

PXP

Plains Exploration & Production Company

**Revisions to the Point Pedernales Field DPP
Tranquillon Ridge Field**

**Supporting Information Volume
Coastal Zone Consistency Analysis and Findings**

**Submitted to:
The Minerals Management Service
Pacific OCS Region**

**Submitted by:
Plains Exploration & Production Company**

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Address Inquiries To:

Mr. David Rose
Environmental Health and Safety Manager
Plains Exploration & Production Company
201 South Broadway
Orcutt, CA 93455
(805) 934-8220
drose@plainsxp.com

**COASTAL ZONE CONSISTENCY ANALYSIS AND FINDINGS
FOR THE
DEVELOPMENT OF THE TRANQUILLON RIDGE FIELD**

The oil and gas reserves from the Tranquillon Ridge Field will be developed from the existing Point Pedernales platform—Platform Irene. The only modifications that would be required would be the replacement of three 600-hp electrical shipping pumps with three 1,250-hp electrical shipping pumps; possible installation of submersible pumps on some of the new wells; and installation of a 1,600-hp electric pump for muds handling. Electrical transformer and switchgear upgrades will be ongoing.

All of the wells will be directionally drilled using existing well slots on the platforms. Drilling of the Tranquillon Ridge wells is expected to last five years with production lasting 15 years.

Plains Exploration & Production Company (PXP), operator of the Point Pedernales project, is proposing to drill development wells from Platform Irene. The proposal is to drill a maximum of seventeen wells (14 producing and 3 injection wells). However, it should be noted that the number of wells needed to develop the reserves on the Tranquillon Ridge Field will not be known until the first few development wells have been completed, placed on production, and evaluated.

All the production from the Tranquillon Ridge Field will be combined with the Point Pedernales Field oil and gas and transported to the Lompoc Oil and Gas Plant (LOGP) in the existing pipelines. From LOGP, the combined oil production from the Tranquillon Ridge Field and the Point Pedernales Field will be transported to the Santa Maria Refinery via pipeline. The combined gas production will either be sold and transported via pipeline or used as fuel at the LOGP.

In brief, the development and production of oil and gas reserves from the Tranquillon Ridge Field will be accomplished by drilling extended reach wells from the existing Platform Irene using existing wells slots, pipelines, equipment and facilities. The total number of wells drilled for the Point Pedernales Field and the Tranquillon Ridge Field will be less than the number of wells originally anticipated and approved for the Point Pedernales Field alone.

The proposed development activities for the Tranquillon Ridge Field, which are described in detail in the Revisions to the Point Pedernales Field Development and Production Plan (DPP) and the Supporting Information Volume, are consistent with the policies of the California Coastal Management Program. The proposed activities will be conducted in a manner to ensure conformity with that program. The development of the Tranquillon Ridge Field will use existing onshore and offshore facilities. This will ensure minimum impact on the environment while producing a needed domestic energy source. Each of the applicable California Coastal Zone Management Plan policies, as set forth in the California Coastal Act, are hereinafter stated and evaluated relative to the development activities proposed for the Tranquillon Ridge Field.

Based upon the evaluation included in this document, along with the information presented in the DPP revision document and the supporting information, the proposed development activities complies with the State of California’s approved coastal management program and will be conducted in a manner consistent with such program.

Section 30211-PUBLIC ACCESS

Development shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Assessment

Development of the Tranquillon Ridge Field will not involve the construction of any new onshore or offshore facilities that would interfere with the public’s right of access to the sea. The drilling and operational phases of the project would increase local road traffic but would not change the Level of Service (LOS) of any roadways. None of the trucking activities to Port Hueneme will interfere with the public’s right of access to the sea.

Finding

The proposed project would not provide new public access, nor will it interfere with existing access. The proposed project is consistent with this section of the Coastal Act because the project will not interfere with the public’s right to access.

Section 30230-MARINE RESOURCES; MAINTANANCE, and 30231-BIOLOGICAL PRODUCTIVITY; WASTE WATER

30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economical significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Assessment

The entire Santa Barbara Channel and Santa Maria Basin area contains a large number of important marine resources. The Marine Biology Section of the October 2006 Tranquillon Ridge EIR describes in detail the seabirds, marine mammals, fish resources, and other flora and fauna of the area.

The development of the Tranquillon Ridge Field will not require any new offshore structures or facilities. The development will occur from the existing Point Pedernales Platform (Platform Irene). This Platform has had a moderate biological impact, creating additional habitat and a localized increase in the number of fish and other marine organisms. The marine resources that have been documented at Platform Irene is discussed in the Marine Biology Section of the October 2006 Tranquillon Ridge EIR. The presence of Platform Irene has resulted in increased fish production and this effect is considered to be beneficial.

The development of the Tranquillon Ridge Field will not result in any increase in sanitary waste discharges or brine from the desalinization unit. Both of these discharges are subject to and comply with the existing EPA NPDES permit conditions. All discharge points on the Outer Continental Shelf are located further than 3,280 feet (1,000 m) seaward of the State 3-mile (5 km) boundary and will not affect the water quality or biological productivity of the State's waters.

The development of the Tranquillon Ridge Field may result in additional produced water discharges at Platform Irene. Currently produced water from Platform Irene is reinjected into the onshore Lompoc Oil Field and the offshore Point Pedernales Field. However, Platform Irene holds a valid NPDES permit that allows for the ocean discharge of produced water. In the future, produced water could be ocean discharged from Platform Irene in accordance with their existing NPDES permit. The volume of produced water associated with the Tranquillon Ridge Field will be no greater than the volume of produced water currently being produced by production from the Point Pedernales Field. The peak produced water production from the Point Pedernales Field is projected to be approximately 85,000 bbls per day. With the development of the Tranquillon Ridge Field the projected peak produced water production from Platform Irene is not expected to exceed 85,000 bbls per day. With the proposed project a maximum of 40,000 bbls per day of produced water would be returned to Platform Irene for injection or ocean disposal.

If the produced water is discharged from the Platform Irene, it would only be expected to create a minor, localized impact in the vicinity of the discharge point by increasing the concentration of such constituents as suspended solids/turbidity, oxygen demand, oil and grease, and trace metals. Any concentration of materials above normal background levels is diluted rapidly by waves and currents. All produced water discharges are subject to and comply with the existing NPDES permit requirements.

The October 2006 Tranquillon Ridge EIR presents the result of produced water modeling, which shows that the NPDES permit discharge limits are met within 20 meters of the discharge point, and that there would be a 50 fold dilution at 100-meters. Based upon the modeling results, the addition of the produced water from the Tranquillon Ridge Field is not expected to change the localized area of impact, which is in the vicinity of the discharge point.

All solid wastes generated aboard the platform, with the exception of washed drill cuttings and drilling muds, will be collected and disposed of at appropriate onshore facilities in accordance with EPA and local disposal permit conditions.

Oil contaminated solids, spent oils, solvents, etc. will be containerized, transported onshore and disposed of in an appropriate disposal site or as specified in the local disposal permit. Produced water, along with any other drainage water containing oil, will be shipped ashore with the oil/water emulsion for processing at the LOGP.

The U.S. EPA and the MMS strictly regulate discharges into the marine environment, including the discharge of drilling muds and cuttings. The ocean disposal of oil contaminated waste is prohibited. The proposed surface locations for the wells (Platform Irene) are beyond 3,280 feet (1,000 m) of State waters; according to a policy established by the Commission in 1980, discharges of drilling muds and cuttings from operations conducted more than 3,280 feet (1,000 m) from the State's 3-mile (5 km) boundary do not affect the coastal zone.

A discussion of the impacts of washed mud and cuttings disposal is included in the October 2006 Tranquillon Ridge EIR. In summary, there is much documentation that supports the fact that most water based drilling muds (the type anticipated for this project) are relatively nontoxic to marine organisms. The discharges of washed muds and cuttings will not result in any long-term adverse impacts to the biological productivity of communities within the area of discharge or nearby vicinity, with the exception of the burial of benthic organisms in the immediate area of discharge; however, the areas subject to burial should experience only short-term impacts.

The effects of drilling mud and drill cuttings discharged at the Point Arguello Platforms on neighboring hard-bottom epifauna were studied in detail during the comprehensive California Monitoring Program (CAMP) Phases II and III, which lasted from 1986 to 1995. The final conclusion provided in the Phase III report was that platform discharges have not caused changes to nearby hard-bottom communities. Equal numbers of positive and negative effects were indicated for dominant taxa, and there was no consistent pattern of response for a single taxon over the three habitat types (deep high and low relief, and shallow low relief). Statistical tests concluded that the cumulative distribution of responses could have been due to chance alone. Based on the results of CAMP Phases II and III, adverse impacts to hard-bottom epibiota as a result of drilling mud and drill cuttings discharges from the proposed development of the Tranquillon Ridge Field are not expected to occur.

The release of drilling muds and cuttings will produce a displacement of sediment and localized turbidity in the vicinity of the platform. The sediment effects are physical in nature, as only "clean" cuttings and drilling muds are to be discharged into the surrounding waters in accordance with existing NPDES permits.

The literature indicates that while marine mammals hear man-made noises and sounds generated by vessels, there is no indication that they are affected deleteriously by the noise (Richardson *et al.*, 1995). Because noise and vessel sounds generated from this project are highly localized and short-term in nature, adverse impacts to marine mammals from noise are not expected. The literature indicates that some species such as dolphins may be attracted to vessels, but the majority will maintain distances of 100-200 m. As described in the October 2006 Tranquillon Ridge EIR, supply vessels, although unlikely, may collide with marine mammals.

Richardson et al. (1995) cite only a single source of information on the levels of noise produced by platform-based drilling activities. Gales (1982) recorded noise produced by one drilling and three drilling and production platforms offshore California. The noise produced was so weak that they were nearly undetectable even along side the platform in sea states of Beaufort 3 or better. No sound levels were computed, but the strongest received tones were very low frequency, about 5 Hz, at 119-127 dB re 1 μ Pa. The highest frequency recorded was about 1.2 Hz. Richardson et al. (1995) predicted that the radii of audibility for baleen whales for production platform noise would be about 2.5 km in nearshore waters and 2 km near the shelf break (MMS 2000).

For gray whales of the coast of central California, Malme et al. (1984) recorded a 50-percent response threshold to playback at 123 dB re 1 μ Pa. This is well within 100m in both the nearshore and shelf-break waters. Therefore, the predicted radius of response for gray whales, and most likely other baleen whales, would also be less than 100m. Richardson predicted similar radii of response for odontocetes and pinnipeds (MMS 2000). As such, noise impacts to marine mammals would be limited to within 100m of the platform.

Finding

The proposed activities are consistent with the enumerated policies for the following reasons:

1. Compliance with MMS regulations (prohibiting ocean dumping of muds containing toxic compounds), EPA and State NPDES permit requirements.
2. The effects of drill cuttings disposal are limited to: 1) localized smothering of less mobile elements of the benthic epifauna and infauna at the base of the drilling platforms and on the lower portions of the structures, and attendant reduction of available food to animals at higher trophic levels; and 2) a temporary increase in water turbidity and consequent reduction of light for plant photosynthesis. Based upon the marine surveys that have been conducted around Platform Irene, the discharge of the cuttings associated with the drilling of the Point Pedernales Unit wells does not appear to have affected the marine life. The discharge of drilling muds at the platform site will not affect marine resources and productivity within coastal State waters.
3. Currently the produced water from Platform Irene is reinjected into the onshore Lompoc Oil Field and offshore into the Point Pedernales Field. In the future, the produced water, separated from the crude oil, could be sent to water treatment facilities for oil removal at the LOGP. Treatment would consist of a skim tank for removal of oil and suspended solids by gravity separation. The water would then be passed through flotation cells to remove suspended oil. The clean water would then be returned to the platform and discharged to the ocean. The oil concentration in the clean discharged water would meet EPA issued NPDES requirements.

Section 30232-OIL AND HAZARDOUS SUBSTANCE SPILLS

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Assessment

The development of the Tranquillon Ridge Field will result in a slight increase in the risk of an oil spill originating in Federal and State waters and onshore locations over what exists today for the Point Pedernales Field production. The Risk of Upset/Hazardous Materials section of the October 2006 Tranquillon Ridge EIR provides a discussion of the oil spill risk associated with the proposed development project.

Increased activities offshore would increase the probability of spills. Also, an increase in the oil percentages in the pipeline would increase the amount of oil that could be spilled into the marine environment if a spill occurs. In addition, the longer life associated with Platform Irene and the Platform Irene to LOGP pipeline would increase the probabilities of a spill over the facility lifetime.

The maximum spill volume for the offshore facilities would increase from 2,868 bbls of oil to 6,718 bbls of oil. This increase is due to the increase in the fraction of oil in the emulsion pipeline over the current operations. However, this is well less than the 18,000 bbls that was assumed in the 1985 Point Pedernales EIR/EIS. The 1985 EIR/EIS has a higher maximum spill volume due to higher throughput through the emulsion pipeline and a much higher oil water ratio in the pipeline.

Development of the Tranquillon Ridge Field would result in an increased throughput of oil and would extend the life over which the oil emulsion pipeline would operate. Currently, to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented and a Supervisory Control and Data Acquisition System is in place to monitor the pipeline. In addition, secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An Oil Spill Contingency Plan is also in place to address response to, clean up of, and restoration of, spill affected areas.

Potential spills could be associated with the platform and the on and offshore pipelines. Protection against the spillage of crude oil is a routine part of PXP's operations. An Oil Spill Response Plan for Platform Irene has been developed, and submitted to and approved by the MMS, which describes the measures that will be taken in the event of an oil spill and the personnel and equipment available to implement spill containment and cleanup procedures. The basic procedure for a spill is to immediately ensure personnel safety, stop the pollutant flow, begin the containment and cleanup procedure, and contact designated company personnel and Government agencies. The platform personnel would conduct the initial response activity. For a spill beyond the capability of the platform personnel and equipment, the primary sources of assistance would be the industry-sponsored spill containment cooperative - Clean Seas.

Additional information on the oil spill equipment and response can be found in the Oil Spill Response Plan that has been submitted to and approved by the MMS.

Further, a comprehensive study was conducted on the life expectancy of the project pipelines. The study was presented to and accepted by SBCED and their consulting engineer. It evaluated corrosion monitoring, control programs and maintenance programs. The findings of the study showed that the pipelines have an expected life, assuming no human interventions for repairs, of greater than 200 years. The investigation concluded the present program for corrosion control and monitoring has demonstrated effectiveness in controlling the corrosion penetration rate to less than .239 mils per year (mpy) for the oil line and .23 for the 8” water line and gas line for 2003 and 2004. This is better than industry standards.

The .239 mpy average gives a life expectancy, without pipeline repair or replacement of greater than 200 years for both the onshore and offshore segments of the 20” oil pipeline. The same parameters applied to the 8” water pipeline give a life expectancy of greater than 200 years for both the onshore and offshore segment.

Plains Exploration and Production (PXP) has expanded the corrosion control program and will ensure that the pipelines are maintained within acceptable corrosion penetration rates through their monitoring, corrosion inhibition and cleaning programs. In addition, periodic pipeline integrity reviews including SBCED and their consulting engineer, have been established to ensure the program is being followed.

Finding

The proposed activities are consistent with the policy to protect against oil spills because: 1) all possible protective measures have been taken to prevent accidental spills; and 2) in the unlikely event that an oil spill does occur, all available means will be implemented to mitigate its impacts and to ensure that it does not adversely impact the marine resources of the area.

Section 30234-COMMERCIAL FISHING AND RECREATIONAL BOATING FACILITIES

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Assessment

The drilling phase for development of the Tranquillon Ridge Field will involve vessel movements to and from Platform Irene and Port Hueneme. It is projected that approximately 22 supply boat trips per year above and beyond what is currently required to support the Point

Pedernales operations will be needed to support the drilling operations. The supply boats that will be used are the existing boats that service Platform Irene. Therefore, the development of the Tranquillon Ridge Field will not reduce commercial fishing or recreational boating harbor space at Port Hueneme. No additional supply boat trips above what is required for the Point Pedernales project will be needed once drilling is complete.

Findings

The proposed project will not compete with commercial or recreational vessels for available dock space or ancillary facilities and is therefore consistent with the policy stated above.

Section 30240-ENVIRONMENTALLY SENSITIVE HABITAT AREAS; ADJACENT DEVELOPMENTS

Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Assessment

The proposed development of the Tranquillon Ridge Field will occur from the existing Platform Irene. No new facilities will need to be built to accommodate the production. Platform Irene is not located within or reasonably near any identified environmentally sensitive habitat areas.

The proposed development could impact environmentally sensitive areas such as the Santa Ynez Estuary, Point Sal, and Point Conception in the unlikely event of a major oil spill occurring and reaching the shoreline. The impacts of an oil spill on sensitive biological communities in these areas are discussed in the October 2006 Tranquillon Ridge EIR. The peak oil production from the Platform Irene with the development of the Tranquillon Ridge Field is estimated to be approximately 30,000 bbls per day. This is slightly more than the peak oil production from the Point Pedernales Field, which was around 25,000 bbls per day, but less than the 80,000 bbls per day that was estimated in the 1986 EIR/EIS for the Point Pedernales Field. The Oil Spill Response Plan for the Platform Irene and pipelines defines the sensitive ecological areas within possible oil spill paths (determined from trajectory data) and delineates procedures to protect these areas from contamination.

Normal operation of seafloor pipelines would not impact sensitive habitat areas. Should an accidental spill occur, offshore kelp beds, rocky intertidal habitats and several public beaches could be adversely affected. PXP's Oil Spill Response Plan includes particular reference to these areas to help prevent spill impacts.

Findings

The proposed activities will be conducted so that adverse environmental impacts on important habitat areas will be avoided. The project is consistent with this policy because normal project activities will not impact any environmentally sensitive habitat areas in the general vicinity. Observing the requirements of the MMS, which require that immediate action be taken to minimize the impact on water and marine resources, would mitigate the impact of an oil spill or blowout.

Section 30244-ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Assessment

The development of the Tranquillon Ridge Field involves directional drilling from Platform Irene into California State Lands, using extended-reach technology. No impacts on cultural resources would occur because access to the wells would be entirely through underground approach, several thousand feet below the ocean floor. The development will not require the construction of any new offshore facilities. All offshore oil and gas production will be handled in existing facilities. As such, no activities associated with the proposed development would impact archaeological or paleontological resources.

Finding

The development of the Tranquillon Ridge Field is considered consistent with the enumerated policy because no new structures will be placed offshore, and as such, no offshore anomalies or sites would be affected.

Section 30251- SCENIC AND VISUAL QUALITIES

The scenic and visual qualities of coastal areas shall be considered and protected as resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Assessment

The development of the Tranquillon Ridge Field will not require the construction of any new offshore facilities. The development of the Tranquillon Ridge Field will be done using existing well slots on Platform Irene. As such, no activities associated with the development of the Tranquillon Ridge Field would change the existing scenic and visual qualities of the area.

Finding

The development of the Tranquillon Ridge Field is considered consistent with the enumerated policy because no new structures will be placed offshore, and therefore, there would be no change in the existing scenic and visual qualities of the area.

Section 30253-MINIMIZATION OF ADVERSE IMPACTS

New development shall:

1. Minimize risks to life and property in areas of high geologic, flood and fire hazard.
2. Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
3. Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.
4. Minimize energy consumption and vehicle miles traveled.
5. Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics are popular visitor destination points for recreational uses.

Assessment

The development of the Tranquillon Ridge Field will not require the construction of any new offshore facilities. The Tranquillon Ridge Field will be developed using existing well slots on Platform Irene. All oil and gas production will be handled in existing facilities. As such, no activities associated with the proposed development would affect areas of high geologic, flood or fire hazard. Since no new facilities are being proposed as part of development of the Tranquillon Ridge Field, there would be no new impacts to geologic stability, or the construction of protective devices that would alter natural landforms along bluffs and cliffs.

The proposed development of the Tranquillon Ridge Field will be covered by the existing Permits to Operate (PTOs) for the Point Pedernales facilities that have been issued by the Santa Barbara County Air Pollution Control District (SBCAPCD). Estimates of the emissions associated with the proposed development are provided in the Air Quality Section of the October 2006 Tranquillon Ridge EIR. All of the emissions associated with the development of the Tranquillon Ridge Field will be offset consistent with SBCAPCD rule and regulations.

Energy consumption will be minimized during the proposed activities by the use electrical power from the PG&E grid, which is supplied to the platform by a power cable. The project itself represents a net production of energy.

As discussed in the Traffic Section of the October 2006 Tranquillon Ridge EIR, the proposed activities will not constitute a major impact to transportation systems in the area or create a substantial increase in vehicle trips per day. The proposed project activities will not disrupt or affect any special communities or neighborhoods.

Finding

The proposed development of the Tranquillon Ridge Field is consistent with the goals and intent of the above policy for the following reasons:

1. Since no new offshore structures will be built as part of the proposed development, no project components will impact high geologic, flood or fire hazards.
2. The proposed development will occur from the existing Platform Irene. The platform structures have been designed to remain stable, even under maximum credible earthquake conditions. The platform has also been designed to withstand extreme oceanographic conditions.
3. The MMS and CSLC drilling rules, the MMS and CSLC approved drilling procedures that will be developed for the proposed wells and implementation of best available safety technology minimize the risk of blowout resulting from communication between a higher pressure strata and a lower pressure strata.
4. The development of the Tranquillon Ridge Field will use the existing pipelines associated with the Point Pedernales Field. These pipelines have been designed to minimize the risk of damage from geologic hazards and to ensure their structural integrity. The onshore pipelines were installed within or near existing right-of-ways and did not require the construction of new protective devices that substantially alter natural landforms along bluffs or cliffs.
5. The development of the Tranquillon Ridge Field will be covered under the existing PTOs for the Point Pedernales facilities that have been issued by the SBCAPCD. Air emissions associated with the proposed development will be offset consistent with SBCAPCD rules and regulations.
6. Energy consumption will be minimized during the proposed activities by use electrical power from the PG&E grid.
7. The Santa Barbara/Ventura Coastal areas provide a number of recreational opportunities that attract tourism to the region. The proposed project will be situated approximately 35 miles from the Channel Islands National Park, which provides a popular visitor destination for limited recreational use. Project activities will occur at a sufficient distance from the park to preclude any adverse impacts during normal activities. Recreational resources along the coastline will not be disrupted since there is no construction activities associated with the proposed project. No long-term effects on recreational opportunities are expected as a result of the development of the Tranquillon Ridge Field since all activities will occur from existing oil and gas development facilities.

Section 30260-INDUSTRIAL DEVELOPMENT; LOCATION OR EXPANSION

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if: (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Assessment

The development of the Tranquillon Ridge Field will not require the construction of any new facilities. The Tranquillon Ridge Field will be developed using existing well slots on Platform Irene. All oil and gas production will be handled in existing facilities with minor modifications. As such, the development of the Tranquillon Ridge Field will not result in and new or expanded industrial development over what exists today.

Finding

The development of the Tranquillon Ridge Field will not result in any new or expanded industrial development over what exists today.

Section 30262-OIL AND GAS DEVELOPMENT

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

- a. The development is performed safely and consistently with the geologic conditions of the well site.
- b. New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
- c. Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risk.
- d. Platforms or islands will not be sited where a substantial hazard of vessel traffic might result from the facility or related operations, determined in consultation with the USCG and the Army Corps of Engineers.

- e. Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.
- f. With respect to new facilities, all oilfield brines are reinjected into oil producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjection will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

Assessment

The development of the Tranquillon Ridge Field will not require the construction of any new facilities. The Tranquillon Ridge Field will be developed using existing well slots on Platform Irene. All oil and gas production will be handled in existing facilities with minor modifications. The proposed development of the Tranquillon Ridge Field will be fully integrated into existing oil and gas operating facilities. This represents that maximum possible use of consolidated facilities.

The use of subsea completions has been determined to be an infeasible alternative for the development of the Tranquillon Ridge Field. The use of subsea completions would serve to increase visual impacts because a drilling vessel would be required onsite during the 15 year drilling phase and frequently during the production phase to accomplish well workovers; and testing. The introduction of additional seafloor obstructions over a relatively large area would pose a greater impact to commercial fishermen than that resulting from the proposed use of existing offshore platforms. There is also more environmental risk associated with the use of subsea completions because they are not as accessible to control or service in case of a malfunction. In the case of the proposed project, artificial lift will be required to extract the resource, thus reducing the potential for using subsea completions.

The majority of the produced water is injected onshore at the Lompoc Oil Field with the remaining returned to Platform Irene for offshore injection. For the proposed development activities, a part of the produced water will continue to be transported offshore. This water will either be discharged to the ocean under the NPDES permit or injected offshore in accordance with the MMS authorization. Approximately 40,000 barrels per day (bpd) of water produced from Point Pedernales and Tranquillon Ridge combined will be shipped from the LOGP to Platform Irene for injection or ocean discharge. PXP is authorized to discharge to the ocean from the platform up to 153,000 bpd of water in accordance with the current NPDES permit. A part of the produced water that will be shipped to Platform Irene may still be injected into Point Pedernales reservoir wells, as is currently the operation. Offshore water injection will be conducted as authorized by the MMS.

Finding

The proposed activities are consistent with the enumerated policies for the following reasons:

The development of the Tranquillon Ridge Field will occur from the existing Platform Irene, which was designed and installed to meet all of the safety requirements. No new offshore structures will need to be built for the proposed development.

The casing and mud program for the project will use the best available safety technology to minimize the risk of a blowout resulting from communication between a higher pressure strata and a lower pressure strata. All wells will be drilled following MMS and CSLC approved drilling procedures.

The development of the Tranquillon Ridge Field will utilize existing facilities for the drilling, processing and transportation of the oil and gas production. This represents the maximum possible use of existing facilities.

Platform Irene, which will be used for the development of the Tranquillon Ridge Field, is located sufficiently clear of the northbound shipping lane of the designated VTSS. The platform was sited in accordance with the requirements of the U.S. Army Corps of Engineers and the U.S. Coast Guard.

Produced water will either be discharged to the ocean under the NPDES permit or injected onshore, or injected offshore in accordance with the MMS authorization.