daily production to peak production and a subsequent, more gradual, decrease to depletion over time is unavailable. All property tax revenue generated by the project would be allocated as follows: County General Fund = 20.1%; Fire Protection District = 12%; Flood Control/Water Conservation District = 0.27%; Los Alamos Flood Zone Number 1 = 0.78%; Water Agency = 0.35%; Santa Maria Public Airport District = 1.14%; Santa Maria Cemetery District = 0.59%; Mosquito & Vector Management District = 0.02%; Cachuma Resource Conservation District = 0.05%; Orcutt Union School District – General = 24.09%; SMJH District – General = 19.95%; Allan Hancock Community College District – General = 5.31%; County School Service = 3.66%; and Education Revenue Augmentation = 11.68%.

1.1.8 ENVIRONMENTAL REPORTING AND MONITORING PROGRAM

Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091(d) require the County to adopt a reporting or monitoring program for the changes to the project that it has adopted or made a condition of approval in order to avoid or substantially lessen significant effects on the environment. The approved project description and conditions of approval, with their corresponding permit monitoring requirements, are hereby adopted as the reporting and monitoring program for this project. The monitoring program is designed to ensure compliance during project implementation. These conditions also require that an Environmental Quality Assurance Program (EQAP) be prepared to ensure compliance during project implementation with those measures included in the project description and with those conditions imposed on the project to mitigate or avoid significant effects on the environment.

2.0 ADMINISTRATIVE FINDINGS

2.1.1 PRODUCTION PLAN FINDINGS

[2] *Ibid.*

Findings required for Production Plans for onshore oil drilling and production in the Inland area. In compliance with Section 35.55.030 of the County Land Use and Development Code, prior to the approval or conditional approval or conditional approval of an application for a Production Plan for oil drilling and production in the Inland area the review authority shall first make all of the following findings:

1. ***There are no feasible alternative locations for the proposed drilling of an onshore reservoir that are less environmentally damaging.***

   The proposed project, as modified by the conditions of approval (specifically Condition No. 41), corresponds with the "Careaga Exclusion Alternative" in the Final EIR, which was identified as the Environmentally Superior Alternative because it would reduce the potential for seeps compared to the proposed project while still meeting the project objectives. PCEC has designed the project to incorporate existing infrastructure within the project site, such as access roads, and processing and storage facilities to the extent feasible. The project has been designed to consolidate 96 wells on a minimal number of pods and to locate the well pods and ancillary facilities on previously disturbed areas within the site to minimize the amount of grading and disturbance of habitat. The project is located within an existing State-designated oil field and near other, similar existing oil and gas production facilities. The discussion and conclusions presented under CEQA Finding 1.1.6 above are incorporated herein by reference. Thus, the Planning Commission finds that there are no feasible alternative locations for the proposed oil drilling and development project that are less environmentally damaging than the project as approved herein.

   Allowing further production below the Careaga tar zone is denied because the evidence has shown steam injection of this very shallow field has consistently resulted in surface oil seeps that have caused significant damage to sensitive environmental habitats. Installation of the existing seep cans began in 2008; as of April 2016, 99 seep cans have been installed at the Project Site. To date, the existing 99 seep can installations have resulted in the direct removal of 6.09 acres of sensitive habitat and approximately 360 Lompoc yerba santa individuals (*Eriodictyon capitatum*), a federally listed Endangered plant species. The seeps have been mitigated to the maximum extent feasible; however, these impacts have resulted in causing a nuisance condition that should not be allowed to expand or intensify. Expansion of development below the Careaga tar zone should not be allowed until the owner can produce the oil without such unacceptable land use impacts to sensitive habitats.

2. ***Significant adverse environmental effects will be mitigated to the maximum extent feasible.***

   Section 6.1.1 of the April 20, 2016 staff report to the Planning Commission, incorporated herein by reference, discusses the significant impacts that would result from implementation of the proposed project and specific mitigation measures which have been adopted as conditions of approval to mitigate each of these

impacts. Impacts that cannot be mitigated to less than significant levels are related to the consequences of oil spills/leaks and/or seeps that could affect water quality and sensitive plants and animals. Conditions of approval have been adopted to mitigate these impacts to the extent feasible as described in CEQA Finding 1.1.4 above. Based on the analyses in the Final EIR, the discussion presented in Section 6.1.1 of the April 20, 2016 staff report, CEQA Finding 1.1.4 above, and as discussed at the May 11, 2016 public hearing and incorporated herein by reference, the Planning Commission finds that, with implementation of the adopted conditions of approval, significant adverse impacts associated with the proposed project will be mitigated to the maximum extent feasible.

3. ***The project will not be detrimental to health, safety, and general welfare of the neighborhood and will not be incompatible with uses of the surrounding area.***

   Potential public health and safety risks associated with the PCEC project are discussed in Sections 4.1 and 4.4 of the project EIR, incorporated herein by reference, and include health risks associated with combustion equipment such as steam generators and diesel-fired engines; mobilization of contaminated soils during construction; and introduction of new ignition sources during construction and operation that could start a structure or brush fire. The project Health Risk Assessment concluded that the project's health risks would be below the cancer and acute and chronic health risk thresholds. The proposed project is located within a designated rural area in a State-designated oil field with existing oil production and and agricultural uses. The project site is not generally visible from public viewing places, and is not adjacent to residential or commercial land uses. Based on the analyses in the Final EIR and as discussed in Section 6.2 of the April 20, 2016 staff report and incorporated herein by reference, the Planning Commission finds that the proposed project will not be detrimental to the health, safety, and general welfare of the neighborhood and will not be incompatible with uses of the surrounding area.

4. ***The development is in conformance with the applicable provisions of this Development Code and the Comprehensive Plan.***

   The proposed project is in conformance with the County Land Use and Development Code (LUDC) and Comprehensive Plan as discussed in Sections 6.2 and 6.3 of the staff report dated April 20, 2016 and incorporated herein by reference. The Planning Commission finds that the project is in conformance with the applicable provisions of the County LUDC and the Comprehensive Plan.

5. ***The site is able to accommodate subsequent oil and gas production, should the proposed drilling program be successful.***

   Since 2005, PCEC has been producing oil from 96 production wells in the Orcutt field using the cyclic steaming process. This has provided PCEC with the understanding necessary to design a long-term production plan, which includes the proposed project. Thus, proposed project constitutes the subsequent oil and gas production determined to be feasible based on the results of its initial 96-well

project approved under 05PPP-00000-00001. Based on the project design, and the environmental analyses in the Final EIR, the Planning Commission finds that the site is able to accommodate the project.

6. ***For projects requiring a Conditional Use Permit, the findings identified in Section 35.82.060 (Conditional Use Permits and Minor Conditional Use Permits) shall also apply.***

   The project does not require the approval of a Conditional Use Permit. Therefore, this finding is not required.

ATTACHMENT B: CONDITIONS OF APPROVAL

1. **Proj Des-01 Project Description**. This Oil Drilling and Production Plan is based upon and limited to compliance with the project description, the Planning Commission hearing exhibits marked Attachments A-I, dated April 20, 2016, and all conditions of approval set forth below, including mitigation measures and specified plans and agreements included by reference, as well as all applicable County rules and regulations.

   The project description is as follows[3]:
   The proposed Project includes the installation and operation of 96 new wells (which would produce oil and gas from the diatomite portion of the Sisquoc Formation) and ancillary equipment on eight previously disturbed pods from prior operations (pods are pads where wells are located), the installation and operation of approximately 10,000 linear feet of new interconnecting above ground pipelines along existing oil field roads and/or existing pipeline corridors, and the installation and operation of an equipment pod and a multiphase booster pump pod on currently undisturbed locations. In addition, the Project includes the drilling of up to 48 additional "replacement" wells at alternate locations on any of the approved well sites (pods) if any of the 192 (existing and proposed) diatomite wells prove to be uneconomic. Estimated crude oil production from the diatomite portion of the field after the proposed Project would total 3,600 bpd.

   Other than the new components described herein, the Project would rely on existing infrastructure approved and in place as part of the existing diatomite operations and approved under the existing Production Plan (05PPP-00000-00001). No new additional steam generators or processing facilities would be required. The Project would not require any additional buildings or roads. A proposed Supplemental Pollution Control Plan is included and would serve as a comprehensive set of best practices for responding to future seeps and surface expressions. Addressing future seeps and surface expressions would require additional grading, which may include temporary roads to access seep areas and surface expressions.

   The proposed new diatomite cyclic steamed oil wells would be located on existing disturbed pods referred to as Pods 8, 9, 10, 11, 12, 13, 14, and 15, located generally to the south and southwest of the existing Pods 1 through 7. The pod locations are between 0.21 and 0.44 acres in size. The following table lists the approximate size for each pod.

[3] The project description contained in Condition No. 1 is modified by Condition No. 41. Where there is a conflict among project conditions, the conditions of approval apply and supersede the project description condition.

Approximate Well Pod Size

Pod Number	Area (square feet)	New Disturbed Area* (square feet)
8	9,300	1,619
9	12,000	1,610
10	9,350	116
11	10,500	715
12	10,500	325
13	19,200	1,743
14	13,500	1,057
15	9,300	2,910
Equipment Pod	9,900	9,931
Multiphase Booster Station	1,800	1,758

Notes: *Area that would be additionally disturbed that is not currently disturbed or developed.
Source: PCEC Application Biological Assessments, Sage Institute Inc. August 2013, Table 4

The proposed Project pods would be located between road junctions or on existing well pods with existing wells (which may be active, idle or plugged and abandoned). In certain instances, the existing pod area would be required to be expanded to accommodate the placement and movement of the drilling rig, thereby requiring the removal of some surrounding vegetation. Access to the proposed pods is provided by existing oil field roads.

Each well would include a wellhead, a linear rod pump, and would be powered by an electric motor. The height of each well equipment set is estimated at between 18 and 22 feet. Wells would be drilled to a depth of 700 to 1,100 feet below ground surface (bgs).

Proposed Equipment and Multiphase Booster Pads

An equipment pad adjacent to Pod 9 would be developed to accommodate a pipeline manifold and automatic well tester, with maximum equipment height of approximately 10 to 14 feet. This equipment would be used to isolate well streams and allow for testing and switching of wells between oil production and steam injection. The area of the proposed equipment pad is approximately 9,900 square feet.

An area to the immediate northeast of Pod 14 is proposed to contain a multiphase booster pump pad and electrical pad, with a maximum equipment height of approximately 8 feet. A multiphase booster pump is a pump that can boost the pressure of the oil, water and gas mixture and push the mixture to the central processing facilities. The area of the proposed multiphase booster pad is approximately 1,800 square feet.

Proposed Pipelines

Produced fluids and gases would be transported between the new wells and equipment and the existing processing facility via above ground pipelines. Approximately 10,000 linear feet of new above ground pipelines would be constructed along existing oil field roads or

existing pipeline corridors. Each pipeline corridor would contain crude oil, gas, water and steam pipelines.

The new pipelines would follow the edges of existing roads to the greatest extent, but would also be placed within various patches of existing vegetation. When located along existing roads in steep areas or fringed with vegetation, the proposed pipelines would be placed on single or double "tee" stands as needed to minimize impact to habitat edges and rare plants. Each "tee" stand would have an augured footing area of approximately eight square feet. In steep or other constrained areas, concrete anchors placed within existing access roads would be used to support the tee stands.

The proposed steam pipelines would include expansion loops, which are designed to absorb the expansion and contraction of steel pipelines as the temperature of their contents varies, at specified intervals along the length of the pipelines. The expansion loops typically extend off of the existing road alignments into adjacent areas. Each expansion loop requires four supports that are augured into the ground creating a disturbance footprint of approximately four square feet per support (approximately 16 square feet per loop). Approximately 27 expansion loops and one omega loop (similar to expansion loops) are proposed along the new pipeline alignments.

The Project includes seven proposed new pipeline corridors within the Project Site to connect the proposed Project pods and wells to the existing infrastructure. The proposed pipeline corridors are listed in the table below.

Proposed Pipeline Corridors

Corridor	Connection	Approximate Length (ft)	New Disturbed Area* (square feet)
Pipeline Corridor One	Existing Pod 6 to Pods 8, 10 and equipment pad	2,500	6,975
Pipeline Corridor Two	Pods 10 and 12	600	463
Pipeline Corridor Three	Pods 9 and 11	1,100	4,049
Pipeline Corridor Four	Existing Pod 7 to Pod 13	850	3,052
Pipeline Corridor Five	Pods 13 and 14	1,550	7,241
Pipeline Corridor Six	Pods 14 and 15	800	2,062
Pipeline Corridor Seven	Pod 14 to existing Pod 3	2,500	7,378

Notes: *Area that would be additionally disturbed that is not currently disturbed or developed.
Source: PCEC Application Biological Assessments, Sage Institute Inc. August 2013, Table 4

All oil produced by the proposed diatomite operation would be transported to the central processing site and then transported from the oil field by the existing Oil Sales Pipeline where it connects to the existing Phillips 66 Transmission Pipeline.

Well Substitution Activities

If any of the 192 diatomite wells (existing and proposed) prove to be uneconomic, up to 25

percent (48) of the wells may be replaced at an alternate location on any of the approved well sites (pods) and re-drilled. If a well is determined to be uneconomic, the well will be plugged and abandoned in accordance with all applicable local, state, and federal regulations. No new surface disturbance would be required for replacement wells since the alternate locations would be within approved well pods. Replacement activity would occur at a 1:1 ratio, and at no time would the number of active wells exceed the proposed permitted limits of 192 wells.

Proposed Project Construction

The Applicant proposes to initiate drilling activities within six months of receipt of all required County and other state permits. Each well is forecasted to take approximately six to ten days to complete with drill crews operating 24 hours a day in two twelve-hour shifts. The drilling schedule for each well includes assembly, drilling, and de-mobilization activities with 12-19 months required to drill the 96 new wells. One drill rig will be operating at any given time as part of the proposed Project.

Construction of the well pods and pipeline corridors is expected to take about 50 weeks.

Drilling would be conducted using a drilling rig and crew. The 100 ft. tall drilling rig would be the same type as would be used for workovers and abandonments. The diesel rig would be powered by a 475 hp diesel-powered APCD-approved engine. During drilling, additional diesel generators (113 and 286 hp) and air compressors (157 hp) would be utilized. Two crews of five persons per crew would be involved in daily drilling. The sub-contractor drilling crews would consist of a drilling manager, mud engineer, pumper, laborer, and maintenance staff.

The drilling process for new oil and gas wells would require the approximately 12,600 gallons (300 barrels) of freshwater per well. This water would come from the freshwater wells located offsite in the community of Orcutt along Orcutt Creek.

Total grading required for the development of the proposed Project pods would involve 1,010 cubic yards of cut and 1,870 yards of fill. Access to all proposed pod locations would be via existing oil field roads. An estimate of the construction equipment necessary for the proposed Project is listed in the following table.

Construction Equipment

Equipment Description	Quantity
Well Pod, Pipeline Construction and Tie-In	
Backhoe	3
Lift	2
Crane – Stinger	1
A Frame Truck Crane	4
¾ Ton Pick-Up Truck	5
Tool Truck	3
Side Boom Crane	1
Water Buffalos (water supply trailer)	8
Welding Machine	8
4,000 Gallon Water Truck	1
950 Loader	1
Skip Loader	1
Skid Loader	1
Well Drilling	
Crane	1
Drilling Rig	1
Workover Rig Abandon & ReDrill	1
Concrete Pump Truck	1
Tractor/Trailer	1
Swivel Drilling	1
Swivel Abandon & Redrill	1
Generator Set 03	1
Generator Set 15	1
Air Compressor 02	1
Air Compressor 04	1

Proposed Project Operations

Steam generation for operation of the new wells would be provided by the existing three steam generators, which are each rated at 62.5 MMBtu/hr. The existing steam generators would require the use of natural gas and the primary sources of natural gas would continue to be field gas from existing producing wells and purchased natural gas. The purchased natural gas comes from Southern California Gas Company. All water used for steam generation would continue to be obtained from the brine water presently produced by existing oil production operations. No fresh water would be used in steam generation.

Water for steam generation would be transported to the steam generator site using existing pipelines. Prior to conversion to steam, the water would be softened in the existing water softening units located adjacent to the existing steam generators. Steam would be transported to the wells along the respective pipeline corridors, and crude oil/water emulsion and gas would be transported back to the processing facilities

The existing processing facility, along with an additional tank permitted but not yet constructed by the Applicant, would be used during the production process to aid in the removal of water from produced oil. Produced water would be treated and processed through the existing steam generators or re-injected via existing injection wells. No additional hydrogen sulfide removal equipment is proposed. All of the treated gas would continue to remain within the Orcutt Oil Field and would be used in existing steam generators.

Equipment Summary

Equipment Description	Quantity
Project Equipment	
Wells	96
AWT Manifold Packages	4
Multiphase Booster Pumps	3
Maintenance Equipment	
Super Sucker Truck	1
Vacuum Truck	1
¾ Ton Pick-Up Truck	7
Pressure Wash Trailer	1
Tractor/Trailer	7
Fork Lift	1
Crane	1
Workover Rig	1
Mini Excavator	1
Skid Steer	1
Dump Truck	1

Consistent with both County and State Division of Oil, Gas, and Geothermal Resources (DOGGR) regulations, wells that are permanently disconnected from the oil production gathering and treating system will be permanently abandoned and the ground restored to regulatory requirements. In addition to the requirements for abandonment and removal of equipment in County Code Chapter 25 (Oil and Petroleum Wells) Sections 25-32 (Abandonment procedure) and 25-33 (Removal of equipment), upon well abandonment, graded pads will be cleared of debris and any facility items including tanks, vessels, and pipelines. Soil remediation, if necessary, will occur as directed by DOGGR and/or the

County. Re-contouring of areas will occur as directed by DOGGR and/or the County.

Current Operations
Existing operations include a combined total of approximately 300 producing wells (including the 96 existing diatomite cyclic steamed wells, of which 82 are active, 11 are idle and 3 have been abandoned), field offices, and oil production facilities and ancillary equipment located throughout the Applicant's Orcutt Oil Field leases. In addition to the current ODPP (No. 05PPP-00000-00001) for the existing diatomite cyclic steaming operations, the Applicant also produces oil from several non-diatomite zones under separate permits.

Existing Diatomite Production
The existing 96 diatomite oil wells are permitted under the current ODPP (05PPP-00000-00001). Current diatomite operations include the 96 oil wells using cyclic steaming to enhance production at depths ranging from approximately 500 to 1,000 feet and an oil processing facility which includes three steam generators; oil, gas and water separation equipment; hydrogen sulfide removal vessels; a fuel gas blending skid; automated control, monitoring and safety systems; and interconnecting steam, water, gas and oil pipelines. The processing facility also includes five tanks, with a sixth tank previously approved under Case No. 13RVP-00000-00002 as part of the existing ODPP (05PPP-00000-00001) which is anticipated to be constructed in 2017. Accessory and support facilities include vapor recovery equipment, heat exchangers, electrical equipment, pumps, a lease automatic custody transfer (LACT) unit, and other appurtenant equipment. There are also existing office and control room buildings which total approximately 16,000 square feet and share the development pad with the oil processing facility.

The existing 96 diatomite oil wells are located on well sites referred to as Pods 1, 2, 3, 4, 5, 6, and 7. Pod 3 does not contain active diatomite wells in operation at this time, as they were abandoned and re-drilled at Pod 7 during the years 2011 and 2012. The 96 existing diatomite wells produced approximately 1,800 bpd of API 13-15 gravity crude oil in 2013.

The existing cyclic steaming process involves injecting steam into selected wells in a given pod for a period of time, typically several days, and then allowing the steam to "soak" into the formation, also for a period of several days. Following the "soak" period, the well is opened and oil, gas and water flow up the well bore and into pipelines to be transported to the oil processing facility. After the initial flow period (typically seven to twenty days), a pump is turned on to extend the production period, which typically lasts for two to three weeks, following which the cycle is repeated. This cyclic process is carefully managed on a continuous basis to ensure that adjacent wells are at different stages of the cycle. This helps to ensure that the flow rates from the pods are smoothed and that the reservoir is produced evenly. Each well is closely monitored and adjusted throughout the cycle in response to ongoing performance evaluation, so well cycles can vary from approximately three to five weeks or more.

Currently, steam is produced by three 62.5MMBtu/hr steam generators located immediately southwest of the office location. The natural gas for the steam generators is

supplied by both field gas from producing wells and purchased natural gas. All water used for steam generation is obtained from the brine water produced by current oil field operations. Brine water is concentrated saltwater that cannot be used for drinking, agriculture, or other productive purposes. Prior to conversion to steam, the brine water is softened in units located adjacent to the existing steam generators. Once the steam is produced, it is routed from the steam generators to a steam header and distributed to the various well pods by an insulated pipeline/manifold system. Fresh water is not used for any steam generation (fresh water is used for drilling and obtained from offsite wells).

A network of existing pipelines transports oil, water, gas and steam across the Project Site. The pipelines are above ground and most are installed along existing roadways. One existing pipeline segment is not located along a roadway and is adjacent to existing above ground pipelines. Three pipelines extend from the steam generator site to the seven existing well pod areas. One of these lines serves Pods 2, 4, 5, 6, and 7; the second line (idle) serves Pod 3; and the third line serves Pod 1. After the produced oil meets pipeline specifications, the oil is metered at the diatomite LACT unit and is then transferred by pipeline to the existing Newlove lease LACT units located adjacent to the existing Newlove production facility for blending. All oil produced by the existing diatomite operation is transported from the oil field by an existing third-party pipeline.

A summary of the existing diatomite production equipment in listed in the table below.

Existing Diatomite Equipment Summary

Equipment Description	Quantity
Diatomite Equipment	
Wells	96
62.5 MMBtu Steam Generators	3
VRU Compressor	2
Field Gas Gathering Compressor	2
Plan Gas Gathering Compressor	2
De-Sanding Bins	2
De-Sanding Vessels	3
3 Phase Separator	2
2 Phase Separator	1
Vessels (liquid scrubbers etc.)	17
H2S Scrubbers	2
Wash Tank	2
Crude Tank	1
Reject Oil Tank	1
Wastewater Tank	1
Drain Tank	1
Headers	5
Diatomite Maintenance Equipment	
Workover Rig	1
Super Sucker Truck	1
Vacuum Truck	2
¾ Ton Pick-Up Truck	15
Pressure Wash Trailer	1
Tractor/Trailer	9
Fork Lift	1
Crane	1
Swivel Rig	1
Air Compressor	1
Generator Set	1

Steam generators utilize field gas (75 percent) and PUC gas (25 percent), totaling about 2.8 million standard cubic feet of gas per day in 2013.

Existing Non-Diatomite Production

The Applicant's existing non-diatomite oil wells produce oil from the Monterey, Point Sal and Sisquoc geologic formations, which is processed through the Newlove Tank Battery, California Coast Tank Battery and Pinal Tank Battery. There are approximately 23 wells producing from these formations within the 285-acre Project Site (as noted, the Applicant also operates additional wells within the Orcutt Oil Field outside of the Project Site). These non-diatomite wells are not part of the proposed Project; however, some of the brine water and most of the gas produced from these wells is used for the production of steam, which is used for the diatomite production. The production from the non-diatomite wells is comingled with the diatomite production for transportation by pipeline.

Seeps and Surface Expressions

Seeps are releases of crude oil from the ground surface originating from the shallow, Careaga Formation (located on top of the diatomite portion of the Sisquoc Formation, which is the target zone for oil production). Seeps are generally low energy, non-eruptive leakages of oil seeping to the ground surface, generally from shallower oil bearing zones such as the Careaga Sands. Although able to flow to the surface on their own, seeps can increase in frequency of occurrence and volume with the addition of steam.

A surface expression of oil is the result of a well mechanical failure, resulting in releases of oil to the surface. Because they are mechanically induced, these releases are generally located within well cellars or in proximity to active wells. These are generally more high energy than seeps.

Both seeps and surface expressions are, or could be, related to oil extraction activities at the Project Site. Seeps do occur naturally unrelated to oil activities and have occurred historically at the Applicant's lease for over 100 years. However, the frequency of oil seeps occurring at the site increased substantially once the Applicant started their steam injection program in 2005, but has subsided due to the implementation of revised field practices developed with DOGGR.

Orcutt Hill has historically had many naturally occurring oil seeps. The shallow geologic formation known as the Careaga contains oily sands and is exposed in the area due to topography and natural erosion processes. The Careaga sandstone sometimes contains a considerable amount of heavy oil, and it is this oil that occasionally creates seeps at the surface. Both DOGGR and the County require that the Applicant control and contain the flow of oil on the ground and remove and dispose of all discharged material. As such, the Applicant conducts daily visual inspections and has implemented a system of seep receptacles (seep cans) and French drains to collect seep oil in compliance with DOGGR and County requirements. Oil that is collected is removed from seep receptacles via pump or vacuum truck and sent to existing onsite diatomite facilities for processing and shipping through the Oil Sales Pipeline. Any contamination of soil resulting from the initial appearance of a seep is also immediately remediated as required by State and County regulations.

A seep can is a temporary receptacle consisting of a perforated galvanized culvert placed vertically in the ground to collect and contain seep oil. In some cases, an electric pump is attached to the seep can. A seep can's depth is generally approximately between 15 and 20

feet, and the diameter of a seep can is generally approximately between 24 and 48 inches. A seep can is not a production well.

In compliance with County and United States Environmental Protection Agency requirements, the Applicant has on file with DOGGR and the County a Spill Prevention Control and Countermeasure (SPCC) Plan. The SPCC Plan contains operating procedures to prevent oil spills, control measures to prevent a spill from reaching navigable waters, and countermeasures to contain, clean up and mitigate the effects of an oil spill.

The proposed Project includes a proposed Supplemental Pollution Control Plan which sets forth a set of methods, procedures and protocols for responding to oil seeps and surface expressions that may occur at Orcutt Oil Field, consistent with requirements established by DOGGR and the County. Implementation of the Supplemental Pollution Control Plan and future seep management activities will be conducted as part of the work approved by this Oil Drilling and Production Plan.

Installation of the existing seep cans began in 2008, and as of April 2016, 99 seep cans have been installed at the Project Site numbered 1 through 99 (number 80 is not used). Approximately 50 of the 99 seep cans are actively collecting oil, and approximately 30 of the active seep cans have electrical pumps to aid in the removal of oil. The need for new seep cans may occur on a periodic basis. The County has addressed the permitting of the existing seep cans through the Emergency Permit process and has issued Emergency Permits for the installation of all aforementioned seep cans as shown in the table below.

Seep Can Emergency Permits

Emergency Permit Number	Seep Can(s)*
13EMP-00000-00001	79 & 85
13EMP-00000-00002	1 through 78
13EMP-00000-00003	Relocation of 30 & 86
13EMP-00000-00004	87 through 93
12EMP-00000-00006	81
12EMP-00000-00008	82
12EMP-00000-00009	Relocation of 33
12EMP-00000-00012	83 & 84
14EMP-00000-00003	94
15EMP-00000-0001	95
15EMP-00000-0003	96
15EMP-00000-0008	97
15EMP-00000-0009	98
16EMP-00000-0005	99

Note: *Number 80 is not used in can numbering system.

The area of disturbance for response and containment activities since 2008 totals approximately 6.09 acres.

Surface expressions have occurred occasionally at the oil field. The most recent surface expression occurred in September 2014, resulting in a surface fracture, steam release and a release of 1.5 bbls of crude oil, all of which was contained within Pod 2 containment berms. All Pod 2 wells were shut-in and the release subsided (as per County Petroleum Division reports).

Any deviations from the project description, exhibits or conditions must be reviewed and approved by the County for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

2. **Proj Des-02 Project Conformity**. The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of the structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval thereto. All plans (such as Landscape and Tree Protection Plans) must be submitted for review and approval and shall be implemented as approved by the County.

MITIGATION MEASURES FROM 14EIR-00000-00001

3. **MM AQ-1. Measures to Reduce Dust Emissions From Construction.** Best Available Control Measures shall be implemented to control PM10 generation during construction of the Project, as per SBCAPCD requirements, including the following:
a. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the area. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the wind speed exceeds 15 mph.
b. Area disturbances shall be minimized and onsite vehicle speeds shall be reduced to 15 mph or less;
c. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads;
d. If importation, exportation, and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the Project Site shall be covered with a tarp from the point of origin;
e. After clearing, grading, earthmoving, or excavation is completed, the disturbed area shall be treated by watering, re-vegetating, or spreading of soil binders, until the area is paved or otherwise developed so that dust generation does not occur;
f. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior

to land use clearance for any grading activities for the Project; and
g. Prior to any land clearance, the Owner/Permittee shall include, as a note on a separate informational sheet to be recorded using a map, these dust control requirements. All requirements shall be shown on grading and building plans.
Plan Requirements/Timing: The dust control monitor shall be designated prior to issuance of Zoning Clearance. The dust control components shall apply from the beginning of any grading or construction throughout all development activities. **Monitoring:** P&D processing planner shall ensure measures are on plans. P&D grading and building inspectors shall spot check; Grading and Building shall ensure compliance onsite. The permittee shall provide P&D Permit Compliance staff and APCD with the name and contact information for an assigned onsite dust control monitor(s). APCD inspectors shall respond to nuisance complaints.

4. **MM AQ-3a Tank Detection System.** For any tanks that have vapor space H2S above 1,000 ppm, the Operator shall install a detection system that will monitor vapor space on all crude oil tanks or direct all tank pressure relief to vapor recovery systems. The detection system shall be capable notifying the Operator via an alarm when the pressure in the tanks increases to a level that is within 10 percent of the tank relief pressure. If the tank pressure exceeds the relief pressure, the Operator shall report the incident to the APCD as a breakdown. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, tanks shall be equipped with monitoring and shall be listed on all plans, and documentation of onsite tank detection system shall be submitted for review and approval by APCD. A report shall be filed with APCD for any tank relief pressure that exceeds 10%. **Monitoring:** P&D monitoring staff shall ensure compliance during field inspections. APCD inspectors shall respond to nuisance complaints.

5. **MM AQ-3b Odor Minimization Plan.** The Operator shall develop an Odor Minimization Plan. The Odor Minimization Plan shall address potential sources of odors from all oil field equipment, including wells and drilling operation, and all high-H2S areas, and shall include measures to reduce or eliminate these odors (e.g., containment, design modifications, use of gas buster or odor suppressants during drilling, carbon canisters). The Plan shall address issues such as facility information, buffer zones, signs with contact information, logs of odor complaints, the protocol for handling odor complaints and odor event investigations and methods instituted to prevent a re-occurrence. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, an Odor Minimization Plan shall be submitted for review and approval by P&D and APCD. **Monitoring:** P&D monitoring staff shall ensure compliance during field inspections. APCD inspectors shall respond to nuisance complaints.

6. **MM GHG-1 GHG Reporting and Reduction**. The Owner/Permittee shall implement a program to quantify and reduce greenhouse gas emissions associated with construction and operations to achieve a reduction below the 1,000 metric ton CO_2-equivalent per year threshold. The standard of performance for this mitigation is a reduction of greenhouse gas emissions at a 1:1 ratio, meaning that the project must achieve an equivalent reduction for every metric tonne of greenhouse gases emitted over the applicable threshold. However, as an alternative the Owner/permittee may be required to pay a fair share mitigation fee for a

hydrogen infrastructure program in the County. Measures to be implemented shall include the following:

1) Using high efficiency pumps and electrical devices to reduce field-wide electrical use,
2) Other onsite or offsite measures and/or purchased GHG offset credits, as described in the EIR, that could achieve the performance standard stated above.

A GHG Reporting and Reduction Plan shall be approved by the County, in consultation with the APCD, detailing the measures to be implemented to achieve the required reductions, updated annually, and shall include specifications on the protocol, vintage, and registry for the offsite mitigation. The following mitigation credits shall not require prior County approval:

1) Credits generated within the County per an approved County protocol;
2) Credits generated within any Santa Barbara County Air Pollution Control District protocol;
3) Credits that meet the requirements of the AB 32 Cap-and-Trade regulation protocols;
4) Credits that are generated and verified under the CAPCOA GHG Rx program;
5) Credits that are generated and verified under the voluntary SCAQMD Regulation XXVII;
6) Verified credits registered with the Climate Action Reserve or the American Carbon Registry.

As an alternative to mitigation Items 1, 2, 4, 5, and 6, the Owner/Permittee may be required to comply with the following mitigation requirement.

7) Payment of a GHG mitigation fee to implement a Hydrogen Infrastructure and Vehicle Program within Santa Barbara County. The fee shall be a fair share contribution calculated based on a fee study approved by the Board of Supervisors through a resolution or other appropriate action. If the Program is adopted by the Board and is identified by the Board to be a higher priority than other mitigation options, such mitigation fee shall apply in lieu of any of the above options for mitigation, with the exception of mandatory Cap and Trade mitigation.

In addition, independently verified GHG credits available through other carbon registries that follow specific protocols may be eligible for offsite mitigation, subject to review and prior approval by the County in consultation with APCD. General criteria for acceptable credits include:

- Real: emission reduction must have actually occurred, as the result of a project yielding quantifiable and verifiable reductions or removals.
- Additional/Surplus: an emission reduction cannot be required by a law, rule, or other requirement.
- Quantifiable: reductions must be quantifiable through tools or tests that are reliable,

based on applicable methodologies, and recorded with adequate documentation.

- Verifiable: The action taken to produce credits can be audited and there is sufficient evidence to show that the reduction occurred and was quantified correctly.
- Enforceable: An enforcement mechanism must exist to ensure that the reduction project is implemented correctly.
- Permanent: Emission reductions or removals must continue to occur for the expected life of the reduction project.

Annual GHG Emissions Reporting Requirements/Timing: The Owner/Permittee shall submit a GHG Monitoring and Reporting Plan for review and approval to the P&D, in consultation with the APCD, prior to issuance of Zoning Clearance. GHG emissions from stationary, construction, mobile sources and from water use and electrical use shall be quantified and reported to P&D and the APCD by September 1 for the previous calendar year. Total construction emissions shall be reported to the County after construction is completed. For any emissions sources subject to the California Cap-and-Trade Regulation and the Mandatory Reporting Rule, emissions reporting to the County shall follow the same reporting format and procedures as required by those programs. **Monitoring:** The County and APCD shall review reports, the APCD will ensure compliance onsite and confirm annual reporting accuracy through the use of: 1) Cap-and-Trade reporting records; 2) Review of onsite electrical and purchased gas use and billing records; 3) Fugitive emissions estimates taken as part of the annual emissions inventory reports to the SBCAPCD combined with gas sampling reports (defining the amount of CO2 and methane in fugitive gases); 4) Records of waste generation; and 5) Records of portable diesel engine fuel use as reported by contractors or company records.

GHG Emissions Mitigation Reporting/Timing: In addition to the annual GHG emissions reporting, the GHG emission reductions generated through Items 1 through 6 above and/or additional programs/credits/allowances, as required for CEQA mitigation, shall be quantified and reported to the County and to the APCD in the same manner as required by the Cap-and-Trade Regulation. Emission reduction credits for CEQA mitigation shall be retired following the same compliance schedule as outlined in the Cap-and-Trade Regulation, with the balance of the compliance obligation due at the end of the Cap and Trade compliance period. **Monitoring:** The County and APCD will review reports; the APCD will ensure compliance onsite and confirm annual reporting accuracy. Mitigation for GHG emissions would rely upon a reporting and reduction program that would require the Owner/Permittee to align their compliance periods with the Cap-and-Trade compliance periods. Reductions, or mitigation measures, could include a wide variety of measures, including onsite increased efficiency, to offsite programs implemented in the community, verifiable "credits" purchased on the market, and allowances purchased as part of the Cap-and-Trade program.

7. **MM Bio-1a.** Prior to issuance of Zoning Clearance, the Owner/Permittee shall prepare and submit a Habitat Restoration Plan to the County Planning and Development Department, the USFWS, and CDFW. The Plan shall include the 6.09 acres of habitat disturbance caused by the past seep can installation and management. The Plan shall provide details for the replacement of specific habitat types, including oak woodland, which could include

the use of conservation easements and contribution to the Oak Woodland Conservation Fund to ensure the permanent preservation of oak woodland habitat. The Plan shall identify locations where restoration is to occur, methods of achieving its objectives, and performance criteria for determining success. The Habitat Restoration Plan shall include success criteria for all habitat restoration that are based on both vegetative percent cover and species abundance. Monitoring all restoration sites will be the Owner/Permittee's responsibility for a minimum of 5 years, or until the County, and appropriate resource agencies (e.g., USFWS, CDFW), judge all of the Project's long-term performance standards to be satisfied. Long-term performance standards shall include, but not be limited to, criteria such as requiring that restorations areas support at least 80 percent of the native species abundance and percent cover and are relatively weed free or demonstrate similar weed cover to surrounding, good quality habitat. If the Owner/Permittee is unable to restore the appropriate amount of habitat onsite, the approving resource agencies (County, USFWS, and the CDFW) shall have the option to require that the Owner/Permittee provide permanent protection of habitat as suitable mitigation, which could include the purchase of credits to an agency-approved conservation bank. **Plan Requirements and Timing:** Prior to the issuance of Zoning Clearance, the Habitat Restoration Plan shall be reviewed and approved by P&D, USFWS, and CDFW. **Monitoring:** P&D, USFWS, and CDFW shall spot check in the field as applicable.

8. **MM Bio-1b.** The Owner/Permittee shall conduct preconstruction surveys of sensitive species habitats (including sensitive plant species habitat, coastal scrub, chaparral, and oak woodland, and drainages) within the Project disturbance boundary immediately prior to the onset of any ground disturbances associated with the Project and seep can installation and management in order to evaluate suitable habitat for the current occupancy of sensitive species and to refine the final habitat mitigation replacement acreages. **Plan Requirements and Timing:** Surveys shall be conducted and reported prior to any ground disturbances or vegetation removal. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** P&D shall perform site inspections throughout the construction phase and receive the survey report from the Applicant Biologist (as identified in Condition No. 15).

9. **MM Bio-1c.** The final Habitat Restoration Plan shall provide for restoration and/or creation of habitat suitable for special status plant species including Lompoc yerba santa, La Purisima manzanita, mesa horkelia, and black-flowered figwort. The final Habitat Restoration Plan shall include defined schedules of restoration efforts, success criteria, weed management methods, monitoring schedules, reporting requirements, and long-term monitoring requirements. The objective of the long-term monitoring shall be to assess if the restored habitats are functioning equal to or better than pre-Project conditions. Restoration monitoring shall continue for five years or until the predetermined success criteria have been met. The assessment of function shall be based on indicators such as wildlife use and presence of sensitive species within the habitats compared to pre-Project conditions. **Plan Requirements and Timing:** Prior to the issuance of Zoning Clearance the Habitat Restoration Plan shall be reviewed and approved by P&D in consult with USFWS and CDFW. **Monitoring:** P&D, USFWS, and CDFW shall spot check in the field as applicable.

10. **MM Bio-1d.** This mitigation measure from the Final EIR requires that the applicant provide funding and access for an independent environmental monitor. The independent environmental monitor shall be the Environmental Quality Assurance Program (EQAP) monitor. See Condition No. 53 for details of the EQAP program.

11. **MM Bio-1e.** If performance standards detailed in the Habitat Restoration Plan are not achieved in any restoration area, the Owner/Permittee shall submit a plan for remedial action, employing an adaptive management strategy during the restoration and monitoring phase, for approval to the County, in consultation with appropriate resource agencies (e.g., USFWS and CDFW). **Plan Requirements and Timing:** As needed through restoration efforts. **Monitoring:** P&D staff shall review annual restoration updates received from the Applicant Biologist (as identified in Condition No. 15).

12. **MM Bio-1f.** The monitoring results collected as part of the Habitat Restoration Plan shall be reported at least annually to the County and appropriate resource agencies (e.g., USFWS and CDFW). The annual report shall document the effects of the proposed protection of sensitive resources on the Project Site and include acreage of occupied habitat that was impacted. The report shall contain a discussion of the problems encountered in implementing sensitive species habitat protection and other protective measures and recommendations for adaptive management to enhance the conservation of sensitive species habitat. **Plan Requirements and Timing:** The Owner/Permittee shall submit Habitat Restoration Plan monitoring reports by February 28 for the previous calendar year for review by P&D. **Monitoring:** P&D staff shall review restoration efforts throughout the restoration phase.

13. **MM Bio-2a.** Prior to issuance of Zoning Clearance, the Owner/Permittee shall fund and implement a biological resources training program for all construction workers and their contractors to minimize potential impacts to sensitive plant and wildlife species. Training shall occur prior to initial construction activities and be repeated annually and as needed for new workers. Prior to issuance of Zoning Clearance, the training program shall be reviewed and approved by P&D in consultation with the EQAP Monitor (see Condition No. 53) and shall include a description of important biological resources within the Project Site and all applicable conditions, permit requirements, and measures implemented to protect those resources. **Plan Requirements and Timing:** Training program shall be reviewed and approved by P&D prior to issuance of Zoning Clearance. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** Applicant Biologist (as identified in Condition No. 15) shall perform annual training updates throughout the construction phase; EQAP Monitor will ensure annual training is occurring.

14. **MM Bio-2b.** Prior to construction activities, including oil seep management activities, all grading limits and construction boundaries shall be delineated and clearly marked in the field. All sensitive species and sensitive species' habitats located within 10 feet of construction activities shall be delineated with specific sensitive species labeling (e.g., permanent signage stating "No Entry — Sensitive Habitat."). **Plan Requirements and Timing:** The County shall approve the fencing or other delineation and marking prior to commencement of the initial grading activities (including clearing and grubbing) or the pod

construction and pipeline installation. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase.

15. **MM Bio-2c.** Prior to issuance of Zoning Clearance, the Owner/Permittee shall enter into an agreement with the County to fund a biological monitor (Applicant Biologist), selected by the Owner/Permittee and approved by the County, to minimize potential impacts to sensitive species. The Applicant Biologist shall conduct sensitive species surveys immediately prior to construction activities, including oil seep installation and management activities, and shall monitor during construction activities in the vicinity of habitats to be avoided. Any sensitive species observed during the pre-construction surveys shall be relocated out of harm's way into the nearest suitable habitat outside the disturbance area as appropriate. Construction and sediment control fencing shall be inspected each work day during construction activities to ensure that sensitive species are not exposed to hazards. **Plan Requirements and Timing:** Sensitive species surveys shall be conducted prior to any ground disturbances or vegetation removal. The County shall review and approve the results of the pre-construction surveys prior to any work commencing. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** Sensitive species surveys shall be performed by the Applicant Biologist. EQAP Monitor shall conduct regular inspections and shall receive and review periodic compliance status reports from the Applicant Biologist throughout the construction phase.

16. **MM Bio-2d.** Under supervision of the Applicant Biologist, the proposed pipeline routes shall be modified in the field to minimize impacts to Lompoc yerba santa, La Purisima manzanita, mesa horkelia, black-flowered figwort or any other sensitive resources as identified by the Applicant Biologist and the EQAP Monitor. All pipeline construction, oil seep can installation, and surface expression management activities that occur within 50 feet of identified sensitive resources shall be conducted under supervision of the Applicant Biologist. The Applicant Biologist shall also be part of the seep containment and cleanup response. The Applicant Biologist can assist with resource avoidance and quantification of impacts resulting from seep can installation. **Plan Requirements and Timing:** Surveys required for pipeline route modification shall be conducted prior to any ground disturbances or vegetation removal. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and receive regular updates from the Applicant Biologist.

17. **MM Bio-2e.** As part of the required Habitat Restoration Plan (Mitigation Measure BIO-1a) and under the supervision of the Applicant Biologist and EQAP Monitor, the Owner/Permittee shall prepare and implement a rare plant salvage and transplant plan to reduce impacts to native sensitive plant species including Lompoc yerba santa, La Purisima manzanita, mesa horkelia, black-flowered figwort and any other sensitive resources as identified by the Applicant Biologist and EQAP Monitor. The Habitat Restoration Plan shall include salvage and planting methods specific for each species, potential out-planting areas, and performance standards for all plant salvaging that shall include, but not be limited to, requiring that all plants salvaged and re-planted in restoration areas survive for

at least five years in order to meet the applicable replacement ratio (described in Condition No. 18, MM Bio-2f). **Plan Requirements and Timing:** Surveys and plant salvaging shall be conducted prior to any ground disturbances or vegetation removal. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and receive regular updates from the Applicant Biologist.

18. **MM Bio-2f.** Due to the uncertainty of impacts to sensitive species resulting from oil seeps, surface expressions, and oil seeps cleanup and management, the Habitat Restoration Plan (Mitigation Measure BIO-1a) shall include a 10:1 replacement of those 360 impacted Lompoc yerba plants disturbed during previous seeps and seep management activities as directed by the existing 2006 MND; a 3:1 replacement of all future impacted Lompoc yerba santa plants; and, a 2:1 replacement of all other individual sensitive plants, including La Purisima Manzanita, mesa horkelia, and black-flowered figwort impacted by construction and oil seep management disturbances. **Plan Requirements and Timing:** Owner/Permittee shall submit a report by February 28 for the previous calendar year. Annual monitoring results shall be reviewed and approved by P&D each year. **Monitoring:** P&D staff shall review restoration efforts throughout the restoration phase.

19. **MM Bio-2g.** The Owner/Permittee shall conduct preconstruction surveys of the entire 382-acre study area to determine the distribution and abundance of sensitive plants species, including but not limited to the federally endangered Lompoc yerba santa, to better determine actual impacts resulting from future oil seeps and oil seep management. Surveys shall include GIS mapping of all sensitive populations, and show the spatial extent and relative abundance of individuals. **Plan Requirements and Timing:** Surveys shall be conducted prior to the onset of any ground disturbances associated with the Project in order to evaluate the current occupancy of suitable habitat for this sensitive species and shall be repeated every three years to update species information. The EQAP Monitor shall review and approve the survey plan and mapping criteria prior to survey implementation. P&D shall review the results of the pre-construction surveys prior to commencement of construction. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and review and approve the report from the Applicant Biologist.

20. **MM Bio-2h.** The Applicant Biologist shall inspect and monitor the Project Site for bird nesting activity prior to construction and pipeline installation resulting in any vegetation disturbances. If initial construction activities, including seep can installation, ground disturbance, or vegetation clearing involving vegetation removal/trimming, is to take place during the nesting season (December 15 through August 31 for raptor species, and February 1 through September 15 for all other avian species), an Applicant Biologist shall conduct a pre-construction bird nesting inspection not more than one week prior to the scheduled construction activity. If birds are determined to be nesting on or within the vicinity of the Project Site, no construction activities, including but not limited to, grading or heavy equipment operation, shall take place within 500 feet of a raptor nest or within 300 feet (or the property line, whichever is closer) of other species' nest locations. Certain construction activities, for example seep containment and cleanup, may be allowed on a

case-by-case basis, as reviewed and approved by P&D. **Plan Requirements and Timing:** Surveys shall be conducted prior to any ground disturbances or vegetation removal. The County shall review and approve the pre-construction survey reports prior to commencement of construction. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and receive the report from the Applicant Biologist.

21. **MM Bio-3. Supplemental Pollution Control Plan.** The Owner/Permittee shall update and implement the Orcutt Hill supplement (dated January 2013) for Orcutt Oil Field. The supplement shall address pollution control measures for surface expressions and seeps at Orcutt Oil Field pursuant to Santa Barbara County Code Sec. 25-9. The Supplemental Pollution Control Plan shall include specific procedures for the discovery, assessment, response, monitoring, control, reporting and mitigation of seeps and surface expressions of oil at the Orcutt Oil Field. At minimum the Plan shall include protocols to address seeps and surface expressions, such as duties and responsibilities in the event of a seep or surface expression; notification and reporting responsibilities; requirements for containment structures; and, standards for seep management activities. The Supplemental Pollution Control Plan reporting requirements shall include details on the timing of reporting; shall require that all new and/or reactivated seeps be reported to the County and OSPR at the same time they are reported to DOGGR; and, shall require that the report to these agencies be followed within 30 days by submittal of a map containing the location of the seep, seep management disturbance area, and sensitive biological resources (including but not limited to Lompoc yerba santa populations, ephemeral drainages, and sensitive habitats). **Plan Requirements and Timing:** Prior to issuance of Zoning Clearance, the Owner/Permittee shall provide P&D with the Supplemental Pollution Control Plan for review and approval. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** Applicant Biologist shall coordinate with County EQAP Monitor to perform field inspections as applicable.

22. **MM Bio-4a.** The final Habitat Restoration Plan shall require a 3:1 replacement of all Waters of the U.S. impacted by past and future potential oil seep cleanup and management activities. **Plan Requirements and Timing:** Prior to the issuance of Zoning Clearance the Habitat Restoration Plan shall be reviewed and approved by P&D, USFWS and CDFW. **Monitoring:** Applicant Biologist shall coordinate with applicable agencies and the County EQAP Monitor/P&D.

23. **MM Bio-4b.** Prior to issuance of Zoning Clearance, the Owner/Permittee shall demonstrate that all staging areas, equipment storage areas, stockpile sites, and refueling areas are located at least 100 feet from surface water bodies and wetland habitats to minimize the potential for releases into surface water or wetland habitat.
Plan Requirements and Timing: Prior to issuance of Zoning Clearance P&D shall review and approve Final grading plans. This condition shall be printed on all final construction, grading, and building plans.
Monitoring: EQAP Monitor shall perform site inspections throughout the construction phase and receive regular updates from the Applicant Biologist.

24. **MM Bio-4c. Emergency Response Action Plan**. Emergency Response Action Plan. The Owner/Permittee shall prepare an Emergency Response Action Plan that addresses protection of sensitive biological resources and revegetation of any areas disturbed during an oil spill or cleanup activities. The Emergency Response Action Plan shall, at a minimum, include specific measures to avoid impacts to native vegetation and wildlife habitats, plant and animal species, and environmentally sensitive habitat areas during response and cleanup operations. These measures shall include integration of the Applicant Biologist on the initial response team to assist with avoidance of sensitive resources and to quantify impacts resulting from seep control, cleanup, and maintenance. Where feasible, low-impact, site-specific techniques such as hand-cutting contaminated vegetation and using low-pressure water flushing shall be specified to remove spilled material from particularly sensitive wildlife habitats, such as riparian woodlands, because procedures such as shoveling, bulldozing, and raking can cause more damage to a sensitive habitat than the oil spill itself. The Emergency Response Action Plan shall evaluate the non-cleanup option for ecologically vulnerable habitats as identified by the Applicant Biologist and the EQAP Monitor. When habitat disturbance cannot be avoided, the Emergency Response Action Plan shall provide stipulations for development and implementation of site-specific habitat restoration plans and other site-specific and species-specific measures appropriate for mitigating impacts to local populations of special-status plant andwildlife species and to restore native plant and animal communities to pre-spill conditions. Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitat areas shall be identified. The Emergency Response Action Plan shall include species- and site-specific procedures for collection, transportation and treatment of oiled wildlife, particularly for sensitive species. The Emergency Response Action Plan shall include procedures for timely re-establishment of vegetation that replicates the habitats disturbed (or, in the case of disturbed habitats dominated by non-native species, replaces them with suitable native species). **Plan Requirements and Timing:** Prior to the issuance of Zoning Clearance the Emergency Response Action Plan shall be reviewed and approved by P&D. **Monitoring:** County P&D and EQAP Monitor.

25. **MM Bio-6a.** The Applicant Biologist shall conduct surveys throughout areas proposed to be disturbed to determine the presence of wildlife species prior to ground disturbance. The Applicant Biologist shall be onsite during initial site disturbance (i.e., brush removal, top soil disturbances). Wildlife species encountered during the initial disturbance shall be relocated to suitable habitat out of potential danger. Construction activities, including oil seep and surface expression cleanup, containment, and management efforts, shall be regularly monitored to ensure that wildlife species have not entered work areas. The Applicant Biologist shall conduct regular site inspections of the construction activities to ensure that all applicable mitigation measures are being enacted properly. The Applicant Biologist shall have the authority to temporarily halt activities if permit requirements and conditions are not being met. By February 28 of each year, the Applicant Biologist shall prepare a comprehensive annual summary report for the previous calendar year describing site visit observations and shall provide this report to the County, and regulatory agencies (including CDFW, ACOE, and USFWS) for review. **Plan Requirements and Timing:** Surveys and wildlife salvage and relocation efforts shall be conducted prior to any ground disturbances or vegetation removal. Applicant biologist shall submit a comprehensive

annual report by February 28 for the previous calendar year. This condition shall be printed on all final construction, grading, and building plans. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and receive regular updates from the Applicant Biologist.

26. **MM Bio-6b.** To minimize the potential for road mortality of wildlife, nighttime traffic shall be minimized during the construction and drilling phases and permitted only for activities required for safety reasons or emergencies; all hauling activities shall be restricted to daylight hours, defined as the hours after sunrise and before sunset. **Plan Requirements and Timing:** During all construction and operational phases. **Monitoring:** EQAP Monitor shall perform site inspections throughout the construction phase and receive regular updates from the Applicant Biologist.

27. **MM CR-1. Phase 3 Data Recovery Excavations.** Archaeological site SBA-4069/H, a multi-component site, is recommended as eligible for listing in the California Register (Kremkau et al. 2014) and is considered a historical resource under CEQA. Prior to issuance of grading permit, the Owner/Permittee shall fund and implement a Phase 3 mitigation program for SBA-4069/H consistent with County Cultural Resource Guidelines. The Phase 3 data recovery plan shall be submitted to the County, and P&D staff shall approve the plan prior to issuance of grading permit. The data recovery excavation portion of the Phase 3 study shall be completed prior to the start of construction. After completion of the work, the Owner/Permittee shall submit the required archaeological studies for P&D review and approval. The Owner/Permittee shall fund, in perpetuity, curation of the excavated materials at an accredited curatorial facility. **Plan Requirements/Timing:** The Phase 3 Plan shall be reviewed and approved by P&D prior to issuance of grading permit. Phase 3 excavations shall be completed prior to issuance of grading permit. **Monitoring:** P&D shall perform field visits and report review as applicable.

28. **MM CR-2. Supplemental Surveys.** The Owner/Permittee and/or their agents, representatives or contractors shall retain a qualified archaeologist to conduct surveys of areas affected by new seeps, as well as fund additional Phase 1 studies for seep cans that have developed since seep can 94 to ensure that no additional cultural sites have been impacted. In the event that cultural resources are identified, the Owner/Permittee shall retain a P&D approved archaeologist (and Native American representative, if the resource is prehistoric) to evaluate the significance of the find in accordance with the provisions of the County Cultural Resource Guidelines. If the resource is determined to be a historical resource under CEQA, then placement of new Project elements (such as French drains and access roads) shall avoid the resource if feasible. If avoidance is not feasible or an historical resource was impacted by seep can installations that occurred since seep can 94 installation, a Phase 3 study shall be conducted in accordance with the County Cultural Resource Guidelines and funded by the Owner/Permittee. **Plan Requirements/Timing:** A Phase 1 survey shall be completed at the location of each new seep can and associated access road and French drain prior to installation if practical or as soon as reasonably possible following seep can installation. P&D permit processing planner shall check plans prior to issuance of Zoning Clearance, and P&D staff shall spot check in the field throughout grading and construction. This condition shall be printed on all building and

grading plans. **Monitoring:** P&D permit processing planner shall check plans prior to issuance of Zoning Clearance and P&D staff shall spot check in the field throughout grading and construction.

29. **MM CR-3. Stop Work at Encounter.** The Owner/Permittee and/or their agents, representatives or contractors shall stop or redirect work immediately in the event cultural resources are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Permittee shall retain a P&D approved archaeologist (and Native American representative, if the resource is prehistoric) to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and funded by the Owner/Permittee. **Plan Requirements/Timing:** During any construction or seep can installation. **Monitoring:** P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

30. **MM GEO-1a. Seismic Design.** The proposed oil development infrastructure shall be designed and constructed to withstand anticipated horizontal and vertical ground acceleration in the Project area, based on the California Building Code. The calculated design base ground motion for project components shall consider the soil type and the most current and applicable seismic attenuation methods that are available. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, documentation shall be submitted to ensure compliance with provisions of GEO-1a. **Monitoring:** P&D staff shall check plans and ensure compliance prior to issuance of Zoning Clearance.

31. **MM GEO-1b. Equipment Restraints.** All surface facilities and equipment shall have suitable foundations and anchoring design, surface restraints, and moment-limiting supports to withstand seismically induced ground shaking. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, documentation shall be submitted to ensure compliance with provisions of GEO-1b. **Monitoring:** P&D staff shall check plans and ensure compliance prior to issuance of Zoning Clearance.

32. **MM GEO-1c. Grading Plan.** A grading plan shall be completed as part of the final Project design and submitted to the County Building and Safety Division for review and approval. The grading plan shall conform to the requirements set forth in Chapter 70 of the California Building Code and the County Grading and Building Codes, which include, but are not limited to the following:
    a. Areas to be graded at the Project Site shall be cleared of unsuitable materials and graded to provide a firm base for compacted fill, as applicable. Ground surfaces to receive compacted fill shall be prepared by removing organics, rubble, debris, existing disturbed fill, artificial fill, unconsolidated materials, and soft or disturbed soils. Removal of unconsolidated materials would likely include several feet of over-excavation.
    b. All fill materials shall be placed in uniform lifts not exceeding 8 inches in its loose state and compacted to a minimum of 90 percent relative compaction, as determined by the latest ASTM Test Designation D-1557.
    c. Cut slopes in soil shall be completed no steeper than 2:1 (horizontal:vertical); cut slopes in bedrock shall be completed no steeper than 1:1; and fill slopes shall be completed no steeper than 1.5:1, unless otherwise indicated by a Certified Engineering Geologist.

d. Surface runoff shall be directed away from slopes and foundations and collected in ditches or drainage swales, via non-erodible engineered drainage devices. Fill slopes and stability fills, as applicable, shall be provided with subsurface drainage for stability.
Plan Requirements/Timing: Prior to issuance of Zoning Clearance, documentation shall be submitted to ensure compliance with provisions of GEO-1c. **Monitoring:** P&D staff shall check plans and ensure compliance prior to any grading.

33. **MM GEO-1d. Post-Earthquake Inspection.** The Owner/Permittee shall inspect all Project-related facilities, equipment, and pipelines for damage immediately following any perceptible (i.e., felt by humans) seismic event. In the event that damage or leaks are observed, such equipment shall immediately cease operations. **Plan Requirements/Timing:** Inspections shall occur prior to restarting operations to ensure compliance with provisions of GEO-1d. **Monitoring:** P&D staff shall check with the Owner/Permittee in the event of an earthquake to determine if cessation of operations is merited and to determine that damage issues have been resolved prior to restart of operations.

34. **MM GEO-2a. Geologic Monitoring**. In the event that a new oil seep is discovered on a slope exceeding a 20 percent grade, a Certified Engineering Geologist or a licensed Geotechnical Engineer shall evaluate the geologic conditions in the vicinity of the seep for indications of potential slope instability. The geologist shall coordinate with the Owner/Permittee in determining a route to the seep location so that installation of the proposed seep can would result in the least potential for erosion and slope instability. The geologist shall make recommendations to monitor and minimize slope instability, including construction of surface water diversionary features, installation of crack monitoring devices and slope inclinometers in coordination with DOGGR, as necessary, to further monitor and minimize slope instability. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, documentation shall be submitted to ensure compliance with GEO-2b, such that GEO-2a would be completed upon discovery of new oil seeps. **Monitoring:** P&D staff shall check plans and ensure compliance with the Supplemental Pollution Control Plan.

35. **MM GEO-2b. Supplemental Pollution Control Plan.** Mitigation Measure GEO-5 shall be added to the proposed Supplemental Pollution Control Plan, which sets forth procedures and protocols for monitoring, assessing, controlling, and reporting seeps occurring at the Project Site. **Plan Requirements/Timing:** Prior to issuance of Zoning Clearance, documentation shall be submitted to ensure compliance with GEO-2b, such that GEO-2a would be completed upon discovery of new oil seeps. **Monitoring:** P&D staff shall check plans and ensure compliance with the Supplemental Pollution Control Plan.

36. **MM WR-1a.** The Owner/Permittee shall prepare a Stormwater Pollution Prevention Plan (SWPPP) that shall include implementation of erosion control measures, including preservation of existing vegetation (where possible), earth dikes and drainage swales, velocity dissipation devices, slope drains, silt fences, fiber rolls, and gravel bag berms.
Plan Requirements/Timing: Prior to issuance of Zoning Clearance, an updated SWPPP shall be submitted for review by P&D. **Monitoring:** P&D shall monitor to ensure that

compliance with the SWPPP plan.

37. **MM WR-1b.** The Owner/Permittee shall prepare a SWPPP that shall include implementation of BMPs, including stabilized construction entrance/exit, exit tire wash, wind erosion control, stockpile management, controlled areas for vehicle and equipment cleaning, fueling, and maintenance; specifications for concrete curing and finishing; proper hazardous materials storage and use; spill prevention and control; and control of solid waste, hazardous waste, sanitary/septic waste, and liquid waste.
Plan Requirements/Timing: Prior to issuance of Zoning Clearance, an updated SWPPP shall be submitted for review by P&D. **Monitoring:** P&D shall monitor to ensure compliance with the SWPPP plan.

38. **MM WR-1c.** The SWPPP shall assign authority to the contractor to mobilize crews in order to make immediate repairs to the control measures. The SWPPP shall require the contractor to assure all of the necessary corrections/repairs are made immediately and that the project complies with the SWPPP, the construction permit, and approved plans at all times. A Notice of Discharge and reports of illicit connections or illegal discharges would be required under the NPDES.
Plan Requirements/Timing: Prior to issuance of Zoning Clearance, an updated SWPPP shall be submitted for review by P&D. **Monitoring:** P&D shall monitor to ensure compliance with the SWPPP plan.

39. **MM WR-1d.** The SWPPP shall include implementation of non-storm water management and materials/waste management activities, including monitoring discharges (dewatering, diversion devices), general site cleanup, spill control, and ensuring that no materials other than stormwater are discharged in quantities that would have an adverse effect on receiving waters.
Plan Requirements/Timing: Prior to issuance of Zoning Clearance, an updated SWPPP shall be submitted for review by P&D. **Monitoring:** P&D shall monitor to ensure compliance with the SWPPP plan.

40. **MM WR-3. Pipeline Integrity and Valve Leak/Integrity Surveillance and Testing.** The SPCC Plan shall be updated to include periodic leak and integrity testing and surveillance of oil gathering lines, as well as both the pipeline connecting the tank battery to the existing Oil Sales Pipeline and the Oil Sales Pipeline itself, where operated by PCEC. In accordance with the SPCC Guidance for Regional Inspectors impracticability determination provision (U.S. EPA 2013), pipeline and valve integrity testing shall be completed in accordance with appropriate industry standards, which shall include a more stringent leak testing schedule than would be required if secondary containment were in place. In addition, the leak testing schedule for both the pipeline connecting the tank battery to the Oil Sales Pipeline and the Oil Sales Pipeline itself shall be more stringent than the schedule for the onsite oil gathering lines, as these pipelines would contain higher volumes of oil. The program shall include 1) daily visual monitoring of all pipelines; 2) monthly visual inspections for all pipelines and tank farm components including corrosion; 3) integrity testing of new lines; 4) integrity testing after line failure requiring repair or replacement or any leak. **Plan Requirements/Timing:** Prior to issuance of Zoning

Clearance, an updated SPCC Plan shall be submitted for review and approval by P&D and include pipeline and valve integrity testing program elements and test frequencies. **Monitoring:** P&D shall monitor to ensure compliance with the SPCC Plan.

PROJECT-SPECIFIC CONDITIONS

41. **Careaga Exclusion.** This condition prohibits the Owner/Permittee from drilling wells through or underneath the Careaga Tar Zone. The Owner/Permittee shall drill no wells, including "replacement wells", in areas overlying the Careaga Tar Zone as depicted on Attachment H (Careaga Tar Zone Map) to the Staff Report dated May 11, 2016. Also, the Owner/Permittee shall not directionally drill wells to down-hole locations directly underlying the Careaga Tar Zone. **Plan Requirements/Timing:** The Owner/Permittee shall submit drilling plans for all wells showing both the surface and bottom-hole locations to P&D for review and approval prior to issuance of Zoning Clearance. P&D staff, in coordination with DOGGR, shall ensure that project plans depict all proposed well locations outside of the Careaga Tar Zone. **Monitoring:** While well drilling and completion processes are underway, DOGGR staff shall verify compliance with this condition through review of Owner/Permittee well drilling records and other appropriate information. If well drilling is determined to be in conflict with this condition, DOGGR shall consult P&D staff, who shall be responsible for enforcement.

42. **Replacement Wells.** The Owner/Permittee shall submit drilling plans for the 48 "replacement" wells showing both the surface and bottom-hole locations to P&D for review and approval. **Plan Requirements/Timing:** The Owner/Permittee shall submit drilling plans for replacement wells showing both the surface and bottom-hole locations to P&D for review and approval prior to commencing drilling activities. **Monitoring:** County Petroleum Office staff shall coordinate with P&D to ensure consistency between drilling plans and Petroleum permits for all replacement wells.

43. **Bio-08 Fish and Wildlife.** No alteration to stream channels or banks shall be permitted (no Zoning Clearance shall be issued) until the Owner/Permittee demonstrates receipt of all authorizations from the California Department of Fish and Wildlife and/or federal agencies for any planned alteration to stream channels or banks as part of pipeline construction.

44. **Bio-09 Fish and Wildlife Jurisdiction Advisory**. The project site is within the range of California tiger salamander and California red-legged frog, species respectively listed as Endangered and Threatened by the U.S. Fish and Wildlife Service. The issuance of this permit does not relieve the Owner/Permittee of any duties, obligations, or responsibilities under the Endangered Species Act or any other law. The Owner/Permittee shall contact the Ventura office of the U.S. Fish and Wildlife Service at (805)644-1766 to ascertain his or her level of risk under the Endangered Species Act in implementing the project herein permitted.

45. **Aest-01 Building Materials**. Natural building materials and colors compatible with surrounding terrain (earth-tones and non-reflective paints) shall be used on exterior surfaces of all structures, including water tanks and fences. **Plan Requirement**: Materials shall be denoted on building plans. **Timing:** Structures shall be painted prior to Final

Building Inspection Clearance. **Monitoring**: P&D compliance monitoring staff shall inspect prior to Final Building Inspection Clearance.

46. **Aest-02 Lighting.** The Owner/Permittee shall ensure any exterior night lighting installed on the project site is of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject lot and prevent spill-over onto adjacent lots. **Plan Requirements and Timing:** The Owner/Permittee shall include these elements on design and construction plans prior to zoning clearance. **Monitoring:** P&D shall review project plans for compliance with this measure prior to Zoning Clearance. P&D Permit Compliance staff shall inspect structures upon completion to ensure that exterior lighting fixtures have been installed consistent with their depiction on the final Lighting Plan.
47. **Special Traf-01.** It shall be prohibited to operate trucks exceeding one and a half tons for use in oil and gas operations between the hours of 9 p.m. and 7 a.m. upon East Rice Ranch Road, which is within a residential neighborhood. This prohibition shall not apply in an emergency as determined by the County Sheriff, Fire Department, or Petroleum Administrator. **Plan Requirements and Timing:** Signs giving notice of the prohibition shall be posted at entrances to the affected streets or parts of streets prior to Zoning Clearance. **Monitoring:** P&D shall monitor to ensure that compliance in the field.

COUNTY RULES & REGULATIONS / LEGAL REQUIREMENTS

48. **Rules-03 Additional Permits Required**. The use and/or construction of any structures or improvements authorized by this approval shall not commence until the all necessary planning and building permits are obtained. Before any Permit will be issued by Planning and Development, the Owner/Permittee must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Permittee has satisfied all pre-construction conditions. A form for such clearance is available from Planning and Development.

49. **Rules-05 Acceptance of Conditions.** The Owner/Permittee‘s acceptance of this permit and/or commencement of use, construction and/or operations under this permit shall be deemed acceptance of all conditions of this permit by the Owner/Permittee.

50. **Rules-23 Processing Fees Required**. Prior to issuance of Zoning Clearance, the Owner/Permittee shall pay all applicable P&D permit processing fees in full as required by County ordinances and resolutions.

51. **Rules-25 Signed Agreement to Comply**. Prior to issuance of Zoning Clearance, the Owner/Permittee shall provide evidence that they have recorded a signed Agreement to Comply with Conditions that specifies that the Owner of the property agrees to comply with the project description, approved exhibits and all conditions of approval. Form may be obtained from the P&D office.

52. **Rules-26 Performance Security Required**. Prior to issuance of Zoning Clearance, the Owner/Permittee shall post separate performance securities, the amounts and form of which shall be approved by P&D, to cover the full cost of installation and maintenance of

habitat restoration associated with past and expected future impacts. New performance securities shall be posted after the occurrence of any subsequent seep occurrence to cover the full cost of installation and maintenance of habitat restoration associated with seep can installation. Installation securities shall be equal to the value of a) all materials listed or noted on the approved referenced plan, and b) labor to successfully install the materials. Maintenance securities shall be equal to the value of maintenance and/or replacement of the items listed or noted on the approved referenced plan(s) for five years of maintenance of the items. The installation security shall be released when P&D determines that the Owner/Permittee has satisfactorily installed of all approved habitat restoration plans per those condition requirements. Maintenance securities shall be released after the specified maintenance time period and when all approved habitat restoration areas have been satisfactorily maintained. If they have not been maintained, P&D may retain the maintenance security until satisfied. If at any time the Owner fails to install or maintain the approved habitat restoration, P&D may use the security to complete the work.

53. **Rules-27 EQAP Condition**. Prior to Zoning Clearance, an Environmental Quality Assurance Program (EQAP) shall be prepared according to procedures established by P&D, paid for by the Owner/Permittee and submitted for review and approval by P&D. The EQAP shall include the following:

    a. All conditions and mitigation measures imposed on this project and the impacts they are mitigating separated by subject area.
    b. A plan for coordination and implementation of all measures and any additional plans and programs required therein.
    c. A description of all measures the Owner/Permittee will take to assure compliance, including field monitoring, data collection, management and coordination of all field personnel and feedback to field personnel and affected County agencies including P&D.
    d. Contractor feedback responsibilities should include weekly, monthly and quarterly reports (as specified in EQAP) to be prepared throughout grading and construction. These shall include status of development, status of conditions, incidents of non-compliance and their results and any other pertinent or requested data.
    e. A contractor to carry out the EQAP shall be selected by P&D in consultation with the Owner/Permittee. The contractor(s) will be under contract and responsible to the County, with all costs to be funded by the Owner/Permittee. The EQAP contractor shall appoint at least one On-site Environmental Monitor responsible for overall monitoring, but shall employ as many qualified specialists as necessary, as determined by P&D, to oversee specific mitigation areas (e.g. archaeologists, biologists). In addition, the EQAP Monitor has the authority and ability to ensure compliance with all project conditions and to stop work in an emergency.

    The EQAP shall also provide for any appropriate procedures not specified in the conditions of approval to be carried out if they are necessary to avoid environmental impacts.

54. **Rules-29 Other Dept Conditions**

    Compliance with Departmental/Division letters required as follows:

    - Fire Department dated November 20, 2014
    - Air Pollution Control District dated April 15, 2016

55. **Rules-30 Plans Requirements.** The Owner/Permittee shall ensure all applicable final conditions of approval are printed in their entirety on applicable pages of grading/construction or building plans submitted to P&D or Building and Safety Division. These shall be graphically illustrated where feasible.

56. **Rules-32 Contractor and Subcontractor Notification**. The Owner/Permittee shall ensure that potential contractors are aware of County requirements. Owner/Permittee shall notify all contractors and subcontractors in writing of the site rules, restrictions, and Conditions of Approval and submit a copy of the notice to P&D compliance monitoring staff.

57. **Rules-33 Indemnity and Separation**. The Owner/Permittee shall defend, indemnify and hold harmless the County or its agents or officers and employees from any claim, action or proceeding against the County or its agents, officers or employees, to attack, set aside, void, or annul, in whole or in part, the County's approval of this project. In the event that the County fails promptly to notify the Owner/Permittee of any such claim, action or proceeding, or that the County fails to cooperate fully in the defense of said claim, this condition shall thereafter be of no further force or effect.

58. **Indemnity Clause for Violation of the Endangered Species Act:** The Owner/Permittee shall defend, indemnify and hold harmless the County or its agents, officers and employees from any and all claims, actions, proceedings, demands, damages, costs, expenses (including attorneys fees), judgments or liabilities, against the County or its agents, officers or employees brought by any entity or person for any and all actions or omissions of the Owner/Permittee or his agents, employees or other independent contractors arising out of this permit alleged to be in violation of the federal or California Endangered Species Acts (16 U.S.C. Sec.1531 et seq.; Cal. Fish & Game Code Sec. 2050 et seq.). This permit does not authorize, approve or otherwise support a "take" of any listed species as defined under the federal or California Endangered Species Acts. Owner/Permittee shall notify County immediately of any potential violation of the federal or California Endangered Species Act.

59. **Rules-37 Time Extensions-All Projects.** The Owner / Applicant may request a time extension prior to the expiration of the permit or entitlement for development. The review authority with jurisdiction over the project may, upon good cause shown, grant a time extension in compliance with County rules and regulations, which include reflecting changed circumstances and ensuring compliance with CEQA. If the Owner/Permittee requests a time extension for this permit, the permit may be revised to include updated language to standard conditions and/or mitigation measures and additional conditions and/or mitigation measures which reflect changed circumstances or additional identified project impacts.

Memorandum

DATE: November 20, 2014

TO: Dean Dusette
Planning and Development
Santa Barbara

FROM: Dwight Pepin, Captain
Fire Department

SUBJECT: APN: 101-020-074; Permit: 13PPP-00001
Site: 1555 Orcutt Hill Road, Santa Maria
Project: Orcutt Hill Resource Enhancement Plan

The above project is located within the jurisdiction of the Santa Barbara County Fire Department, and to comply with the established standards, we submit the following requirements.

REQUIREMENTS FOR OIL AND GAS PRODUCTION PLAN

1. Access shall be as shown on plans dated November 3, 2014, received November 18, 2014.
   - A minimum of 13 feet, 6 inches of vertical clearance shall be provided and maintained for the life of the project for emergency apparatus access.

2. The site fire protection shall be per Collings & Associates Master Fire Protection Plan Evaluation Summary 2.0 dated July 13, 2013, with all upgrade recommendations.

These conditions apply to the project as currently described. Future changes, including but not limited to further division, change of occupancy, intensification of use, or increase in hazard classification, may require additional mitigation to comply with applicable development standards in effect at the time of change.

As always, if you have any questions or require further information, please telephone me 805-686-8178 or 805-681-5523.

DP:mkb

April 15, 2016

Matt Young
Santa Barbara County
Planning and Development
123 E. Anapamu Street
Santa Barbara, CA 93101

Re: APCD Suggested Conditions for the Orcutt Hill Resource Enhancement Plan Project, 13PPP-00000-00001

Dear Mr. Young:

The Air Pollution Control District (APCD) has reviewed the referenced project. The applicant, Pacific Coast Energy Company (PCEC), proposes the installation and operation of 96 new oil wells and ancillary equipment on eight previously disturbed well pods, approximately 10,000 linear feet of new interconnecting above ground pipelines, and a new equipment pod and new multiphase booster pod on currently undisturbed locations. Additionally, the project allows for the drilling of up to 48 replacement wells as alternate locations on any of the approved well pods if any of the existing/proposed diatomite wells prove to be uneconomic. The subject property, a 4,024-acre parcel zoned AG-II-100 and identified in the Assessor Parcel Map Book as APN 101-020-074, is located at 1555 Orcutt Hill Road in the unincorporated Orcutt area.

Air Pollution Control District staff offers the following suggested conditions:

1. Standard dust mitigations (**Attachment A**) are recommended for all construction and/or grading activities. The name and telephone number of an on-site contact person must be provided to the APCD prior to issuance of grading/building permit issuance.

2. APCD Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities* establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site. The text of the rule can be viewed on the APCD website at www.ourair.org/wp-content/uploads/rule345.pdf.

3. The State of California considers particulate matter emitted by diesel engines carcinogenic. Therefore, during project grading, construction, and hauling, construction contracts must specify that contractors shall adhere to the requirements listed in **Attachment B** to reduce emissions of particulate matter from diesel equipment as well as of ozone precursors.

4. **The proposed project includes operations subject to APCD permitting requirements, rules, and regulations, therefore the project will be required to obtain an Authority to Construct (ATC) permit from the APCD prior to building permit issuance.** Proof of receipt of the required APCD permits shall be submitted by the applicant to planning staff. *The APCD permit process can take several months. To avoid delay, the applicant is encouraged to submit their Authority to*

Construct permit application to the APCD as soon as possible, see www.ourair.org/permit-applications/ to download the necessary permit application(s).

5. All portable diesel-fired construction engines rated at 50 bhp or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or APCD permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from APCD permit, provided they will be on-site for less than 12 months. *If an APCD permit is required, proof of receipt of the APCD permit shall be submitted by the applicant to planning staff.*

6. If contaminated soils are found at the project site, the APCD must be contacted to determine if Authority to Construct and/or Permit to Operate permits will be required. (APCD permits are required for all soil vapor extraction activities. APCD permits are also required for the excavation, or "dig-and-haul", of more than 1,000 cubic yards of contaminated soil.)

7. At all times, idling of heavy-duty diesel trucks should be minimized; auxiliary power units should be used whenever possible. State law requires that:
   - Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
   - Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
   - See www.arb.ca.gov/noidle for more information.

8. At a minimum, prior to occupancy, any feasible greenhouse gas reduction measures from the following sector-based list should be applied to the project:
   - Leak detection to reduce fugitive emissions
   - Minimize flaring of field gas
   - Reduction in vehicle trips from passenger and haul vehicles.

9. Asphalt paving activities shall comply with APCD Rule 329, *Cutback and Emulsified Asphalt Paving Materials*.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8890 or via email at BarhamC@sbcapcd.org.

Sincerely,

Carly Barham

Carly Barham,
Air Quality Specialist
Technology and Environmental Assessment Division

Attachments: Fugitive Dust Control Measures
Diesel Particulate and NO_x Emission Measures

cc: TEA Chron File

Santa Barbara County
Air Pollution Control District

ATTACHMENT A
FUGITIVE DUST CONTROL MEASURES

These measures are required for all projects involving earthmoving activities regardless of the project size or duration. Proper implementation of these measures is assumed to fully mitigate fugitive dust emissions.

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.

- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.

- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.

- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

  Plan Requirements: All requirements shall be shown on grading and building plans and as a note on a separate information sheet to be recorded with map. **Timing**: Requirements shall be shown on plans or maps prior to land use clearance or map recordation. Condition shall be adhered to throughout all grading and construction periods.

  MONITORING: Lead Agency shall ensure measures are on project plans and maps to be recorded. Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

Santa Barbara County
Air Pollution Control District

ATTACHMENT B
DIESEL PARTICULATE AND NO_x EMISSION MEASURES

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. The following is an updated list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible.

The following measures are required by state law:

- All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
- All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

The following measures are recommended:

- Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible.
- If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

Plan Requirements: Measures shall be shown on grading and building plans. **Timing:** Measures shall be adhered to throughout grading, hauling and construction activities.

MONITORING: Lead Agency staff shall perform periodic site inspections to ensure compliance with approved plans. APCD inspectors shall respond to nuisance complaints.

Table ES-2 Summary of Environmental Impacts for the Proposed Project

Impact Class I = Significant adverse impact that remains significant after mitigation.
II = Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
III = Adverse impact that does not meet or exceed an issue's significance criteria.
IV = Beneficial impact.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
Section 4.1 Air Quality – Criteria and Toxic Pollutants			
AQ.1	Construction emissions associated with the oil development would be below APCD construction thresholds.	III	AQ-1 Measures to Reduce Dust Emissions From Construction: Best Available Control Measures (BACMs) shall be implemented to control PM10 generation during construction of the Project, as per SBCAPCD requirements, including the following: a) During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the area. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the wind speed exceeds 15 mph; b) Area disturbances shall be minimized and onsite vehicle speeds shall be reduced to 15 mph or less; c) Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads; d) If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the Project Site shall be covered with a tarp from the point of origin; e) After clearing, grading, earthmoving, or excavation is completed, the disturbed area shall be treated by watering, re-vegetating, or spreading of soil binders, until the area is paved or otherwise developed so that dust generation does not occur; f) The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior to land use clearance for any grading activities for the Project; and g) Prior to any land clearance, the Applicant shall include, as a note on a separate informational sheet to be recorded using a map, these dust control requirements. All requirements shall be shown on grading and building plans.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
AQ.2	Operational, fugitive, and mobiles source emissions would be below APCD criteria pollutant thresholds.	III	No mitigation measures are required since the impact would be less than significant.
AQ.3	Potential operations and drilling could create odor events.	II	AQ-3a~~a~~ Tank Detection System: For any tanks that have vapor space H_2S above 1,000 ppm, t~~T~~he Operator ~~shall route all tanks to vapor recovery or~~ shall install a detection system that will monitor vapor space pressure ~~on all crude oil tanks~~ or direct all tank pressure relief to vapor recovery systems~~, for any tanks that have vapor space H_2S above 1,000 ppm~~. The detection system shall be capable of ~~monitoring pressure in the vapor space of the tanks and of~~ notifying the Operator via an alarm when the pressure in the tanks increases to a level that is within 10 percent of the tank relief pressure. If the tank pressure exceeds the relief pressure, the Operator shall report the incident to the APCD as a breakdown. *AQ-3b~~b~~* Odor Minimization Plan: The Operator shall develop an Odor Minimization Plan. The Odor Minimization Plan shall address potential sources of odors from all oil field equipment, including wells and drilling operation, and all high-H2S areas, and shall include measures to reduce or eliminate these odors (e.g., containment, design modifications, use of gas buster or odor suppressants during drilling, carbon canisters). The Plan shall address issues such as facility information, buffer zones, signs with contact information, logs of odor complaints, the protocol for handling odor complaints and odor event investigations and methods instituted to prevent a re-occurrence.
Section 4.2 Air Quality – GHG			
GHG.1	The proposed Project's GHG emissions would be cumulatively considerable.	II	GHG-1 GHG Reporting and Reduction: The Applicant shall implement a program to quantify and reduce greenhouse gas emissions associated with construction and operations to achieve a reduction below the applicable threshold. The standard of performance for this mitigation is a reduction of greenhouse gas emissions at a 1:1 ratio, meaning that the project must achieve an equivalent reduction for every metric tonne of greenhouse gases emitted over the applicable threshold. Measures to be implemented shall include the following: 1) Using high efficiency pumps and electrical devices to reduce field-wide electrical use, 2) Other onsite or offsite measures and/or purchased GHG offset credits, as described in the EIR,that could achieve the performance standard stated above. A GHG Reporting and Reduction Plan shall be approved by ~~submitted to the APCD and~~ the

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			County, in consultation with the APCD, detailing the measures to be implemented to achieve the required reductions, updated annually, and shall include specifications on the protocol, vintage, and registry for the offsite mitigation. The following mitigation credits shall not require prior County approval: 1) Credits generated within the County per an approved County protocol; 2) Credits generated within any Santa Barbara County Air Pollution Control District protocol; 3) Credits that meet the requirements of the AB 32 Cap-and-Trade regulation protocols; 4) Credits that are generated and verified under the CAPCOA GHG Rx program; 5) Credits that are generated and verified under the voluntary SCAQMD Regulation XXVII; 6) Verified credits registered with the Climate Action Reserve or the American Carbon Registry. In addition, independently verified GHG credits available through other carbon registries that follow specific protocols may be eligible for offsite mitigation, subject to review and prior approval by the County in consultation with APCD. General criteria for acceptable credits include: • Real: emission reduction must have actually occurred, as the result of a project yielding quantifiable and verifiable reductions or removals. • Additional/Surplus: an emission reduction cannot be required by a law, rule, or other requirement. • Quantifiable: reductions must be quantifiable through tools or tests that are reliable, based on applicable methodologies, and recorded with adequate documentation. • Verifiable: The action taken to produce credits can be audited and there is sufficient evidence to show that the reduction occurred and was quantified correctly. • Enforceable: An enforcement mechanism must exist to ensure that the reduction project is implemented correctly. • Permanent: Emission reductions or removals must continue to occur for the expected life of the reduction project. Annual GHG Emissions Reporting Requirements The Owner/Applicant shall submit a GHG Monitoring and Reporting Plan review and approval to

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			the ~~for to~~ P&D, in consultation with the APCD, ~~and the APCD for review and approval~~ prior to issuance of the Zoning Clearance. Operational GHG emissions from stationary, construction, mobile sources and from water use and electrical use shall be quantified and reported to P&D and the APCD by September~~S~~ 1 for the previous calendar year. Total construction emissions shall be reported to the County after construction is completed. For any emissions sources subject to the California Cap-and-Trade Regulation and the Mandatory Reporting Rule, emissions reporting to the County shall follow the same reporting format and procedures as required by those programs. GHG Emissions Mitigation Reporting In addition to the annual GHG emissions reporting, the GHG emission reductions generated through the above and/or additional programs/credits/allowances, as required for CEQA mitigation, shall be quantified and reported to the County and to the APCD in the same manner as required by the Cap-and-Trade Regulation. Emission reduction credits for CEQA mitigation shall be retired following the same compliance schedule as outlined in the Cap-and-Trade Regulation, with the balance of the compliance obligation due at the end of the Cap and Trade compliance period.
Section 4.3 Biological Resources			
BIO.1	**Sensitive Species Habitat.** Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential future pipeline spills have the potential for short-term and permanent degradation or loss of habitat for sensitive species including the California tiger salamander (federally listed as endangered	I	BIO-1a Prior to issuance of applicable Zoning Clearance, the Applicant shall prepare and submit a Habitat Restoration Plan to the County Planning and Development Department, the USFWS, and CDFW. ~~The restoration plan shall include a 2:1 onsite replacement of all native habitats beyond the 2,200 foot radius of CTS breeding pond ORCU-12 impacted due to construction phase, oil seeps, surface expressions, oil seep management disturbances, and pipeline spills.~~ The restoration plan shall include a 3:1 onsite replacement of all native habitats ~~within 2,200 feet of breeding pond ORCU-12~~ (including annual grasslands) impacted due to construction phase, oil seeps, surface expressions, oil seep management disturbances, and pipeline spills. The Plan shall include the ~~5.596.06~~6.09 acres of habitat disturbance caused by the past seep ~~and~~can installation ~~seep~~ and ~~management~~. The plan shall provide details for the replacement of specific habitat types including oak woodland which could include the use of conservation easements and contribution to the Oak Woodland Conservation Fund to ensure the permanent preservation of oak woodland habitat. The plan shall identify locations where restoration is to occur, methods of achieving its objectives, and performance criteria for determining success. The Habitat Restoration Plan shall include success criteria for all habitat restoration that is based on both vegetative percent cover and species abundance. Monitoring all restoration sites will be the Applicant's responsibility for a minimum of 5 years, or until the County, and appropriate resource agencies (e.g., USFWS, CDFW~~U.S. Fish and Wildlife Service~~), judge all of the Project's long-term performance standards to be satisfied. Long-term performance standards shall include, but not be limited to, criteria such as requiring that restorations areas support at least 80 percent of the native species abundance and percent cover and

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	and State listed as threatened), sensitive plants, including the federally listed Lompoc yerba santa, and other non-listed sensitive plant and wildlife species habitats.		is relatively weed free or demonstrates similar weed cover to surrounding, good quality habitat. If the Applicant is unable to restore the appropriate amount of habitat onsite, the approving resource agencies (County, USFWS, and the CDFW) shall have the option to require that the Applicant provide permanent protection of habitat as suitable mitigation, which could include the purchase of credits to an agency-approved conservation bank. BIO-1b The Applicant shall conduct preconstruction surveys of sensitive species habitats (including sensitive plant species habitat, coastal scrub, chaparral, and oak woodland, and drainages) within the Project disturbance boundary immediately prior to, the onset of any ground disturbances associated with the Project and seep can installation and management in order to evaluate the current occupancy of suitable habitat for sensitive species and to refine the final habitat mitigation replacement acreages. BIO-1c The final Habitat Restoration Plan shall provide for restoration and/or creation of habitat suitable for special status plant species including Lompoc yerba santa, La Purisima Manzanita, mesa horkelia, and black-flowered figwort. The final Habitat Restoration Plan shall include defined schedules ~~of~~ for restoration efforts, success criteria, weed management methods, monitoring schedules, reporting requirements, and long-term monitoring requirements. The objective of the long-term monitoring shall be to assess if the restored habitats are functioning equal to or better than pre-Project conditions. Restoration monitoring shall continue for five years or until the predetermined success criteria have been met. The assessment of function shall be based on indicators such as wildlife use and presence of sensitive species within the habitats compared to pre-Project conditions. BIO-1d Prior to issuance of applicable Zoning Clearance, the Applicant shall enter into an agreement with the County to fund and provide access for a County-approved independent, on-site environmental monitor (OEM) who shall periodically review and monitor construction and restoration efforts and shall be responsible for ensuring that conditions of approval are being enforced and that success criteria are being met. The independent OEM shall have the authority to temporarily halt activities if permit requirements and conditions are not being met. BIO-1e If performance standards detailed in the Habitat Restoration Plan are not achieved in any restoration area, the Applicant shall submit a plan for remedial action, employing an adaptive management strategy during the restoration and monitoring phase, for approval to the County, ~~and~~ in consultation with appropriate resource agencies (e.g., USFWS and CDFW). BIO-1f The monitoring results collected as part of the Habitat Restoration Plan shall be reported at least annually to the County and appropriate resource agencies (e.g., USFWS and CDFW). The annual

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			report shall document the effects of the proposed ~~Project to~~protection of sensitive resources on the Project Site and include acreage of occupied habitat that was impacted. The report shall contain a discussion of the problems encountered in implementing sensitive species habitat protection and other protective measures and recommendations for adaptive management to enhance the conservation of sensitive species habitat.
BIO.2	**Sensitive Species.** Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline spills have ~~the potential to~~ resulted in the loss of individual Lompoc yerba santa (federally listed as endangered), and has the potential to result in the loss of individual California tiger salamander (federally listed as endangered and ~~state~~State listed as threatened), and other non-listed special-status species or species protected by the MBTA.	Class I for Lompoc Yerba Santa; Class II for California tiger salamander and other non-listed sensitive species	BIO-2a Prior to issuance of Zoning Clearance, the Applicant shall fund and implement a biological resources training program for all construction workers and their contractors to minimize potential impacts to sensitive plant and wildlife species. Training shall occur prior to initial construction activities and repeated, annually and as needed for new workers. Prior to issuance of Zoning Clearance, the training program shall be reviewed and approved by the County Planning and Development Department in consultation with the OEM (see BIO-1d) and shall include a description of important biological resources within the Project Site and all applicable conditions, permit requirements, and protection measures implemented to protect those resources. BIO-2b Prior to construction activities including oil seep management activities, all grading limits and construction boundaries shall be delineated and clearly marked in the field. All sensitive species and sensitive species' habitats located within 10 feet of construction activities shall be delineated with specific sensitive species labeling (e.g., permanent signage stating "No Entry — Sensitive Habitat."). The County shall approve the fencing prior to commencement of the initial grading activities (including clearing and grubbing) or the pod construction and pipeline installation. BIO-2c Prior to issuance of Zoning Clearance, the Applicant shall enter into an agreement with the County to fund a biological monitor (Applicant Biologist), selected by the Applicant and approved by the County to minimize potential impacts to sensitive species. The County-qualified biologist shall conduct sensitive species' survey immediately prior to construction activities including oil seep installation and management activities and shall monitor during construction activities in the vicinity of habitats to be avoided. Any sensitive species observed during the pre-construction surveys shall be relocated out of harm's way into the nearest suitable habitat outside the disturbance area as appropriate. Construction and sediment control fencing shall be inspected each work day during construction activities to ensure that sensitive species are not exposed to hazards. BIO-2d Under supervision of the Applicant Biologist, the proposed pipeline routes shall be modified in the field to minimize impacts to Lompoc yerba santa, La Purisima Manzanita, mesa horkelia, black-flowered figwort or any other sensitive resources as determined by the Applicant Biologist. All pipeline construction and oil seep ~~-~~can installation and surface expression management that occur~~s~~ within 50 feet of identified sensitive resources shall be conducted under supervision of the Applicant Biologist. The Applicant Biologist shall also be part of the seep containment and cleanup response. The Applicant Biologist can assist with resource avoidance and quantification of

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			impacts resulting from seep can installation. BIO-2e As part of the required Habitat Restoration Plan (Mitigation Measure BIO-1a) and under the supervision of the Applicant Biologist, the Applicant shall prepare and implement a rare plant salvage and transplant plan to reduce impacts to native sensitive plant species including Lompoc yerba santa, La Purisima Manzanita, mesa horkelia, black-flowered figwort or any other sensitive resources as determined by the County-approved biologist. The Habitat Restoration Plan shall include salvage and planting methods specific for each species,– potential out-planting areas, and performance standards for all plant salvaging that shall include, but not be limited to, requiring that all plants salvaged and re-planted in restoration areas survive for at least five years in order to meet the 3:1 or 2:1 replacement ratio (described below) required in this mitigation measure. BIO-2f Due to the uncertainty of impacts to sensitive species resulting from oil seeps, surface expressions, and oil seeps cleanup and management, the Habitat Restoration Plan (Mitigation Measure BIO-1a) shall include a 10:1 replacement of those 360 impacted Lompoc yerba plants disturbed during previous seeps and seep management activities as directed by the existing 2006 MND, a 3:1 replacement of all future impacted Lompoc yerba santa plants , and a 2:1 replacement of all other individual sensitive plants including ~~Lompoc yerba santa,~~ La Purisima Manzanita, mesa horkelia, black-flowered figwort impacted resulting from the construction phase and oil seep management disturbances. BIO-2g The Applicant shall conduct preconstruction surveys of the entire 382-acre study area to determine the ~~presence~~ distribution and abundance of sensitive plants species, most specifically the federally endangered Lompoc yerba santa, to better determine actual impacts resulting from future oil seeps and oil seep management. BIO-2h The Applicant shall retain and pay for a P&D approved Applicant Biologist to inspect and monitor the Project Site for bird and raptor nesting activity prior to construction and pipeline installation resulting in any vegetation disturbances. If initial construction activities including seep can installations, ground disturbance, or vegetation clearing involving vegetation removal/trimming occurs is to take place during the nesting season (December 15 through August 31 for raptor species, and February 1~~5~~ through ~~August~~ September 15~~31~~ for all other avian species), an Applicant Biologist shall conduct a pre-construction bird and raptor nesting inspection not more than one week prior to the ~~proposed beginning of~~scheduled construction activity. If birds or raptors are determined to be nesting on or within the vicinity of the Project Site, no construction activities, including, but not limited to grading or heavy equipment operation, shall take place within 500 feet of the raptor nest or within 300 feet (or the property line, whichever is closer) of other species' nest location.~~a bird nest~~. Certain construction activities, for example seep containment and cleanup, may be allowed on a

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			case-by-case basis as reviewed and approved by P&D.
BIO.3	**Sensitive Habitats:** Expansion of Project pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and potential pipeline leaks and ruptures have the potential to result in short-term and permanent loss of biological functions of sensitive habitats including central maritime chaparral, iris-leak rush seep, valley needlegrass grassland, southern Bishop pine forest, oak woodland, coastal scrub, arroyo willow thicket, habitats for rare plants and animals, and other biotic communities considered sensitive by Federal, State, or local policies, statutes, and regulations.	II	BIO-3 Supplemental Pollution Control Plan. The Applicant shall update and implement the ~~SPCC~~ Supplemental Pollution Control Plan Orcutt Hill supplement (dated January 2013) ~~to the existing Spill Prevention Control and Countermeasure Plan ("SPCC"), dated November 2011,~~ for Orcutt Oil Field. The supplement shall address pollution control measures for surface expressions and seeps at Orcutt Oil Field pursuant to Santa Barbara County Code Sec. 25-9. The Supplemental Pollution Control ~~C~~Plan shall include specific procedures for the discovery, assessment, response, monitoring, control, reporting and mitigation of seeps and surface expressions of oil at the Orcutt Oil Field. At minimum the Plan shall include protocols to address seeps and surface expressions such as~~: an inventory of all potential sources of spills; discharge recovery and reporting methods in the event of a spill;~~ duties and responsibilities in the event of a ~~spill~~a seep or surface expression~~; spill incident~~; notification and reporting responsibilities; ~~and~~ requirements for ~~secondary~~ containment structures, ~~spill response equipment,~~ and ~~periodic leak inspections of tanks~~standards for seep management activities. ~~In addition, the plan needs to contain spill prevention control and countermeasure provisions including: Secondary Containment Design, Construction Materials and Volume; Berm Containment Capacity Calculations; Inspections, Tests and Records; Facility Drainage; worst case oil discharge scenarios and the downstream creeks and drainages that would be affected; identification and elimination of the spill, containment of the spill, notification of the designated emergency response coordinators, initiation of cleanup measures, using either onsite equipment and/or outside emergency response contractors; spill notification including both verbal notification and written notification; and Security Measures.~~ The ~~SPCC's~~Supplemental Pollution Control Plan reporting requirements shall include details on the timing of reporting~~ and~~, shall require that all new and/or reactivated seeps be reported to the County and OSPR at the same time they are reported to DOGGR, and shall require that the report to these agencies ~~shall~~ be followed, within 30 days, by submittal of a map containing the location of the seep, seep management disturbance area, and important, sensitive biological resources (including but not limited to Lompoc yerba santa populations, ephemeral drainages, and sensitive habitats).
BIO.4	**Federal Wetlands.** Expansion of Project	II	BIO-4a The final restoration plan shall require a ~~2~~3:1 replacement of all Waters of the U.S. impacted by past and future potential oil seep cleanup and management activities.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	pods, pipeline installation, seeps, surface expressions, the installation and maintenance of existing and new oil seep cans, and pipeline leak or rupture have the potential to affect Federal wetlands as defined in Section 404 of the Clean Water Act.		BIO-4b Prior to issuance of Zoning Clearance, the Applicant shall demonstrate that all staging areas, equipment storage areas, stockpile sites, and refueling areas are located at least 100 feet from surface water bodies and wetland habitats to minimize the potential for releases into surface water or wetland habitat. BIO-4c Emergency Response Action Plan. The Applicant shall prepare an Emergency Response Action Plan that addresses protection of sensitive biological resources and revegetation of any areas disturbed during an oil spill or cleanup activities. The Emergency Response Action Plan shall, at a minimum, include specific measures to avoid impacts to native vegetation and wildlife habitats, plant and animal species, and environmentally sensitive habitat areas during response and cleanup operations. <u>These measures shall include integration of a biologist on the initial response team to assist with avoidance of sensitive resources and to quantify impacts resulting from seep control, cleanup, and maintenance.</u> Where feasible, low-impact, site-specific techniques such as hand-cutting contaminated vegetation and using low-pressure water flushing shall be specified to remove spilled material from particularly sensitive wildlife habitats, such as riparian woodlands, because procedures such as shoveling, bulldozing, and raking can cause more damage to a sensitive habitat than the oil spill itself. The Emergency Response Action Plan shall evaluate the non-cleanup option for ecologically vulnerable habitats. When habitat disturbance cannot be avoided, the Emergency Response Action Plan shall provide stipulations for development and implementation of site-specific habitat restoration plans and other site-specific and species-specific measures appropriate for mitigating impacts to local populations of special-status wildlife species and to restore native plant and animal communities to pre-spill conditions. Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitat areas shall be identified. The Emergency Response Action Plan shall include species- and site-specific procedures for collection, transportation and treatment of oiled wildlife, particularly for sensitive species. The Emergency Response Action Plan shall include procedures for timely re-establishment of vegetation that replicates the habitats disturbed (or, in the case of disturbed habitats dominated by non-native species, replaces them with suitable native species).
BIO.5	**Wildlife Migration Corridors.** Expansion of Project pods, pipeline installation, seeps,	III	No mitigation measures are required since the impact would be less than significant.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	surface expressions, and the installation and maintenance of existing and new oil seep cans has the potential to impact the movement, migration, or dispersal of resident and migratory fish and wildlife species.		
BIO.6	**Plants and Wildlife.** Expansion of Project pods, pipeline installation, seeps, surface expressions, and the installation and maintenance of existing and new oil seep cans has the potential to reduce the size and diversity of plant and animal populations at the Project Site.	II	BIO-6a The Applicant Biologist shall conduct surveys throughout areas proposed to be disturbed to determine the presence of wildlife species prior to ground disturbance. The Applicant Biologist shall be onsite during initial site disturbances (i.e., brush removal, top soil disturbances). Wildlife species encountered during the initial disturbances shall be relocated to suitable habitat out of potential danger. Construction activities, including oil seep and surface expression cleanup, containment and management efforts shall be regularly monitored to ensure that wildlife species have not entered work areas. The Applicant Biologist shall conduct regular site inspections of the construction activities to ensure that all applicable mitigation measures are being enacted. The Applicant Biologist shall have the authority to temporarily halt activities if permit requirements and conditions are not being met. The Applicant Biologist shall prepare an annual summary report describing site visit observations and shall provide this report to the County, and regulatory agencies (including CDFW, ACOE, and USFWS) for review. BIO-6b To minimize the potential for road mortality of wildlife, nighttime traffic shall be minimized during the construction ~~and drilling~~ phases and permitted only for activities required for safety reasons or emergencies; all hauling activities shall be restricted to daylight hours, defined as the hours after sunrise and before sunset.
Section 4.4 Hazardous Materials			
None were identified.			
Section 4.5 Cultural Resources			
CR.1	Continued use of the access road to seep can location 88 has the potential to disrupt, alter, or destroy SBA-4069/H,	II	CR-1 Phase 3 Data Recovery Excavations. Archaeological site SBA-4069/H, a multicomponent site, is recommended as eligible for listing in the California Register (Kremkau et al. 2014) and is considered a historical resource under CEQA. Prior to issuance of grading permit, the Owner/Applicant shall fund and implement a Phase 3 mitigation program for SBA-4069/H consistent with County Cultural Resource Guidelines. The Phase 3 data recovery plan shall be specifically designed to mitigate for the direct impacts on the site from the use of the access road

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	a significant prehistoric and historic archaeological site.		to seep can 88. The Phase 3 data recovery plan shall be submitted to the County, and P&D staff shall approve the plan prior to issuance of grading permit. The data recovery excavation portion of the Phase 3 study shall be completed prior to the start of construction. After completion of the work, the Owner/Applicant shall submit the required archaeological studies for P&D review and approval. The Applicant shall fund, in perpetuity, curation of the excavated materials from all Phase 2 and Phase 3 studies at an accredited curatorial facility.
CR.2	Impacts to significant cultural resources resulting from removal of contaminated soils, creation and maintenance of new seep can locations and associated French drains, and new access roads.	II	CR-2 Supplemental Surveys. The Owner/Applicant and/or their agents, representatives or contractors shall retain a qualified archaeologist to conduct surveys of areas affected by new seeps, as well as fund additional Phase 1 studies for seep cans that have developed since seep can 94 to ensure that no additional cultural sites have been impacted. In the event that cultural resources are identified, the Owner/Applicant shall retain a P&D approved archaeologist (and Native American representative, if the resource is prehistoric) to evaluate the significance of the find in accordance with the provisions of the County Cultural Resource Guidelines. If the resource is determined to be a historical resource under CEQA, then placement of new Project elements (such as French drains and access roads) shall avoid the resource if feasible. If avoidance is not feasible or an historical resource was impacted by seep can installations that occurred since seep can 94 installation, a Phase 3 study shall be conducted in accordance with the County Cultural Resource Guidelines and funded by the Owner/Applicant.
CR.3	Disturbance to unknown subsurface cultural and/or ethnic resources	II	CR-3 Stop Work at Encounter. The Owner/Applicant and/or their agents, representatives or contractors shall stop or redirect work immediately in the event cultural~~archaeological remains~~ resources are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Applicant shall retain a P&D approved archaeologist and Native American representative (if the resource is prehistoric) to evaluate the significance of the find in compliance with the provisions of Phase 2 investigations of the County Archaeological Guidelines and funded by the Owner/Applicant.
Section 4.6 Geological Resources			
GEO.1	Faulting and Seismicity. Seismic activity along regional active faults could produce seismic ground shaking or other seismically induced ground failure that would expose people and structures to greater	II	GEO-1a Seismic Design. The proposed oil development infrastructure shall be designed and constructed to withstand anticipated horizontal and vertical ground acceleration in the Project area, based on the California Building Code. The calculated design base ground motion for Project components shall consider the soil type and the most current and applicable seismic attenuation methods that are available. GEO-1b Equipment Restraints. All surface facilities and equipment shall have suitable foundations and anchoring design, surface restraints, and moment-limiting supports to withstand seismically induced ground shaking. GEO-1c Grading Plan. A grading plan shall be completed as part of the final Project design and submitted to the County Building and Safety Division for review and approval. The grading plan shall

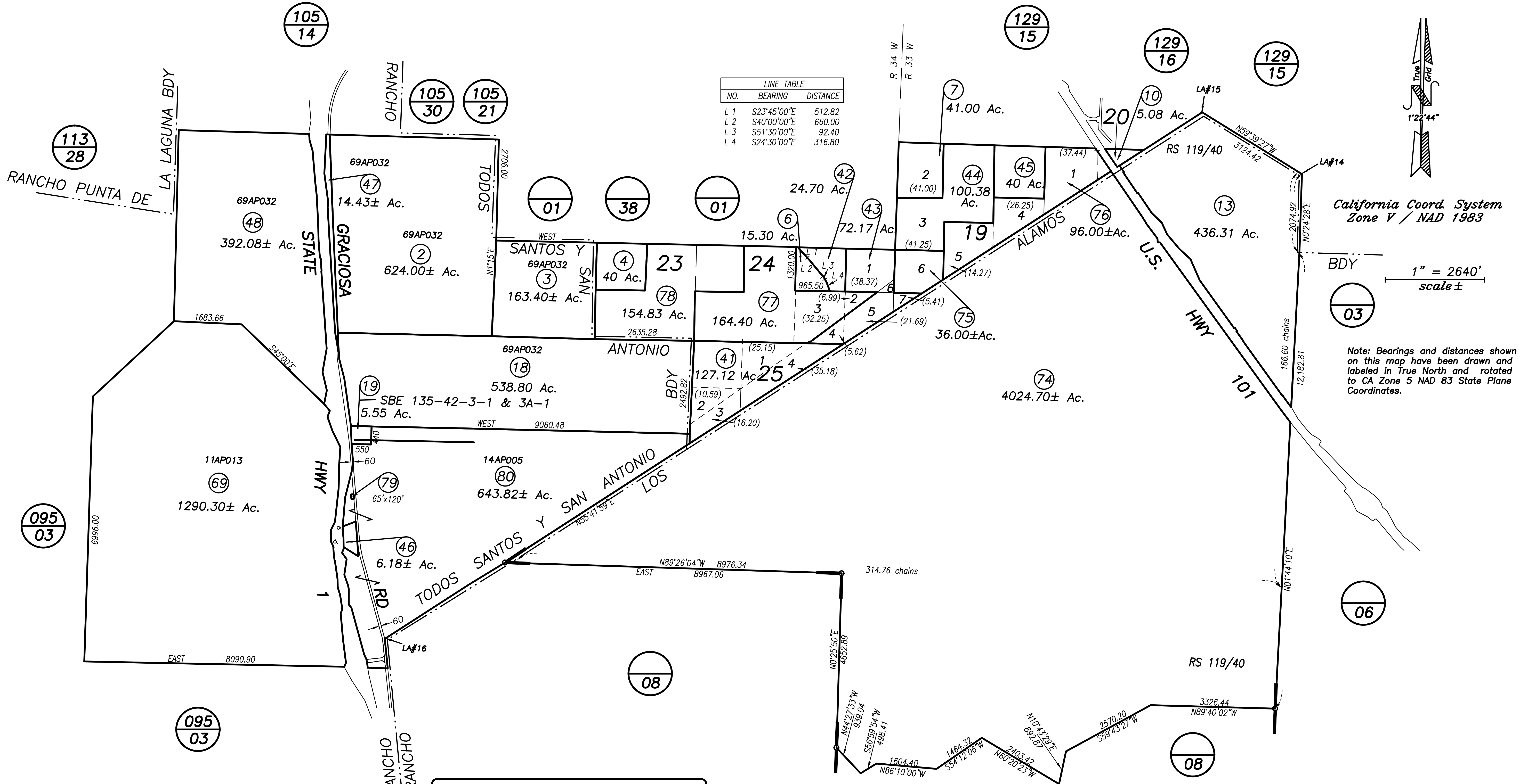
Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	than normal risk.		conform to the requirements set forth in Chapter 70 of the California Building Code and the County Grading and Building Codes, which include, but are not limited to the following: a) Areas to be graded at the Project Site shall be cleared of unsuitable materials and graded to provide a firm base for compacted fill, as applicable. Ground surfaces to receive compacted fill shall be prepared by removing organics, rubble, debris, existing disturbed fill, artificial fill, unconsolidated materials, and soft or disturbed soils. Removal of unconsolidated materials would likely include several feet of over-excavation. b) All fill materials shall be placed in uniform lifts not exceeding 8 inches in its loose state and compacted to a minimum of 90 percent relative compaction, as determined by the latest ASTM Test Designation D-1557. c) Cut slopes in soil shall be completed no steeper than 2:1 (horizontal:vertical); cut slopes in bedrock shall be completed no steeper than 1:1; and fill slopes shall be completed no steeper than 1.5:1, unless otherwise indicated by a Certified Engineering Geologist. d) Surface runoff shall be directed away from slopes and foundations and collected in ditches or drainage swales, via non-erodible engineered drainage devices. Fill slopes and stability fills, as applicable, shall be provided with subsurface drainage for stability. GEO-1d Post-Earthquake Inspection. The Applicant shall inspect all Project-related facilities, equipment, and pipelines for damage immediately following any perceptible (i.e., felt by humans) seismic event. In the event that damage or leaks are observed, such equipment shall immediately cease operations.
GEO.2	Potential Slope Failure. Project grading would not occur on slopes in excess of 20 percent; however, potential seep can construction may occur on slopes in excess of 20 percent.	II	GEO-2a Geologic Monitoring. In the event that a new oil seep is discovered on a slope exceeding a 20 percent grade, a Certified Engineering Geologist, ~~Engineering Geologist and~~or and a licensed Geotechnical Engineer shall evaluate the geologic conditions in the vicinity of the seep for indications of potential slope instability. The geologist shall coordinate with the Applicant in determining a route to the proposed seep can location that would result in the least potential for erosion and slope instability. The geologist shall make recommendations to monitor and minimize slope instability, including construction of surface water diversionary features, installation of crack monitoring devices and slope inclinometers in coordination with DOGGR, as necessary, to further monitor and minimize slope instability. GEO-2b Supplemental Pollution Control Plan. Mitigation Measure GEO-~~5~~2a shall be added to the proposed Supplemental Pollution Control Plan, which sets forth procedures and protocols for monitoring, assessing, controlling, and reporting seeps occurring at the Project Site.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
4.7 Fire Protection and Emergency Response			
FIRE.1	The Project would introduce additional equipment and crude oil production into the Orcutt Oil Field, which could introduce additional fire protection issues related to equipment spacing, defensible space or emergency response.	III	No mitigation measures are required since the impact would be less than significant.
4.8 Hydrology and Water Quality			
WR.1	Potential Construction Impacts to Creeks. Project grading, oil production infrastructure construction, and oil pipeline construction, and excavations for potential new oil seeps could degrade surface water quality.	II	WR-1a Implementation of erosion control measures, including preservation of existing vegetation (where possible), earth dikes and drainage swales, velocity dissipation devices, slope drains, silt fences, fiber rolls, and gravel bag berms. WR-1b Implementation of BMPs, including stabilized construction entrance/exit, exit tire wash, wind erosion control, stockpile management, controlled areas for vehicle and equipment cleaning, fueling, and maintenance; specifications for concrete curing and finishing; proper hazardous materials storage and use; spill prevention and control; and control of solid waste, hazardous waste, sanitary/septic waste, and liquid waste. WR-1c The SWPPP would be assigned authority by the contractor to mobilize crews in order to make immediate repairs to the control measures. The SWPPP would require the contractor to assure all of the necessary corrections/repairs are made immediately and that the Project complies with the SWPPP, the construction permit, and approved plans at all times. A Notice of Discharge and reports of illicit connections or illegal discharges would be required under the NPDES. WR-1d The SWPPP would include implementation of non-storm water management and materials/waste management activities, including monitoring discharges (dewatering, diversion devices), general site cleanup, spill control, and ensuring that no materials other than stormwater are discharged in quantities that would have an adverse effect on receiving waters.
WR.2	Potential Seeps/Surface Expression of Oil.	I	See Mitigation Measure BIO-3.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	Oil seeps and surface expressions are possible as a result of steam injection and could impact hydrological resources.		
WR.3	Potential Facilities Leaks and Impacts to Nearby Waterways and offsite ground water. A rupture or leak from the PCEC oil production facilities and pipelines could substantially degrade surface or groundwater quality.	I	WR-3 Pipeline and Valve Leak/Integrity Surveillance and Testing. The SPCC shall be updated to include periodic leak and integrity testing and surveillance of oil gathering lines, the pipeline connecting the tank battery to the existing Oil Sales Pipeline and the Oil Sales Pipeline, where operated by PCEC. In accordance with the SPCC Guidance for Regional Inspectors impracticability determination provision (U.S. EPA ~~2005~~2013), pipeline and valve integrity testing shall be completed in accordance with appropriate industry standards, which shall include a more stringent leak testing schedule than would be required if secondary containment were in place. In addition, the leak testing schedule for the pipeline connecting the tank battery to the Oil Sales Pipeline and the Oil Sales Pipeline shall be more stringent than the schedule for the onsite oil gathering lines, as this pipeline would contain higher volumes of oil. The program shall include 1) daily visual monitoring of all pipelines; 2) Monthly visual inspections for all pipelines and tank farm components including corrosion; 3) Integrity testing of new lines; 4) Integrity testing after line failure requiring repair or replacement or any leak.
WR.4	Water Supply Impacts. Project operations would primarily be limited by availability of water for steam production.	III	No mitigation measures are required since the impact would be less than significant.
4.9 Energy and Mineral Resources			
None were identified.			
4.10 Land Use/Recreation			
LU.1	The proposed Project would not conflict with existing land uses or land use plans, policies, regulations, or habitat conservation plans.	III	No mitigation measures are required since the impact would be less than significant.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
4.11 Transportation			
TR.1	The proposed Project would not significantly impact existing traffic circulation or increase existing traffic hazards.	III	No mitigation measures are required since the impact would be less than significant
4.12 Public Services & Utilities			
None were identified.			

POR. RANCHOS LOS ALAMOS & TODOS SANTOS Y SAN ANTONIO
POR. T9N R33 & 34W SBB&M



105
14
RANCHO
105
30
105
21
129
15
129
16
129
15
113
28
RANCHO PUNTA DE
LA LAGUNA BDY
STATE
GRACIOSA
HWY
1
RD
TODOS
SANTOS Y
SAN
ANTONIO
BDY
WEST
69AP032
47
14.43± Ac.
48
392.08± Ac.
2
624.00± Ac.
3
163.40± Ac.
01
38
01
4
40 Ac.
23
24
78
154.83 Ac.
77
164.40 Ac.
6
15.30 Ac.
42
24.70 Ac.
43
72.17 Ac.
7
41.00 Ac.
44
100.38 Ac.
45
40 Ac.
19
20
10
5.08 Ac.
76
96.00±Ac.
75
36.00±Ac.
13
436.31 Ac.
74
4024.70± Ac.
18
538.80 Ac.
19
SBE 135-42-3-1 & 3A-1
5.55 Ac.
41
127.12 Ac.
25
11AP013
69
1290.30± Ac.
14AP005
80
643.82± Ac.
79
65'x120'
46
6.18± Ac.
TODOS SANTOS Y SAN ANTONIO
LOS
ALAMOS
U.S. HWY 101
R 34 W
R 33 W
LA#15
LA#14
LA#16
RS 119/40
N59°39'27"W
3124.42
2074.92
N0°24'28"E
BDY
12,182.81
166.60 chains
N01°44'10"E
N89°26'04"W 8976.34
EAST 8967.06
314.76 chains
N0°25'50"E
4652.89
N44°27'33"W
939.04
S56°59'54"W
498.41
1604.40
N86°10'00"W
1464.32
S54°12'06"W
2403.42
N60°20'23"W
N10°43'29"E
892.87
2570.20
S59°43'27"W
3326.44
N89°40'02"W
EAST 8090.90
6996.00
1683.66
S45°00'E
WEST 9060.48
2635.28
2706.00
2492.82
1320.00
965.50
N1°15'E
N55°41'59"E
60
550
440
California Coord. System
Zone V / NAD 1983
1" = 2640'
scale±
True
Grid
1°22'44"
03
06
08
08
095
03
095
03
RANCHO
RANCHO
Note: Bearings and distances shown on this map have been drawn and labeled in True North and rotated to CA Zone 5 NAD 83 State Plane Coordinates.

LINE TABLE

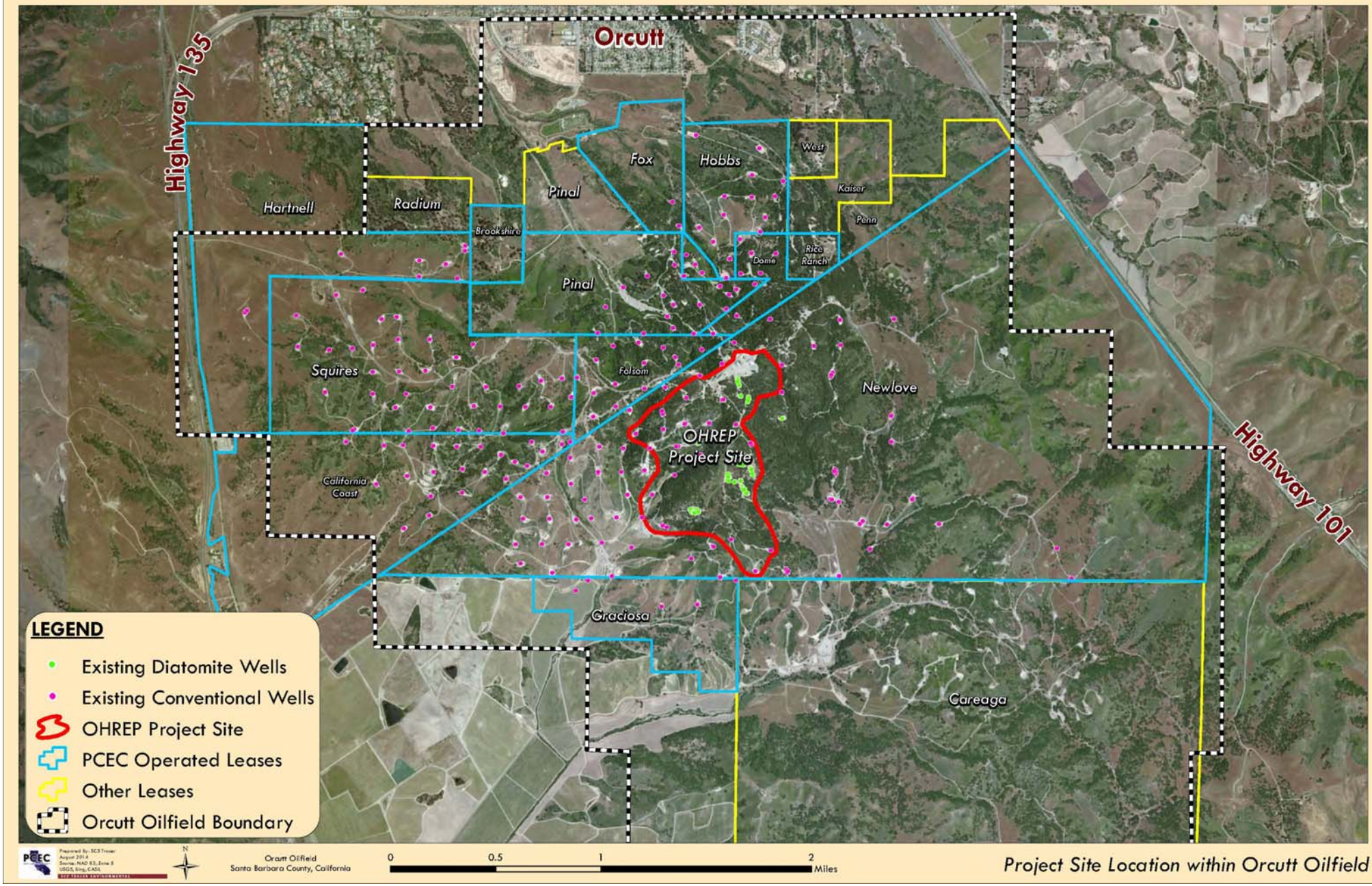
NO.	BEARING	DISTANCE
L 1	S23°45'00"E	512.82
L 2	S40°00'00"E	660.00
L 3	S51°30'00"E	92.40
L 4	S24°30'00"E	316.80

NOTICE

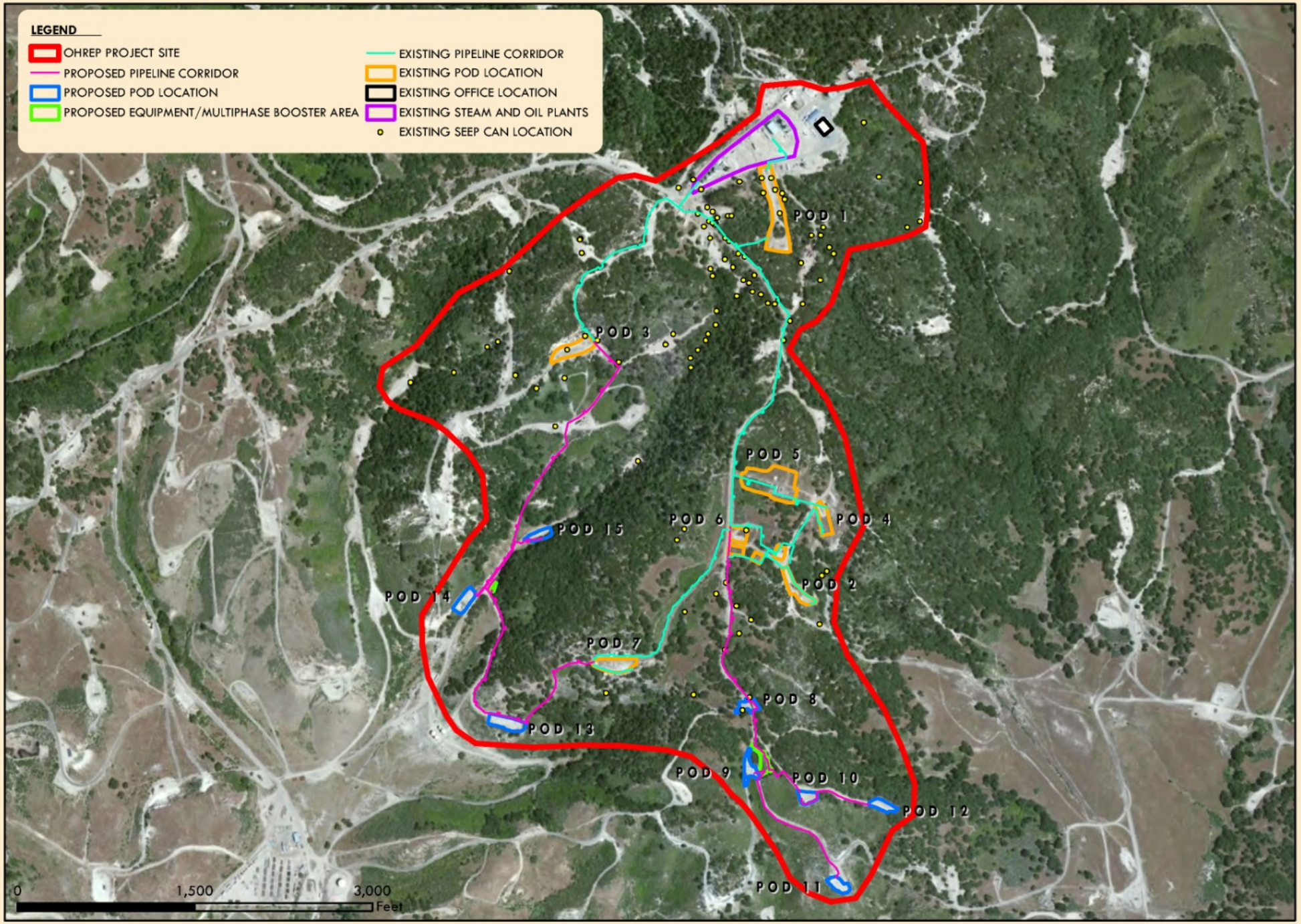
Assessor Parcels are for tax assessment purposes only and do not indicate either parcel legality or a valid building site.

Assessor's Map Bk, 101–Pg, 02
County of Santa Barbara, Calif.

LD/15 — 70 into 79 & 80
80, Ag Contract Replacement



Project Site Location within Orcutt Oilfield



PCEC

USGS science for a changing world

CAL-ATLAS

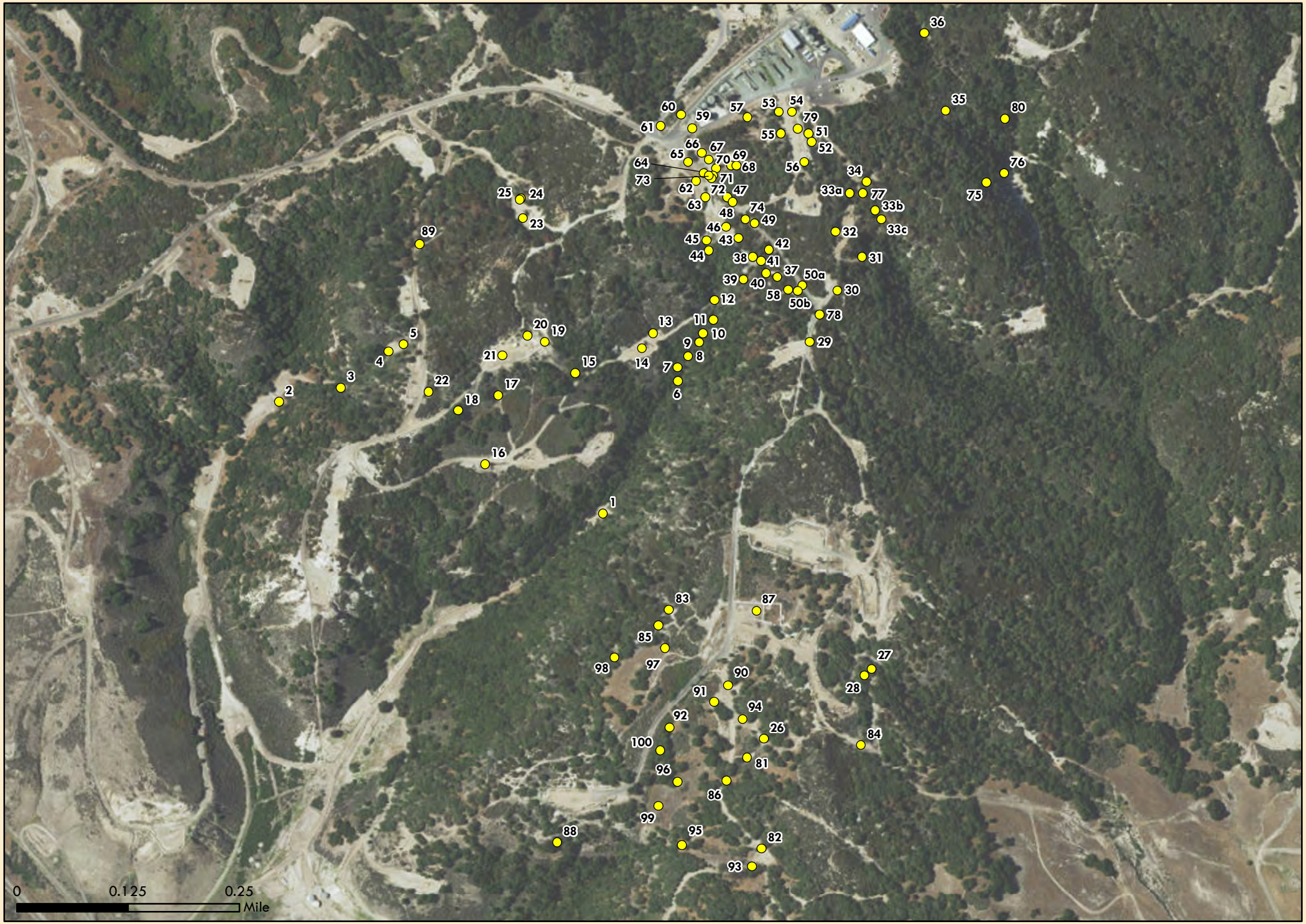
SCS TRACER ENVIRONMENTAL

PREPARED BY SCS TRACER
JANUARY 2015
GCS, NAD 83
SOURCE: USGS, CASIL

PACIFIC COAST ENERGY COMPANY
ORCUTT OILFIELD
SANTA BARBARA COUNTY, CALIFORNIA

PROJECT SITE MAP

ORCUTT OILFIELD
ORCUTT HILL RESOURCE ENHANCEMENT PLAN



PCEC

USGS science for a changing world

CAL-ATLAS

PREPARED BY SCS TRACER
MARCH 2016
GCS, NAD 83
SOURCE: USGS, CASIL

SCS TRACER ENVIRONMENTAL

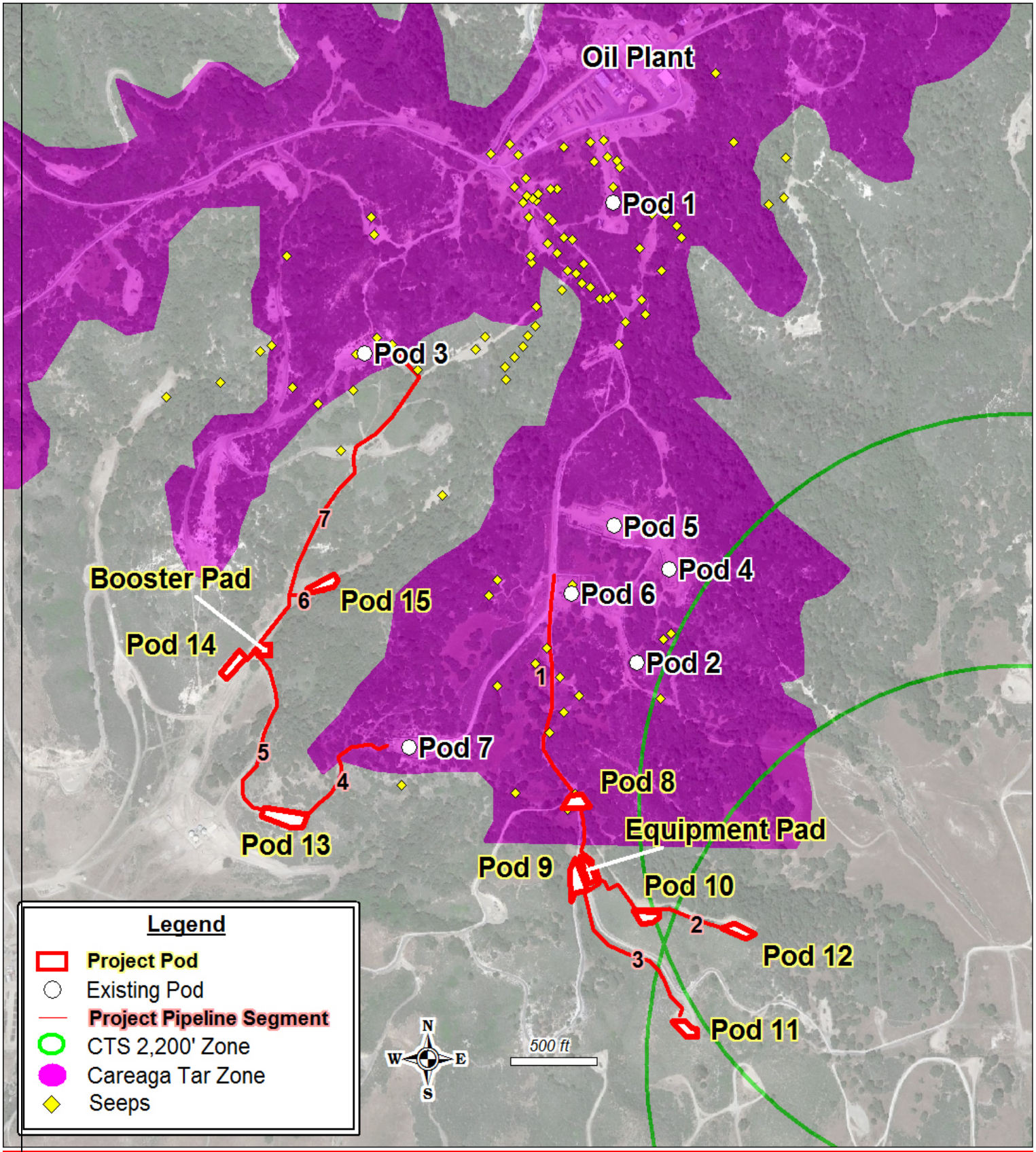
N
W E
S

PACIFIC COAST ENERGY COMPANY
ORCUTT OILFIELD
SANTA BARBARA COUNTY, CALIFORNIA

SEEP CAN LOCATION

EXISTING SEEP CAN LOCATIONS

ORCUTT OILFIELD
ORCUTT HILL RESOURCE ENHANCEMENT PLAN


Oil Plant
Pod 1
Pod 3
Pod 5
Pod 4
Pod 6
Pod 2
Pod 7
Pod 8
Pod 9
Pod 10
Pod 11
Pod 12
Pod 13
Pod 14
Pod 15
Booster Pad
Equipment Pad
1
2
3
4
5
6
7
Legend
Project Pod
Existing Pod
Project Pipeline Segment
CTS 2,200' Zone
Careaga Tar Zone
Seeps
N
W
E
S
500 ft

ATTACHMENT I

Project EIR

14EIR-00000-00001, SCH# 2014021025

http://www.sbcountyplanning.org/energy/projects/PCEC.asp