<u>CONDITIONS OF APPROVAL</u> CAREAGA AND CTS EXCLUSION PROJECT

1. **Proj Des-01 Project Description**. This Oil Drilling and Production Plan is based upon and limited to compliance with the project description, the Board of Supervisors hearing exhibits dated November 1, 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 follows¹:

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.

Because of the need to respond to and contain seeps promptly and limit impacts to the environment, it is anticipated that the Permittee and Planning & Development (P&D) will coordinate to ensure the conditions of approval below are implemented while allowing the Permittee to contain seeps in a timely manner. P&D may grant the Permittee verbal authorization to proceed with work prior to satisfying certain requirements in the conditions as determined appropriate by P&D.

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

¹ 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.

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

in size. The following table lists the approximate size for each pod.

Approximate Well Pod Size

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,

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.

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

Proposed Pipeline Corridors

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	

3

Construction Equipment

Backhoe

Lift	2
Crane – Stinger	1
A Frame Truck Crane	4
³ ⁄ ₄ 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	
Well Drilling Crane	1
Well Drilling Crane Drilling Rig	1
Well Drilling Crane Drilling Rig Workover Rig Abandon & ReDrill	1 1 1
Well Drilling Crane Drilling Rig Workover Rig Abandon & ReDrill Concrete Pump Truck	1 1 1 1 1
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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 Description	Quantity	
Project Equipment		
Wells	96	
AWT Manifold Packages	4	
Multiphase Booster Pumps	3	
Maintenance Equipment		
Super Sucker Truck	1	
Vacuum Truck	1	
³ ⁄ ₄ 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	

Equipment Summary

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

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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.

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

Existing Diatomite Equipment Summary

³ / ₄ 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 100 (number 80 is not used). Approximately 49 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.

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

Seep Can Emergency Permits

12EMP-00000-00008	82
12EMP-00000-00009	Relocation of 33
12EMP-00000-00012	83 & 84
14EMP-00000-00003	94
15EMP-00000-00001	95
15EMP-00000-00003	96
15EMP-00000-00008	97
15EMP-00000-00009	98
16EMP-00000-00005	99
16EMP-00000-00007	100

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).

Additional Project Features

- 1. <u>Project Labor Agreement</u>. PCEC has entered into a binding commitment with the California Building Trades that the Project will be covered by a Project Labor Agreement, ensuring high-paying, high quality union jobs for local families.
- 2. <u>Breeding Habitat Conservation for California Tiger Salamander ("CTS")</u>. The Habitat Restoration Plan required by Condition No. 7/MM Bio-1a will provide for the permanent conservation of CTS breeding habitat on Orcutt Hill within an approximately 21-acre area of CTS breeding habitat that includes a known breeding pond (ORCU-12) and a potential breeding pond located in close proximity to ORCU-12, which will provide benefit to the species. As required by Condition No. 7/MM Bio-1a, the Habitat Restoration Plan shall be approved by the County prior to issuance of Zoning Clearance.
- 3. <u>Funding for Important Lompoc yerba santa Research</u>. To benefit Lompoc yerba santa, PCEC has volunteered the following additional measure to be included in the Habitat Restoration Plan required by Condition No. 7/MM Bio-1a, which shall be approved by the County prior to issuance of Zoning Clearance. Payments will be made annually for five years by June 30th of each year:

"The Habitat Restoration Plan shall include funding in the amount of \$25,000/year for a period of five (5) years to support research to determine whether and to what extent

individual Lompoc yerba santa plants may be propagated to establish a new population in the wild. Any research project receiving such funding shall first be reviewed and approved by the County, U.S. Fish and Wildlife Service, and CDFW."

4. <u>Mitigation of Greenhouse Gas Emissions to Zero</u>. PCEC shall mitigate project GHG emissions down to zero; this is below the County CEQA threshold of significance of 1,000.

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 or direct all tank pressure relief to vapor recovery systems. The detection system shall be capable 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. 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 CO₂-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:

Using high efficiency pumps and electrical devices to reduce field-wide electrical use,
 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 that meet the requirements of the AB 32 Cap-and-Trade regulation protocols;

2) Credits that are generated and verified under the CAPCOA GHG Rx program;

3) Credits that are generated and verified under the voluntary SCAQMD Regulation XXVII;

4) Verified credits registered with the Climate Action Reserve or the American Carbon Registry.

As an alternative to mitigation Items 2, 3, and 4, the Owner/Permittee may be required to comply with the following mitigation requirement.

5) 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. This may include Credits generated within the County per an approved County protocol or credits generated within any Santa Barbara County Air Pollution Control District protocol

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 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 restoration plan shall include a 3:1 onsite replacement of all native habitats (including annual grasslands) impacted due to construction phase, oil seeps, surface expressions, oil seep management disturbances, and pipeline spills. 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 Monitoring all restoration sites will be the Owner/Permittee's species abundance. responsibility for a minimum of 5 years, or until the County judges all of the Project's longterm 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 County 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. P&D shall consult with USFWS and CDFW prior to approving the Habitat Restoration Plan. Monitoring: P&D 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 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. 54 for details of the EQAP program.

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- 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). 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. 54) 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 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 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 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 EOAP 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. 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 speciesspecific measures appropriate for mitigating impacts to local populations of special-status plant and 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 sitespecific procedures for collection, transportation and treatment of oiled wildlife, particularly for sensitive species. The Emergency Response Action Plan shall include procedures for timely reestablishment 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 for review. Plan Requirements and Timing: Surveys and wildlife salvage and relocation efforts shall be conducted prior to any ground disturbances or Applicant biologist shall submit a comprehensive annual report by vegetation removal. 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 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 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/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 specifically designed to mitigate for the direct impacts on the site from the use of the access road 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/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 from all Phase 2 and Phase 3 studies 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 Projectrelated 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. PCEC Orcutt Hill Resource Enhancement Plan 13PPP-00000-00001 Page 24

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 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-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. **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 <u>and CTS</u> **Exclusion.** This condition prohibits the Owner/Permittee from drilling wells through or underneath the Careaga Tar Zone <u>and from drilling wells within 2,200 feet of known or potential CTS breeding ponds</u>. 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. <u>Owner/Permittee shall drill no wells, including</u> "replacement wells" within 2,200 feet of known or potential CTS breeding ponds as shown on Figure 5-1 of the EIR. Drilling on Pods 8, 10, 11 and 12 shall be prohibited. **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 will 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 will 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. Department of Oil, Gas and Geothermal Resources (DOGGR) Notices to County.** Notifications related to seeps, surface expressions, oil spills or otherwise related to onsite operations provided by the applicant to DOGGR shall also simultaneously be provided to the County Planning & Development Department, Energy & Minerals Division.
- **44. 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.
- **45. 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.
- 46. 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.
- 47. 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

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consistent with their depiction on the final Lighting Plan.

48. 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

- **49. 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 preconstruction conditions. A form for such clearance is available from Planning and Development.
- **50. 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.
- **51. 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.
- **52. 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.
- **53. 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 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

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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.

- **54. 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.

55. 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
- **56. 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.

- **57. 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.
- **58. 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.
- **59. 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.
- **60. 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 or additional identified project impacts.