-24-84

California Coastal Commission
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File Number:	CC-24-84.
Date Received:	6/29/84.
3-Month Period Ends:	9/29/84.
6-Month Period Ends:	12/29/84.
Staff:	E. Metz.
Hearing Date/Item:	11/28/84.
	13b.

NOTED-DUNAWAY

REGULAR CALENDAR

FINAL STAFF RECOMMENDATION
ON CONSISTENCY CERTIFICATION

PROJECT DESCRIPTION

Applicant for Federal Permit: Chevron U.S.A., Inc.

Project Location: Offshore Lease OCS P-0450, approximately 6.5 statute miles southwest of Point Arguello and 13.6 miles northwest of Point Conception (see Exhibit 1).

Project Description: One 56-slot drilling and production platform (Hidalgo) on Lease OCS P-0450; two subsea pipelines for carrying oil and gas approximately 4.8. statute miles from Platform Hidalgo to Chevron's Platform Hermosa. At Hermosa the oil and gas will enter consolidated pipelines that transport Pt. Arguello production to the consolidated onshore facilities at Gaviota.

Substantive File Documents: see Appendix 1.

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution, findings, and declarations:

I. CONCURRENCE

The Commission concurs with the Consistency Certification made by Chevron U.S.A., Inc. for its Development and Production Plan for OCS P-0450 because while the Development and Production Plan (DPP) affects the coastal zone, it does meet the policies of the approved California Coastal Management Program, and is therefore consistent with the CCMP. Specifically, the Commission finds that Chevron's proposed project includes adequate information to permit an assessment of its probable coastal zone effects, including cumulative impacts, and it complies with the enforceable policy requirements of Chapter 3 of the California Coastal Act (Public Resources Code Section 30000 et seq.). The Commission furthermore finds that the DPP implements the national interest as required by Chapter 11 of the CCMP and Sections 302 and 303 of the CZMA.

The findings and declarations that follow explain in detail: (1) the effects that this proposed activity has on the coastal zone where sufficient and adequate data have been submitted to so determine; and (2) how the activity is consistent with the specific mandatory provisions of the CCMP.

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. COMMISSION REVIEW OF DEVELOPMENT PLANS

A Development and Production Plan (DPP), which is prepared by an applicant for a federal permit, includes an Environmental Report describing environmental impacts and a technical drilling and production plan. Two federal laws govern the content and review of a DPP: (1) the Coastal Zone Management Act (CZMA); and (2) the Outer Continental Shelf Lands Act (OCSLA). THe Commission has the authority to review DPPs for consistency with the California Coastal Act because the federal government has approved the California Coastal Management Program (CCMP) under the CZMA. The Coastal Act policies are the enforceable standards of the CCMP. The Commission must act on DPPs within six months of their receipt.

Chevron has stated that it has applied, or will be applying for the federal licenses and permits listed below. Chevron certifies that the proposed activities described in the Development and Production Plan for Platform Hidalgo and its associated pipelines do not significantly affect any land or water use in the Coastal Zone in the State of California and are therefore consistent with the CCMP. By concurring in Chevron's certification, the Commission informs the Federal agencies listed below that Chevron's project is consistent with the CCMP.

Agency	Federal License or Permit
U.S. Minerals Management Service	Approval of the Development and Production Plan (DPP) and ER. Right-of-Way Approval for Pipeline.
U.S. Army Corps of Engineers	Platform and Pipeline Structure.
U.S. Environmental Protection Agency	NPDES Permit.
U.S. Coast Guard	Approval of Navigation Aids. Certificate of Financial Responsibility.
Federal Aviation Administration	Heliport.
Federal Communications Commission	Private Radio Licenses.

The MMS has determined that Chevron's project is a "major federal action" pursuant to the requirements of 30 CFR 250.34. Therefore, the MMS and the State jointly prepared an Environmental Impact Report/Statement EIR/S which considers the proposed offshore oil and gas development of the Point Arguello Field located in the lower Santa Maria Basin offshore Santa Barbara County, California, and the related processing of produced oil and gas at facilities proposed at Gaviota in Santa Barbara County. Platform Hidalgo and its associated pipelines are included in the EIR/S. The cumulative impacts resulting from all this development are discussed in

part D. 11., below. The EIR/S was certified by the Santa Barbara County Planning Commission on October 25, 1984 and has provided essential information for reviewing this project's compliance with the CCMP.

B. PROJECT DESCRIPTION AND HISTORY

Chevron U.S.A., Inc. proposes to expand development of the Point Arguello Field by installing Platform Hidalgo and two additional subsea oil and gas pipelines.

1. Platform Hidalgo-Summary:

- One 56-slot drilling and production platform (Hidalgo) on OCS Lease P-0450 in 430' of water, approximately 6.5 statute miles southwest of Point Arguello and 13.6 miles northwest of Point Conception; and

- Two subsea oil and gas connections between Platform Hidalgo and Platform Hermosa, the central platform in the Point Arguello Field. Pipelines from Platform Hermosa will transport the oil and gas to the consolidated Gaviota onshore facilities which are designed to accommodate Platform Hidalgo production estimates.

2. Previous Commission Consistency Concurrences for Point Arguello Development.

To date, the Commission has concurred in consistency certifications made by Chevron U.S.A. Inc. and Texaco U.S.A., Inc., for the following development in the Point Arguello Field.

a. Chevron's Platform Hermosa and Associated Facilities (CC-12-83):

- One 48-slot drilling and production platform (Hermosa) on OCS Lease P-0316 in 602 feet of water approximately 7.3 miles south of Point Arguello and 8.5 miles west of Point Conception;

- Two subsea oil and gas pipelines leading from Platform Hermosa to shore;

- Continuation of the oil and gas pipeline system onshore to processing facilities at Gaviota;

- New oil and gas processing facilities at Gaviota; and

- One ocean outfall pipeline terminating within state waters in the vicinity of the Getty Gaviota marine terminal.

b. Texaco's Platform Harvest and Associated Facilities (CC-27-83):

- One 50-slot drilling and production platform (Harvest) on OCS Lease P-0315 in 670 feet of water, approximately 11 miles west of Point Conception; and

- Two subsea oil and gas pipelines connecting Texaco's Platform Harvest to Chevron's Platform Hermosa.

3. Platform Hidalgo and Associated Pipelines.

Chevron U.S.A. Inc. and Phillips Petroleum Company are the co-lessees of OCS Lease P-0450. Chevron is the operator. Chevron has committed to transport its Point Arguello Field crude by a common carrier pipeline to its refinery. Chevron made this commitment when the Commission concurred in Chevron's consistency certification for Platform Hermosa on November 15, 1983 (CC-12-83). Chevron also committed to take the lead in constructing the pipeline if such a pipeline is not proposed by another company. The pipeline would be sized to handle all crude production from the Point Arguello field.

Phillips, as Chevron's partner in this DPP, has also committed to transporting its oil by pipeline to refineries on the Gulf Coast as soon as a pipeline is available. Phillips would consider sale or trade of all or part of its crude oil produced offshore California to California refineries who will use intrastate pipelines for delivery of the oil. If, in Phillips opinion, pipeline transportation does not provide a viable, economic, and competitive means of oil transportation, Phillips will request approval to use other modes of transportation as provided in the Santa Barbara County Coastal Zoning Section 35-154.5(i). Other modes of transportation can only be approved under this ordinance if pipeline transportation is found to be unreasonable, taking into account alternative transportation modes, economic costs, and environmental impacts.

Installation of Platform Hidalgo is expected to commence in April 1986. Oil production from Platform Hidalgo is expected to peak in 1992 at 20,000 barrels per day (BPD) with 10,000,000 standard cubic feet per day (10 MMSCF/D) of gas by 1996. Primary separation of produced gas, oil and water will occur at the platform utilizing three-phase separators. Hydrocarbon gas and an oil emulsion will be transported by separate subsea pipelines to Platform Hermosa where they will commingle with Hermosa's production and travel by submarine pipelines to proposed consolidated facilities at Gaviota. At Gaviota the oil will be heated and dehydrated and the gas will be treated and compressed. An ocean outfall pipeline terminating inside California State waters at Gaviota will dispose of produced water extracted during the onshore oil dehydration process.

When the reservoir from which Platform Hidalgo produces is depleted, the platform will be removed in accordance with the applicable MMS regulations. The structure will be disposed of or used as an artificial reef as dictated by the appropriate environmental engineering and economic restraints at the time. Ultimate disposition of the platform (i.e., salvage for scrap or salvage for placement as an artificial reef) will depend on various factors which must be addressed at that time.

C. COASTAL DEPENDENCY AND RELATION TO INDUSTRIAL DEVELOPMENT

Section 30101 of the Act defines a coastal dependent development or use as that which "... requires a site on, or adjacent to, the sea to be able to function at all." Ports, commercial fishing facilities, offshore oil and gas development, and mariculture are specifically mentioned in the Coastal Act as coastal dependent, although not all activities or facilities associated with such development would be considered coastal dependent uses. Coastal dependent developments are given priority over other development on or near the shoreline. In fact, the Coastal Act provides that a level of land and water access and service capacities must be reserved for coastal dependent uses that is not afforded non-coastal dependent or coastal related uses.

A special provision of the Act, Section 30260, provides for further consideration of coastal dependent industrial facilities even if they fail to meet the policies contained in Sections 30200-30255 of Chapter 3. Under Section 30260, a coastal dependent industrial facility may be permitted if: (1) there are no feasible less environmentally damaging locations for the project; (2) denial of or objection to the project would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible. Section 30260 therefore provides special standards for coastal dependent facilities that otherwise fail to satisfy Coastal Act requirements.

Offshore oil and gas extraction is by its very nature "coastal dependent" because the operations to develop the petroleum resources take place where the resources are located, underneath the sea. In this particular project, the Commission finds that the platform and the pipelines from Platform Hidalgo to Platform Hermosa are coastal dependent industrial facilities which must be evaluated under the considerations provided in Section 30260 of the Act.

D. COASTAL ACT ISSUES

1. Transportation of Crude Oil.

Section 30232 of the Coastal Act states that:

> 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.

Sections 30230 and 30231 of the Act require protection of the biological productivity of the marine environment, and Section 30253 requires protection of air quality. Section 30260 provides for possible approval of coastal dependent industrial facilities (which includes offshore oil and gas development) not otherwise consistent with Chapter 3 of the Coastal Act, if among other provisions, the adverse impacts are mitigated to the maximum extent feasible. Section 30262 requires consolidation to the maximum extent feasible and legally permissible of new or expanded oil and gas facilities. Taken individually or together, all of these Coastal Act provisions mandate the use of the most environmentally protective method of oil transportation.

The Commission has made detailed findings in past federal consistency actions which demonstrate the superiority of onshore pipeline transportation of crude over transportation by tanker because of the reduced risk of massive oil spills and reduced air pollutant emissions. These findings are supported by data from the Department of the Interior and the Council of Environmental Quality (1975), the Rand Corporation (1975), the State Lands Commission (1982), the Oil Spill Intelligence Report (1981), the U.S. Coast Guard (1981, 1982), the Department of the Interior (1983), the County of Santa Barbara (1984), and the All American Pipeline Company (1984) (see for example the Commission's findings for Exxon's Santa Ynez Unit [CC-7-83], Chevron's Platform Hermosa [CC-12-83], Texaco's Platform Eureka [CC-4-84], which are incorporated by reference). These findings demonstrate the environmental and economic advantages of pipeline transportation over the use of tankers.

a. Oil Spill Reduction Using Pipelines.

Recent information developed in the Santa Barbara County Oil Transportation Plan, the Exxon Environmental Impact Report/Statement (EIR/S) for the Santa Ynez Unit, the

Getty and Chevron/All American pipeline EIR/S, and the Oil Spill Intelligence Report all provide date which continues to support the Commission's conclusion that pipeline transportation is environmentally preferable to transportation of crude oil by tanker.

1) Santa Barbara County Oil Transportation Plan (OTP). Santa Barbara County conducted a detailed oil transportation study to determine the most environmentally preferable methods for storing, processing, and transporting oil produced from offshore oil operations. The Oil Transportation Plan (OTP) considers 63 different transportation alternatives which include a variety of combinations of pipelines, tankers, and railroads. These alternatives are based upon four general refining cases. After comparing the environmental impacts of spills from onshore pipelines vs. marine tanker spills, all of the preferred scenarios (ones with the least adverse environmental impacts) favored pipelines as the primary long term transportation method.

According to the OTP, an "extreme" (worst projected case) tanker accident could result in a spill as high as 500,000 barrels; the "extreme" oil spill from an onshore pipeline would be approximately 40,000 barrels. The OTP analysis compared impacts to wetlands, drainages, and groundwater supplies at risk from onshore pipeline spills to marine resources (such as estuaries, lagoons, and rocky intertidal areas) at risk from tanker spills. This analysis included a specific inventory of sensitive acres at risk in both cases. The study found that, in general, the impacts from marine tanker spills cause greater environmental damage. This fact, when combined with the possibility of an extreme 500,000 barrel tanker spill, clearly favors oil transportation by land pipeline.

The oil spill rates from the OTP have been challenged by some parties as being unreasonable. However, the authors have taken the precautions to assure that the spill rates, and environmental damage assessments are reasonable.

The OTP explicitly recognizes that:

> the Santa Barbara Channel has its own unique characteristics that would warrant using accident rates less than world wide averages and (the OTP) also tries to use more than just one technique to check the reasonableness of the results. (p.3-44, Oil Transportation Plan/FEIS)

For instance, the OTP included a sensitivity analysis for oil spills that assumed lower tanker grounding rates and improved mitigation of impacts to sensitive areas. Even when the impacts to sensitive habitats were reduced by a factor of four and the impacts to recreational user days were reduced by a factor of two, the results of the OTP analysis preferring land pipelines to tankers for oil transportation did not change.

2) Oil Spill Intelligence Report. Recent data published in the Oil Spill Intelligence Report (an international newsletter published by the Center for Short-Lived Phenomena and Cahners Publishing Company) documents an alarming trend of increase of oil spills during 1983, particularly from tankers. Worldwide oil spill data for 1982 listed 23.5 million gallons. The 1983 figure was 241.1 million gallons. This represents a 927% increase in oil spilled from 1982 to 1983. Of the total amount of oil spilled in 1983, 94.5% resulted from six tanker incidents. These tanker incidents represent a 3,282% increase in the tanker accident rates from 1982. Tanker spills resulted in approximately one-half of the oil spilled in 1983. The largest tanker incident involved the Spanish tanker Castillo de Bellver. The grounding and subsequent fire led to the loss of 78.5 million gallons of crude oil.

The spill data from 1984 has not been tabulated, but one of the largest to date is the Alvenus tanker spill which occured off the Galveston, Texas coastline. Over 50,000 barrels (2,100,000 gallons) of oil spilled was lost during this one incident.

These data demonstrate that oil spills are increasing and that extreme spills are resulting from tanker incidents. The data is consistent with the overall methodology and findings from the OTP. It provides further evidence that oil transportation by land pipeline is preferable to oil transportation by marine tanker.

b. Air Quality Advantages of Pipeline Transport.

The Petroleum Transportation Committee Phase II Report (June 1983) demonstrates the air quality advantages of pipelines over tankers. The document provides an excellent comparison of emissions that could be expected from pipelines in comparison to tanker loadings at marine terminals, as shown in the following table.

COMPARISON OF PIPELINE AND TANKER EMISSIONS

TRANSPORTATION MODE	EMISSIONS * (pounds per day on an average annual basis)				
	SO_2	NOx	TSP	CO	RHC
Tankers (assuming 0.5% sulfur fuel oil, 90% NOx control)	1285	372	540	698	3478
Pipelines (assuming 90% emission reduction and gas-fired pumps)	6	325	154	737	510

* Assumes 0.5% sulfur content in tanker fuel, use of gas-fired pipeline pumps, 90% control of NOx and RHC on pipeline and tankers, and 400,000 barrels per day throughput.

The table shows the higher emissions of sulfur dioxide, nitrogen oxide, total suspended particulates, and reactive hydrocarbons from tanker transport compared to transport by pipeline.

The conclusions of this analysis are consistent with those reached in earlier studies conducted by the Council of Environmental Quality (1975), the Rand Corporation (1975), and the more recent analysis for the California State Lands lease sale from Point Conception to Point Arguello. Pipelines present significant air quality advantages over the use of marine tanker loading options and are therefore the preferred method of transportation.

c. Pipeline Feasibility Considerations.

A significant amount of data has been developed in recent EIR/S and studies to indicate that pipelines are not only preferable, but feasible to construct and operate. Pipeline proposals have been made by the Celeron/All American Pipeline Company, Getty Oil Company, Arco/Four Corners, and the Pacific Texas Pipeline. These proposals include pipeline routes that will allow oil to be transported to Los Angeles and the Gulf Coast, and will improve oil distribution by pipeline to San Francisco.

1) Santa Barbara County Oil Transportation Plan (OTP). A major finding in the OTP states pipelines are economically feasible to construct and operate. This study considers existing and projected oil reserves, potential markets on the west and Gulf coasts, and the costs of constructing and operating pipelines.

2) Celeron/All American and Getty Pipeline EIR/S. A major finding in this document is that pipelines are feasible to construct and operate. Specifically the document states:

> This EIR/EIS has reviewed and analyzed those studies pertinent to the question of marine tanker transportation. The conclusion at this time is that oil can be moved to viable markets by pipeline at costs equal to or less than tankers.

This recently released report verifies the pipeline feasibility conclusions of the past studies. Put simply, pipelines are feasible to construct and operate and should be considered a viable alternative to the less preferable method of tankering.

d. Chevron's Proposal for Crude Oil Transportation.

Chevron has committed to transport its oil produced from the Point Arguello Field by a common carrier pipeline from Gaviota to El Segundo and has committed to take the lead to build such a pipeline if one is not proposed by another company (see Exhibit 2).

Such a Chevron built pipeline would be sized to handle all crude production from the Point Arguello field.

Prior to January 1, 1990, and absent the existence of a common carrier pipeline or a consolidated marine terminal, Chevron will use the Gaviota marine terminal as an interim facility to transport their Point Arguello oil by tanker to refinery centers. After January 1, 1990, the use of the Gaviota marine terminal, or a consolidated marine terminal if one exists, shall be restricted to temporary use only during pipeline or refinery interruptions beyond company control. These commitments substantially reduce the threat of oil spills during the transport of the crude oil. However, marine tankering of oil will still occur as an interim use until a pipeline has been built. For this reason, the Commission finds that Chevron's use of interim tankering is inconsistent with Sections 30230, 30231, 30232, and 30253 of the Act.

However, Chevron's commitments to transport its oil by pipeline and to build such a pipeline, if necessary, will help to avoid crude oil spills, to protect marine resources and to promote greater air quality. These assurances that a pipeline transportation system is feasible and will be made available by Chevron provides maximum feasible mitigation and consolidation for this portion of the project. Phillips Petroleum Company, as Chevron's partner in this project, has also committed to transporting its oil from California to the Gulf Coast by pipeline as soon as a pipeline is available (see Exhibit 3). Phillips would consider sale or trade of all or part of its crude oil produced offshore California to California refineries who will use intrastate pipelines for delivery of the oil. If, in Phillips' opinion, pipeline transportation does not provide a viable, economic, and competitive means of oil transportation, Phillips will request approval to use other modes of transportation as provided in the Santa Barbara County Coastal Zoning Section 35-154.5(i).

Both Chevron and Phillips have made firm commitments to transport Hidalgo crude by pipeline consistent with Coastal Act policies and the Santa Barbara County Zoning Ordinance 35-154.5(i). Therefore, the Commission finds that the transportation portion of the project is mitigated and consolidated to the maximum extent feasible and therefore is consistent with Section 30260.

2. Containment and Cleanup of Crude Oil Spills.

Section 30232 of the Coastal Act, cited previously, requires protection of the marine environment from any spilling of crude oil, gas petroleum products, or other hazardous substances. For any development or transportation of these materials, the section further requires "... Effective containment and cleanup facilities and procedures..." to be provided for spills that do occur.

The Commission interprets the word "effective" to mean that spill containment and recovery equipment must have the ability to keep oil off the coastline. Unfortunately, this equipment does not currently have the capability to clean up large oil spills in the open ocean. Spill clean up efforts could not keep oil off the beaches during the Ixtoc I oil spill in the Bahia de Campache, Mexico; the Amoco Cadiz spill off the coast of France; the 1969 Santa Barbara oil spill from Union's Platform A; or the Puerto Rican spill off San Francisco. Clean up of large spills is extremely difficult. A 1980 report from the International Tankers Owners Pollution Federation states:

> If a large volume of crude is released into the sea relatively close to shore, it's highly unlikely that even the best organized cleanup flotilla can prevent some, if not most, of the oil from reaching the coastline. The only real saviours of the beaches in the case of a major spill are favorable winds and currents which take the oil out to sea where it can be dispersed naturally.

This principle also holds true for any small oil spills in the open ocean. In 1977, for example, the Chevron tanker Manhattan spilled approximately 20 barrels at Chevron's El Segundo terminal, most of which contacted local beaches. While oil spill clean up equipment can function with about 50 percent recovery efficiencies in calm seas, recovery efficiencies are drastically reduced in moderate or rough seas, thus limiting or eliminating the ability of the equipment to recover oil. According to data from the National Climatic Center in Ashville, North Carolina, wave height conditions for the Point Arguello-Point Conception area exceed two feet 74 percent of the time. Waves exceed six feet 20 percent of the year and nine feet six percent of the year.

Thus, the Commission cannot find that the proposal is consistent with Section 30232 due to the limited effectiveness of existing oil spill equipment in open ocean conditions.

As found in part C. of this report, the platform and subsea pipelines components of the project are found to be coastal dependent industrial facilities and therefore are given additional consideration under Section 30260 of the Act. Oil spill containment and clean up equipment, including response time and contingency planning, associated with Platform Hidalgo and the pipelines to shore, must provide maximum feasible mitigation for the project to be consistent with Section 30260 of the Act.

a. Increased Risks of Oil Spills.

The construction and operation of the proposed platform and associated pipelines, and the loading of crude oil onto marine vessels from an existing or expanded marine terminal for transport to refineries significantly increases the risk of an oil spill in the Point Arguello-Point Conception/Santa Barbara Channel area. Chevron has proposed to use a pipeline for transporting crude oil to refineries, with marine terminal use during the interim period prior to the pipeline construction.

An oil spill could seriously affect marine resources. According to Chevron's Oil Spill Contingency Plan, oil spilled from Platform Hidalgo would move toward San Miguel Island from December through February. The rest of the year, oil would move toward Santa Cruz Island. However, drift bottle studies (1973) performed by the Scripps Institute of Technology have shown a tendency for oil movement north during some months, thus threatening the sea otter range. If oil does contact the islands or the sea otter range, the feathers of birds and the fur of marine mammals would be fouled. Birds, mammals, fish and invertebrates could ingest the oil. Both fouling and ingestion can result in the death of the animals. Commercial fish species could become oil-tainted and therefore could not be sold by the commercial fishermen. Depending on the extent of a spill, kelp beds, wetland areas, streams, and rocky intertidal areas could be damaged. The southern sea otter, an endangered species, is not now a resident of the area, but could move into the kelp beds in the future. The sea otter is especially susceptible to injury or death from oil contact. Therefore, it is essential that Chevron provide the maximum feasible mitigation measures for response to oil spills.

b. Oil Spill Containment Equipment and Response.

The Commission has determined in past permit and federal consistency certification decisions that the following oil spill containment and cleanup equipment must be located at the site of offshore drilling operations to help provide the first line of defense against oil spills:

- 1500 feet of oil spill containment boom capable of open ocean use;
- An oil recovery device (skimmer) capable of open ocean use;
- Oil storage capacity to handle skimmer throughput until the oil spill cooperative can arrive from shore with additional equipment;
- A boat located at the site of drilling operations or within 15 minutes of the site at all times; and
- Oil sorbent material capable of absorbing 15 barrels of crude oil.

To provide the maximum feasible response time with the most appropriate equipment, Chevron will locate a vessel with similar response capability to the Clean Seas response vessels (Mr. Clean I or II), at or near the site of oil operations. This vessel will be equipped with major open ocean oil skimmers both advancing and stationary, 3,000 feet of oil containment boom, an onboard boat to assist boom deployment, adequate oil storage capacity, and dispersant application equipment. This boat will provide an onsite capability which far exceeds the Commission's equipment standard requirements. This level of response is necessary due to the 5-6 hour response time of the oil spill cooperative vessels to this location.

c. Clean Seas Oil Spill Cooperative.

The Clean Seas oil spill cooperative is composed of numerous oil companies which have pooled their personnel and financial resources for response to oil spills. The cooperative's inventory of tools for oil spill clean up include eight onshore vans with equipment for shoreline protection, equipment at its Carpinteria storage yard, and two large oil spill response vessels, Mr. Clean I and Mr. Clean II. The cooperative's role is to provide assistance for spills exceeding Chevron's onsite capability and for initial response to large spills. Clean up operations for large spills will probably require the assistance of other spill cooperatives, numerous contractors, and the U.S. Coast Guard Pacific Strike Team, located in the San Francisco Bay area.

The primary western Channel offshore response capability provided by Clean Seas is its 130-foot oil spill response vessel, Mr. Clean I, stationed in Santa Barbara Harbor. A similar vessel, Mr. Clean II, is located at Port San Luis. These vessels are equipped with both stationary and advancing skimmer (Walaesep W3 and Offshore Devices Incorporated's skimming barrier). The Coast Guard Oil Pollution Response Planning Guide for extreme weather limits the performance of these systems to Sea State 4. Sea State 3 includes waves 3.1 to 5.4 feet and sea state 4 includes waves 5.4 to 7.5. As previously noted, waves in the Point Arguello area exceed six feet during 20 percent of the year.

Finally, the Mr. Clean vessels can store only about 500 barrels of fluid onboard. The Commission has found in previous actions that 1,000 barrels of oil storage capacity is required to provide maximum feasible mitigation of oil spillage. In fact, Exxon recently committed in amendments to its Santa Ynez Unit DPP that 1,000 barrels of oil storage capacity will be available at the site within six hours. Chevron has committed to assuring that these improvements are made by Exxon or itself prior to the operation of platforms within the Arguello field. This commitment assures that the project meets the maximum feasible mitigation requirements of Section 30260 of the Act.

d. Oil Spill Contingency Plan.

According to Coast Guard requirements, oil companies operating offshore must submit oil spill contingency plans with specific dispersant procedures to be used in a spill. This information must include a description of wind and wave conditions in areas where dispersants may be necessary, spill sizes where dispersant use is warranted, detailed descriptions of dispersant application systems, and, most importantly, an evaluation of whether the dispersant can function on the type of oil being produced. Although the Commission has so requested, to date, Chevron has not provided all of this information. The Commission must have this information to adequately evaluate Chevron's plans for oil spill response.

Chevron has provided some dispersant information, but a few important issues are not adequately addressed. The oil spill dispersant planned for use by Chevron is Exxon's Corexit 9527. This dispersant does not work well on heavy oils, such as the Arguello Field crude. In addition, the dispersant and oil mixtures may be more toxic than the oil alone, according to a recent Environment Canada report titled, Acute Lethal Toxicity of Prudhoe Bay Crude Oil and Corexit 9527 to Arctic Marine Fish and Invertebrates, 1982. Chevron has not demonstrated through independent analysis that the dispersant will work on heavy Arguello crude or that the dispersant's toxicity level will be acceptable when mixed with this crude. However, Chevron has committed to providing additional information and to participate in effectiveness and toxicity testing of dispersants, prior to the operation of platforms within the Arguello field.

In summary, the Commission now has commitments that Chevron will adopt maximum feasible mitigation measures for response to spills. Therefore, the Commission finds that the oil spill response equipment does provide the maximum feasible mitigation for oil spill impacts as required by Section 30260(3). This finding is based on Chevron's commitment to provide: (1) adequate onsite oil spill containment and cleanup equipment, including open ocean booms, skimmers, sorbents, and deployment vessels; (2) adequate oil spill containment and cleanup equipment and procedures for larger spills; and (3) adequate dispersant information or an approved dispersant use plan.

3. Marine Resources.

The Coastal Act requires the protection of marine resources in Sections 30230-30236. Section 30230 of the Act states:

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

Section 30231 of the Act states:

> 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,

Chevron's proposal raises significant marine resource issues under these Coastal Act sections because the development plan will result in the following: (1) disturbance of marine mammals and other marine organisms from platforms, pipelines, construction equipment, crew and supply boats, and helicopters; (2) increased risk of oil spills; (3) ocean disposal of drilling muds and cuttings; and (4) adverse effects on both the commercial and sport fishing industry (discussed further under part D.4., below).

a. Resources of the Point Arguello - Point Conception Area.

Platform Hidalgo is proposed on Lease OCS P-0450, approximately 6.5 statute miles southwest of Point Arguello and 13.6 miles northwest of Point Conception in 430' of water. Platform Hidalgo is within two statute miles (NNW) of Texaco's Platform Harvest and within four statute miles (NNW) of Chevron's Platform Hermosa.

The prevailing northerly (Davidson) and southerly (California) ocean currents come together at Point Conception, creating a complex hydrographic regime (patterns of surface water circulation and temperatures). This convergence of warm and cold water masses, respectively, creates a biogeographical barrier to shallow-water fauna, and may be the most important factor in the distribution of these species along the west coast of the United States. Relatively large numbers of species terminate their north-south ranges at or near Point Conception and the offshore islands. Consequently, this region (due to the prevailing currents) contains species associated with both of the major eastern north Pacific biotic provinces: the cold and warm temperate. The region is also thought to support endemic species adapted to this transition area.

Due to its remoteness and to frequently severe weather conditions, the Point Arguello - Point Conception area has been subjected to relatively little human degradation compared to most of the coastal and marine communities in the Southern California Bight. This factor, combined with the hydrogeographic factors discussed above, contribute to a diverse and abundant coastal and marine faunal assemblage.

The open water, shores and islands support marine mammals, seabirds and a healthy fishery. The coastal shallow water areas support large kelp beds and productive intertidal and subtidal communities. Kelp beds and rocky outcroppings provide excellent habitat for abalone. Large concentrations of intertidal abalone have been recorded south of Rocky Point, for example. There are harbor seal haul out areas west of the Point Arguello Boathouse, at Jalama, and at Point Conception. Several species of seabirds nest at Point Arguello, Rocky Point and Point Conception. Gray whales pass through the area twice each year during migration. The endangered California Brown Pelican is often found feeding in the area.

Chevron's proposal for one new platform and associated subsea pipelines, as discussed below, presents numerous possibilities for disturbance and damage to these marine resources.

b. Marine Biological Survey of Platform Hidalgo Site and Corresponding Pipeline Route.

The environmental impacts on benthic communities which are always associated with production platforms, due to drilling, installation of the platform and associated pipelines, and the disposal of drilling muds and cuttings, have been described in the Commission's findings on Chevron's Platform Hermosa (CC-12-83) and Texaco's Platform Harvest (CC-27-83), which are incorporated by reference.

A marine biological survey of soft-bottom habitats was conducted by Engineering-Science on September 8 through 12, 1983, in the vicinity of the Platform Hidalgo site and corresponding pipeline route between Platforms Hidalgo and Hermosa. Marine biological surveys of hard-bottom habitats in the vicinity of the Platform Hermosa site and the surrounding leases were conducted in 1982 and 1983 (Dames & Moore, 1982, 1982a and 1983).

The soft-bottom and hard-bottom faunal associations and habitats sampled were similar to those observed in other surveys. Most of the taxa sampled have broad geographic ranges. Higher abundances (number of individuals per sample) were sampled in 1983 than had been previously sampled by others. Water quality was typical for the study area except that surface water temperatures were about 3° C above normal during the Platform Hidalgo survey. Engineering-Science speculated that these elevated water temperatures were a result of El Nino conditions, which may account for the high infaunal abundance observed during the survey.

Engineering-Science (1984) collected several specimens of an undescribed cumacean from the soft-bottom habitats, designated as Diastylis sp. D, which may represent a new species. According to Engineering-Science (1984), this species is easily misidentified as a species of Leptostylis. Many undescribed species were collected during the course of the Engineering-Science survey, but most are reportedly well known to experienced taxonomists and are designated by a letter or number (e.g., Diastylis sp. A or Anemone #10). No species which have been identified as rare or endangered were collected. This cumacean may be endemic, on the other hand, it may simply not have been collected or correctly identified in other surveys. Such uncertainty in the data base contributes to the Commission's conclusion that this project can not be considered consistent with the marine resources protection policies, (Sections 30230-30232), of the Coastal Act. Due to the limitations in the

data base, the impacts of this project can not be fully evaluated. The limitations of the data base is discussed further under part d., below, which addresses the impacts from the ocean disposal of drilling muds.

The hard-bottom feature observed near (3300') to Platform Hidalgo is composed of four sub-habitat types which were distinguished in the region: (1) isolated single solid solid substrate objects; (2) low cobble/shingle substrate with a high percentage of the exposed surface being sediments; (3) boulder fields of jumbled and piled rocks often reaching more than 1 meter in height; and (4) apparently in-place ledges and low ridges of a meter or more in height. Predominant invertebrates were crinoids and basket stars. No Vema or Allopora (California hydrocoral) were seen. The drill cuttings are projected to fall within a 650' radius of the discharge outlet. The cuttings pile will substantially impact the soft bottom habitat within this radius, but the hard-bottom habitat should not be significantly affected.

The proposed pipeline route does not intersect any known hard bottom areas, however, if anchoring is required for the vessels installing the pipeline, the anchors will span an area approximately 3,000' on each side of the pipeline.

Chevron will avoid rocky areas when choosing the anchor sites, and can place anchors within 100' of the sites which will be designated in the final pipeline design. Chevron states that the pipeline installation will most likely be by the conventional pipe lay barge/stinger method, reel barge, bottom tow, or bottom pull methods.

Platform Hidalgo will be located near the northeast corner of Department of Fish and Game (DFG) fish block 658 and the pipeline linking Hidalgo to Platform Hermosa will be within fish blocks 658 and 659. According to Chevron and DFG, commercial catches from these blocks have been comprised mainly of urchins, abalone, crab, halibut, rockfish, and shark. Since halibut and shark are caught by set nets and urchins, abalone and crab are fished in near shore waters, these fisheries will not be affected by the proposed project. The EIR/S states that Hidalgo and the pipeline will be within a productive rockfish area for the Point Arguello Field. Maps prepared for MMS (July 1984) which depict trawl areas in central and southern California show that fishing for petrale, rex and dover sole occurs in the vicinity of the proposed project. Fishing activities in the vicinity of the proposed platform appear to be relatively light because of adverse weather conditions and rocky seafloor bottoms. Recorded DFG fish catches substantiate this position. The impacts on the commercial fishing industry are discussed further under part D.4., below.

c. Disturbance to Marine Mammals from Increased Crew and Supply Boat, Helicopter, and Tanker Traffic.

Increases in crew and supply boats, helicopter, and tanker traffic to a marine terminal could affect marine mammals (especially gray whales) by collisions or disturbance of migration patterns. The California gray whale moves through the Point Conception area twice each year, in the early winter and spring months. Noise and collision disturbance is therefore a seasonal impact, which Chevron has agreed to mitigate by limiting construction activities to the months of April through October to avoid the peak migration period.

Specifically, Chevron has agreed to the following mitigation measures: (1) supply boats will adhere to prescribed shipping lanes between Port Hueneme or Carpinteria Pier and Platform Hidalgo as much as possible to minimize channel-wide noise impacts; (2) Chevron will cooperate with the Fisheries and Environmental Training

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Program and the Western Oil and Gas Association to improve, if necessary, the information presented in the program on gray whales and the avoidance of any harassment; and (3) all pipeline mobilization, installation, and testing activities will be completed prior to the southward gray whale migration, which typically occurs from December to early February. The Commission finds that with these mitigation measures, Chevron has included maximum feasible mitigation measures to protect marine mammals and the project is consistent with Section 30260.

d. Ocean Disposal of Drilling Muds and Cuttings.

1) Commission authority over the discharge of drilling muds and cuttings. The Commission reviews OCS Development and Production Plans (DPPs) under Section 307(c)(3)(B) of the Coastal Zone Management (CZMA) to determine if these plans are consistent with the California Coastal Management Plan (CCMP). The discharge of drilling muds and cuttings is tested under all applicable policies in Chapter 3 of the Coastal Act, including Sections 30230 and 30231 (quoted above), and under the cumulative impacts policy contained in Section 30250 (quoted in part D.11., below).

Based upon an extensive review of substantive evidence pertaining to the effects of drilling muds and cuttings on marine habitat areas and biota, the Commission finds, in general, as follows: (1) discharges within 1,000 meters of the Coastal Zone or especially sensitive marine habitat areas, or in shallow waters less than 100 feet in depth, affect land and water uses in the coastal zone; and (2) any and all discharges cumulatively may affect land and water uses in the coastal zone.

2) Affects on the marine environment from drilling muds discharge. The Commission finds that the scientific studies and information available on the fate and affects of drilling muds and cuttings have not addressed essential questions about the marine environment and the effects of drilling muds (Brannon and Rao, 1979; Cal. DFG, 1983; Dames and Moore, 1981; Duke and Parrish, 1984; Jenkins and Sanders, 1984; Klapow and Lewis, 1978; Neff, 1984 and 1979; Petrazzuolo, 1983 and 1981; and Tagatz et al., 1978). For example, most studies on the bioaccumulation of metals contained in drilling fluids measure only total tissue or body burdens, and therefore their usefulness in predicting biological effects is limited. Only recently have studies been devised to examine the subcellular distributions of the contaminants and to determine the ecological implications of this data. In addition, despite theoretical chemical principals which suggest that a substance such as barium sulfate should not be bioavailable, it is apparently bioavailable. In the Santa Barbara Channel, the marine biological system is so complicated that scientists cannot distinguish natural changes from pertubations caused by drilling discharges (Dr. Ken Johnson, Santa Barbara News Press, July 28, 1984).

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The evidence shows that drilling muds may cause adverse effects on the environment on a cumulative basis. The Commission is compelled by the Coastal Act to take a conservative approach because land and water uses in the coastal zone will be degraded or destroyed if these effects occur. The Western Oil and Gas Association estimates that, by the year 2000, approximately 1,500 exploratory and production wells will be drilled in just the Santa Barbara Channel and Santa Maria Basin. This amount of drilling could result in roughly one million tons of drilling muds and cuttings being discharged into the ocean (Hank Wright, WOGA, personal communication--based upon MMS's EIS for Lease Sale 80). Only upon completion of scientifically rigorous long-term monitoring programs in the California offshore environment can the Commission arrive at firm conclusions regarding cumulative impacts. Such studies are currently being planned or conducted by the MMS and EPA.

The Commission finds that the standards contained in Sections 30230 and 30231 as applied to the discharge of drilling muds and cuttings cannot be satisfied by reliance on the current state of knowledge. Discharges resulting from Chevron's Platform Hidalgo may cause adverse impacts upon the marine environment when considered on a cumulative basis with other development. Therefore, the Chevron project is inconsistent with Section 30250(a). However, because this project is a coastal dependent development, it must also be analyzed under the requirements of Section 30260, under which a project may be approved even if inconsistent with certain policies contained in Chapter 3 of the Coastal Act.

3) Quantities and Types of Drilling Muds Proposed for Discharge. During drilling operations on Platform Hidalgo, muds and completion fluids will periodically be discharged to the ocean at a rate of approximately 4,000 bbl (total) of drilling muds per well and 600 barrels per well of completion fluid. Each well is also expected to produce approximately 1,472 barrels of drill cuttings.

Any oil contaminated drilling mud or cuttings will be collected and shipped to shore and trucked to an approved disposal site. The discharge will be made through the cuttings chute in accordance with the applicable EPA NPDES permit. As discussed above under part 3. Marine Resources, the cuttings are not expected to adversely affect the sensitive hard bottom habitats in the vicinity of the platform. The platform is in deep water and in excess of 1,000 meters from the coastal zone or any specially designated biologically sensitive area, but may still cumulatively affect land and water uses in the coastal zone. Maximum feasible mitigation must be provided for possible cumulative effects, as discussed below.

4) Maximum feasible mitigation. Under Section 30260, all offshore oil operators must provide the maximum feasible mitigation for the discharge of drilling muds and cuttings. Since the discharge will be subject to an EPA NPDES permit (which must also be consistent with the CCMP), and the platform is not near any biologically sensitive areas, the only other mitigation feasible is to further reduce the toxicity of the discharge beyond that which is currently required by EPA. Chevron has committed to do this by using chrome-free lignolsulonates. This will reduce the risk that may be associated with introducing chrome into the environment.

In addition, Chevron has initiated a study on drilling muds and cuttings discharge mitigation techniques (which it committed to implement when the Commission concurred in its consistency certification for Platform Hermosa). While conducting a study on mitigation does not in itself constitute actual mitigation, Chevron has agreed to implement all feasible mitigation measures appropriate to Platform Hidalgo which may be identified in that study.

The Commission finds, based upon the information cited above, and further elaborated in the Commission's general policy statement on the ocean disposal of drilling muds and cuttings that while the project is inconsistent with the marine resource policies of Chapter 3 of the Coastal Act (Sections 30230 and 30231), and with Section 30250, the discharge is proposed in the least environmentally damaging location. Adverse environmental effects are mitigated to maximum extent feasible due to Chevron's commitment to use chrome-free lignosulfonates and to implement all feasible mitigation measures appropriate to Platform Hidalgo which may be identified in the study referenced above.

However, the Commission will be conducting another review of the drilling and muds and cuttings issue when it considers EPA's consistency certification on the General NPDES permit. Thus, while the Commission finds that Chevron's project is consistent with the CCMP, Chevron's project is still subject to the General NPDES permit, which

must also be consistent with the CCMP. The Commission may object to the EPA's consistency certification, in which case Chevron could not discharge muds and cuttings.

4. Commercial Fishing.

Coastal Act policies which protect commercial fisheries and associated commercial fishing industries are contained in Sections 30230, 30231, and 30234 of the Coastal Act. Sections 30230 and 30231 require that development sustain the biological productivity of all marine species for long-term commercial purposes. These policies also require protection of areas with special biological significance. Read together, these sections protect marine habitats and species and also call for special protection of commercial uses which depend upon these resources.

Section 30234 protects and requires upgrading, where feasible, of onshore support facilities such as ice plants and fish processing plants. Section 30255 and 30703 establish commercial fishing as a priority use of the coastal zone which must be protected in ports and all other coastal areas.

The Coastal Act also requires the consideration of social and economic impacts. Section 30001(d) of the California Public Resources Code provides that, "... the economic and social well-being of the people of this state..., " are critical considerations for the Coastal Commission. Section 30001.5 requires the Commission to take into account, "... the social and economic needs of the people of the state." Section 30260 also requires the Commission to consider the public welfare.

Effects upon the state's commercial fishing industry will affect the land and water uses of the coastal zone. The industry generates many additional secondary jobs for seafood processors, brokers, dock workers, truck drivers, and boat yard crew members. Most businesses which support these workers are located in local harbors and ports and require a waterfront location to function. These coastal dependent industries are dependent on the commercial fishing industry, and thus a significant reduction in the commercial fishing effort could affect these businesses, and their use of land and water in the coastal zone.

Chevron's Platform Hidalgo will be located near the northeast corner of Department of Fish and Game (DFG) fish block 658 and the pipeline linking Hidalgo to Platform Hermosa will be within fish blocks 658 and 659. According to Chevron and the DFG, commercial catches from these blocks have been comprised mainly of urchins, abalone, crab, halibut, rockfish, and shark. Since halibut, and shark are caught by set nets and urchins, abalone and crab are fished in near shore waters, these fisheries will not be affected by the proposed project. The EIR/S for the Point Arguello Field states that Hidalgo and the pipeline will be within a productive rockfish area. Maps prepared for MMS (July 1984) depicting trawl areas in central and southern California show that fishing for petrale, rex and dover sole occurs in the vicinity of the proposed project. Fishing activities in the vicinity of the proposed platform appear to be light because of adverse weather conditions and rocky seafloor bottoms. Recorded DFG fish catches substantiate this position.

According to Chevron and DFG, fish blocks 657, 658, and 659 contributed to 2 percent of the rockfish (679,927 pounds, $38,417) catch landed at Morro Bay, Port San Luis, Santa Barbara, Port Hueneme, Oxnard, and Ventura in 1981. Landings of sole were even smaller with only 724 pounds taken in the three blocks.

Commercial fishermen are informed of oil and gas exploration and development by direct communication with the applicant and/or by notice in the "Oil and Gas Project

Newsletter for Fishermen and Offshore Operators," published monthly by the U.C. Marine Advisor at (U.C.S.B.) and currently funded by a CEIP grant. The newsletter is widely distributed to fishermen and other interested parties in ports from Port San Luis in San Luis Obispo County to San Diego. The Commission, applicants, and fishermen rely on this form of communication for information on the timing and location of offshore oil and gas related activities. If fishermen perceive a conflict will occur between fishing and oil and gas related activities, they inform the applicant and the Commission.

Chevron's project proposal was noticed in the September/October and November 1984 issues of the newsletter. To date, no comments from commercial fishermen have been received in response to the notice. Normally, a lack of response suggests that little or no impact would occur from a project. However, because the subject proposal will be a permanent development, Commission staff contacted several trawlers from Morro Bay and Santa Barbara. They stated that the area supports only limited use and that the platform and pipeline should cause little impact on their operations.

In previous Commission decisions, general concerns regarding drilling muds and cuttings disposal, oil spills, and crew and supply boats have been raised by fishermen. Drilling up to 50 wells from the proposed platform will entail ocean disposal of drill muds and cuttings. In previous Commission reviews of DPPs and POEs, commercial fishermen and the Commission have expressed concern about the effects of these materials on commercially recoverable fish. Part 3. Marine Resources, above, provides further analysis of the fates and effects of drill muds on marine biota.

Production from Platform Hidalgo will increase the chance of oil spills, which could adversely impact commercial fisheries. Economic losses to the fishing industry can occur in the following ways: (1) marine organisms may be tainted by direct coating or ingestion of hydrocarbons; (2) the total available catch could be reduced; (3) fishing gear and vessels may be contaminated, requiring either cleaning or replacement of the gear and cleaning of the vessels; and (4) fishermen may be prevented from leaving port due to placement of oil containment booms. Additional discussion of impacts from oil spills is provided in part D.2., above.

Crew and supply boats traveling between Port Hueneme, Carpinteria Pier, and Platform Hidalgo will conflict with nearshore (set gillnettting and trapping) fishing activities by running over buoys and surface lines, leading to loss of the gear. Fishermen from Port Heuneme have stated in a petition to the U.S. Coast Guard that some support vessels anchor within traditional halibut grounds outside Port Hueneme, thereby blocking access to the Hueneme Flat. To mitigate against these conflicts, Chevron will use support boat routes adopted by the Joint Committee in Santa Barbara Channel Oil Service Vessel Corridor Programs, and will refrain from mooring its support vessels within 10 fathoms of the Hueneme Flats. Helicopters will be the principal mode of crew transportion. During inclement weather, Port Hueneme and Carpinteria Pier will be used as the crew bases.

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Construction and operation of the platform and pipeline would also impact the fishing activities by blocking access to traditional trawl areas by disposing project related debris in the fishing areas and by snagging trawl nets. To minimize these conflicts Chevron agrees to the following: (1) design and construct the pipeline connections so that protrusions will be shrouded or sandbagged; (2) use pipeline installation methods which would eliminate or minimize anchor scarring; (3) use pipelines with a minimum of surface obstructions; (4) conduct post-construction surveys within the platform and pipeline construction zones; (5) remove all

artificial obstructions related to the pipeline and platform construction activities; (6) notify commercial fishermen of the schedule and locations of construction activities through the Santa Barbara Marine Advisory Program Newsletter and the Notice to Mariners; and (7) continue ongoing discussion with commercial fishermen to identify concerns and move toward determination and implementation of feasible mitigation measures.

In addition to analyzing individual impacts of proposed development, the Commission also analyzes the effects of past, present, and future development in accordance with Section 30250 of the Act. The waters offshore California have historically supported and will continue to support the oil and gas and commercial fishing industries. Future development and production facilities for oil and gas will be proposed in Lease Sale 53 and 68 tracts and future exploration and development could occur on Lease Sale 73 and 80 areas. In addition to future activities in the OCS, activity may increase in state waters, as evidenced by the proposed state tidelands lease sale between Points Arguello and Conception.

Already the Commission is in the midst of reviewing four production projects which will impact trawling activities in the Santa Maria Basin and the Santa Barbara Channel. The EIR/S for development of the Santa Ynez Unit states that 27 percent of the trawling operations in the area will be affected by construction activities, and less than 10 percent will be affected by operation of the platforms and pipelines. The MMS maps show that the ARCO Coal-Oil Point project will be located within halibut trawling grounds. In addition, the maps show that Union's Platform Irene and pipeline will also be located within English sole, Petrale sole, rockfish, and halibut grounds. Tanker traffic associated with the marine terminal proposed by Getty could also interfere with trawling activities. Recent announcements of commercial hydrocarbon finds by Exxon, City Services, and Sun in the Santa Maria Basin will lead to proposals for additional offshore development which could conflict with the trawl fisheries. Further assessment is required to establish whether these projects and future exploratory work will cause a significant cumulative impact on the trawl fisheries. Chevron's proposed mitigation measures which will reduce conflicts between the project and the trawlers. As a result cumulative impacts both on the fishing operations, and the coastal dependent onshore fishing-related businesses, will be lessened.

Since the mitigation measures will reduce but not eliminate the impacts the Commission finds that the project proposal will indeed impact commercial fishing operations. Use of the vessel corridors will displace a portion of the nearshore trapping and gillnetting grounds, and trawling activities will be displaced during construction and operation of the pipeline and platform. Although expected impacts from this project may be small, future development in the Santa Maria Basin and Santa Barbara Channel may compound the impacts on the fishing operations and fishing-related businesses. Thus, the Commission finds that the project is inconsistent with Sections 30230, 30231, 30234, 30250, 30255, and 30703 of the Coastal Act.

The Commission found in part C. Coastal Dependency and Relation to Industrial Development, above, that the platform and subsea pipelines portion of the project are coastal dependent industrial facilities. The proposed development does not comply with the Coastal Act sections cited above, but because the project is coastal dependent, it must be further analyzed under the requirements of Section 30260, cited previously.

A major relocation, or consolidation of Platform Hidalgo with Platforms Hermosa or Harvest is infeasible since these measures would limit efficient production of the

Point Arguello field. In addition, relocation of the pipeline could adversely affect is geologic stability. Platform Hidalgo producers are committed to using pipeline transportation of their crude to market, if pipelines are available. Other available methods would only be used until the pipelines are available and during emergencies. Although the proposal includes use of the existing marine terminal at Gaviota, expanded use of the terminal is temporary; therefore, Chevron's proposed use of the onshore pipeline is the least environmentally damaging alternative with regard to commercial fishing issues. The project consistent is therefore consistent with Section 30260(1) of the Act.

Adverse environmental effects be mitigated to the maximum extent feasible. As stated above Chevron has committed to mitigation measures which meet with the requirements of 30260(3).

Even though the project is mitigated to the maximum extent feasible traditional trawl and set gear fisheries will be displaced, and cumulatively these impacts will increase as more development is permitted offshore California. When the cumulative impacts are determined to be significant, measures to improve or replace income producing fishing opportunities may be used to mitigate these impacts.

However, development of such programs will be very difficult because they must benefit the parties who are impacted by the displacement. Identifying these parties will be a complicated challenge to the administering agency. The Joint Committee is studying this issue and may negotiate an approach to this problem. The Commission will address the issue if it is not successfully undertaken by the Joint Committee, or if the Committees solution does not satisfy Coastal Act policies.

5. Vessel Traffic Safety.

Section 30262(d) of the Act states, in part, as follows:

> Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:
>
> (d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

Chevron proposes to site Platform Hidalgo approximately fourteen miles northwest of the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS). Presently, vessels traveling between the Santa Barbara Channel and ports on the North American coast pass through the general area of the proposed platform site. The U.S. Coast Guard request for a northwesterly extension of the present Santa Barbara Channel Vessel Traffic Separation Scheme has been rejected by the International Maritime Organization (IMO), and, therefore, vessels will, in large part, continue to pass through the proposed area of Hidalgo. This could lead to excessive traffic and unsafe navigation. The Coast Guard minimum requirements for aids to navigation are inadequate in this case.

In addition, the proposed platform site is in an area of extreme weather conditions. According to the U.S. Coast Guard Pilot (NOAA):

> Off Point Arguello, sea fog becomes a persistent and frequent navigational hazard.... These fogs are often thick, and Point Arguello is considered by mariners to be the most dangerous along the coast.

The Texaco DPP for Platform Harvest states that waves exceeding six feet significant height occur 17.7 percent of the time. The Chevron DPP for Platform Hermosa stated that wave height exceeded nine feet 49 percent of the time during the months of January to March 1980.

Vessel traffic in the Channel and the Point Arguello area will increase in the next decade due, in part, to the many oil and gas projects proposed for the area. The Chevron Hermosa DPP states that the Point Arguello operators will generate 144 tanker trips per year and Exxon's Santa Ynez production will result in 132 tanker trips per year if pipelines to refinery centers are not available. Additional vessel trips will be generated by other developments in the area, such as the remaining areas of the Santa Maria Basin, Sockeye Field, and State Lands leases.

In the years 1970-1982 inclusive, 93 collisions occurred between offshore installations and vessels. Thirty of these resulted in loss of life. Twenty-four of the 93 collisions took place in the United States. Collisions are the second greatest cause of accidents resulting in structural damage, blowouts are first.

Oil spills resulted from 58 of these collisions. Since the platform will be sited where it will pose a substantial hazard to vessel traffic safety and thus could increase the likelihood of oil spills, the Commission finds Platform Hidalgo inconsistent with Sections 30262(d) and 30232.

Chevron has added several measures to the DPP which mitigate the project to the maximum extent feasible. These include joint use of the Coast Guard approved Automatic Radar Plotting Aid (ARPA) unit to be installed on a platform in the Point Arguello area. The platform will be alerted of an approaching vessel's location by an observer staffing the ARPA unit.

Chevron will install four quick-flashing white lights visible for five miles on each corner of the platform. The flare boom and each drilling rig derrick will have steady and flashing red lights for aviation safety. Chevron has agreed to daytime lighting when visibility is less than three miles. The heliport on the platform will be outlined with lights plus one flashing amber beacon. (The heliport lights will be used only during flight operations.) The platform will have a foghorn with a two-mile audible range. The platform will be painted white in order to increase its visibility to vessels.

Chevron is placing three escape capsules, accommodating 50 persons each, on the platform. This is a valuable addition to platform safety in the Point Conception-Point Arguello area.

The Commission finds the platform will be sited where it could pose a hazard to vessel traffic, but Chevron has mitigated the project to the maximum extent feasible. Therefore, the Commission finds the project consistent with Section 30260 of the Coastal Act.

6. Geologic Hazards.

Section 30253(1) and (2) of the Act states that:

New development shall:

(1) Minimize risk 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, 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.

Section 30262 of the Act states in part that:

> 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 consistent with the geologic conditions of the well site.
>
> (b) 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.
>
> 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.

Section 30263(a)(4) of the Act further states that:

> New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if... (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands or within or contiguous to environmentally sensitive areas....

Platform Hidalgo will be a three-deck, eight leg drilling production facility with space for 56 wells slots. The sea floor at the platform site is generally smooth and dips 2 degrees to the southwest. The Arguello Shelf edge is located 800 feet west of the platform site and the slope of the sea floor increases to 5 degrees.

Chevron has conducted detailed geologic studies of the sea floor between platforms Hidalgo and Hermosa. A pipeline corridor 1000 feet in width and 4.8 miles in length has been selected within the study area. Two submarine pipelines and an electric power cable are planned within the corridor route. One 14 to 18 inch pipeline will carry emulsified oil and another 8 to 10 inch line will transport gas. These lines will tie in to the pipelines running from Platform Hermosa to Point Conception.

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a. Seismicity.

The Santa Barbara Channel region is one of the most active seismic areas of California. The earliest recorded destructive earthquake, with an estimated magnitude of 7, occurred on December 21, 1812, and heavily damaged several missions along the coast. Since then, numerous events have been detected and several damaging earthquakes have occurred. For example, almost the entire business section of Santa Barbara was destroyed or rendered unsafe by the June 29, 1925 earthquake of

magnitude 6.3. Santa Barbara was also damaged by the June 30, 1941 earthquake of magnitude 6. The epicenters of these last two earthquakes have not been accurately determined, but are inferred to be very near to the August 13, 1978 event. The 1978 earthquake, with a magnitude of 5.1 was located 4 km south of Santa Barbara at a depth of 12.5 km. This earthquake produced a maximum acceleration of 0.44 g at ground level (measured at UCSB). Widespread minor damage was reported.

Chevron maintains that Platform Hidalgo and pipeline facilities will adhere to the state-of-the-art seismic design standards. In addition, federal requirements call for a third party review of the seismic design criteria and analysis for the platform. This third party review process was described in the Commission's Exxon Staff Recommendation (CC-7-83, page 46):

> Under OCS Order No. 8 promulgated by the Minerals Management Service, a Certified Verification Agent (CVA) must verify that the design criteria and analysis procedures for each OCS platform meet industry standards of good practice, published regulations, and accepted procedures. Design will conform to API RP2A recommendations. The CVA's review will include consideration of all relevant environmental conditions, including seismic excitation in the area. Further specifics on the CVA process for platform design, fabrication, and installation are given in the USGS publication "OCS Platform Verification Program."

Chevron has submitted a detailed site and foundation seismic study (McClelland, 1983) for Platform Hidalgo. These studies indicate that there is a fifteen percent probability that the platform site will experience a design level earthquake that will subject the platform site to a 0.18g peak acceleration at some time during a projected thirty-five year design life. Discussions with Chevron have also considered the ductile limit of the platform (the ductile limit is that acceleration value at which some form of deformation would occur in the platform). Deformation in the structure would probably take place at approximately 0.33g, but the platform would not collapse. Calculations by McClelland (1983) indicate that there is a two percent probability that the ductile limit would be exceeded during the project's 35-year design life. The Certified Verification Agency and the MMS will review all data used to calculate the above mentioned values.

The Commission has compared seismic design data for platform Hidalgo and the associated submarine pipelines to the values recommended for Platforms Harvest and Hermosa. Minor variations in these values exist but are due to site specific conditions and the proximity of each platform to potential sources of seismicity. Earthquake design criteria are in general agreement for all three of the proposed Point Arguello platforms.

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b. Liquefaction.

The development of high pore-water pressures in certain types of sediments due to ground vibrations, (which can occur during an earthquake) can cause sediments to be altered from a solid state to a liquid state (liquefaction). In some cases, liquefaction of sand induced by earthquake ground motions can cause overlying, sloping soil to slide laterally along the liquefied layer.
Examination of soils at the site and within the pipeline corridor indicate a lack of historic instability due to liquefaction (McClelland, 1983). Individual soil layers at the platform site and within the pipeline corridor could liquefy during an extreme earthquake and Chevron has considered this factor in the design of the platform and submarine pipelines.

c. Submarine Slumping.

No submarine slumps exist within the pipeline corridor or at the platform site. However, a sea floor channel that cuts a buried channel area is located 600 feet to the west of the platform site and any relocation of the platform should not be considered west of the proposed location. The potential for submarine slumping increases substantially in a westerly direction.

d. Faulting.

Special engineering is required where pipelines must cross active faults. Fault surface rupture or creep can severely damage a marine or onshore pipeline. For this reason, the age and location of active faulting is critical to pipeline design. Chevron's detailed studies show little to no evidence of active or potentially active faulting at the platform site. One fault has been identified by McClellend (1983) that appears to cross the pipeline corridor approximately 11,000 feet southeast of the platform site. This fault has minor vertical offset and does not break the seafloor. Geophysical data indicate that the shallowest strata cut by the fault are approximately 160 feet below the seafloor. Therefore, Chevron considers this feature to be inactive.

e. Shallow Gas Zones.

Chevron's geophysical data (McClelland, 1983) indicates that a possible gas zone exists approximately 150 feet below mudline at the platform site. Geotechnical borings surrounding the platform site contained small gas bubbles but the data obtained from previous exploratory wells throughout the Arguello Field have shown that these shallow gas zones have not been over-pressured. No shallow gas zones have been identified within the pipeline corridor. Therefore, shallow gas does not appear to be a geologic constraint to the proposed project.

f. Subsidence

Subsidence of the land or seafloor can pose potential problems for oil development on any non-oil related structures. The main causes of subsidence in California oil fields have been the result of extraction of oil, water, and gas. Chevron maintains in the DPP as follows (pp. IV-15 to 16):

> Surface subsidence due to reservoir fluid withdrawal is not expected to be a problem at the Pt. Arguello field for the following reason: First, the region has been in compression since the end of Miocene time. Second, the trapping structure, at the reservoir depth, has a good arch-supporting structure with associated thrust faulting. Third, the depth of burial of the oil producing section is over 6000 feet below the ocean floor. This thick section of overburden will furnish additional support. And fourth, the hard, siliceous nature of the reservoir rock will lend additional support.

Commission technical staff discussions with the U.S. Geological Survey and the MMS reveal an absence of measured subsidence locations where there has been oil or water extraction from the Monterey Formation at onshore Santa Barbara County locations or offshore in state or federal waters (R. Castle, USGS and J. McCarthy, MMS, personal communication, 1983). Should any subsidence occur, it is expected to be negligible and will be restricted to the offshore area. Any minor subsidence that may pose a threat to oil field production facilities could be eliminated by implementing a repressurization program. Therefore, subsidence should not pose a significant

hazard to the structural integrity or stability of the development, either onshore or offshore.

The Commission's review of offshore geotechnical studies have revealed no major geologic hazards that would preclude development of the Point Arguello Field as proposed. No geologic constrains exist at the platform site or within the pipeline corridor. Therefore, the Commission finds that the proposed platform and pipeline corridor meet the requirements of Section 30253 and 30262 of the Coastal Act as they relate to geologic hazards.

7. Air Quality.

Section 30250 further requires new development to be located where it will not have, "... significant adverse effects, either individually or cumulatively, on coastal resources."

Section 30253(3) of the CCMP states in part, that:

> New development shall:
>
> (3) Be consistent with requiremens imposed by an air pollution control district or the State Resources Control Board as to each particular development.

Air pollutant emissions from the proposed project will occur individually as a result of the construction and operation of the proposed offshore platform and pipelines. Construction and drilling emissions will be of short duration, while emissions from production will occur throughout the life of the project. Cumulatively, air pollutant emissions will occur as a result of the construction and operation of the remainder of the Point Arguello Field project (additional platforms, pipelines to shore, and onshore oil and gas processing facility) and as a result of other existing and proposed developments in the area.

a. Applicable Regulations.

The air pollutant emissions from the project must meet all applicable standards and conform to both federal and local rules and regulations to be found consistent with the CCMP. These federal and local air quality regulations include: the Department of the Interior (DOI) regulations established under the OCS Lands Act Amendments (OCSLAA); the U.S. Environmental Protection Agency (EPA) standards for attaining and maintaining air quality standards established under the Clean Air Act (CAA); the California Air Resources Board standards and limitations established under the Health and Safety Code; and the local air quality management district regulations and management plans for meeting the federal and state standards under the CAA and Health and Safety Code.

The Commission has previously expressed concern for the adequacy of the DOI regulations to protect California's onshore air quality in its Findings for Lease Sale 73 (CD-28-83), Chevron (CC-12-83), and Texaco (CC-27-83). The DOI regulations allow large amounts of pollutants--far in excess of local onshore limits--from OCS facilities without requiring any analysis of the onshore air quality impacts.

The South Central Coast Air Basin which may be impacted by air emissions from the project includes Santa Barbara County and portions of Ventura County. Santa Barbara County has been designated a nonattainment for ozone, although the northern portion of the county is being considered for redesignation to attainment. The County

favors retention of the ozone nonattainment designation throughout the county because of potential onshore transport of ozone and other impacts from future OCS development. The Santa Maria portion of Santa Barbara County currently does not meet federal standards for total suspended particulates (TSP) and has been designated as nonattainment. Ventura County is in attainment of the federal standards except for ozone, and TSP in more populated areas.

As air pollutant emissions in the area increase from offshore development, it will be difficult, if not impossible, to meet the statutory requirements under the CAA and state law, particularly since emissions from offshore oil and gas production were not considered in Santa Barbara and Ventura Counties' Air Quality Management Plans (AQMP).

The CCMP requirement that new development be consistent with the requirements of the air quality management district or ARB includes the state's plan for attaining and maintaining federal ambient air quality standards. Thus, if the emissions from Chevron's project, either individually or in combination with other existing or proposed project emissions, impede the state's strategies for and progress toward attainment, the project cannot be found consistent with the CCMP.

b. Impacts of Project.

Impacts to onshore air quality from emission sources on the OCS and sources onshore and within State waters from associated facilities, whether individually from Chevron's project or in combination with other offshore development in the area, are likely to occur. In addition to potential environmental and public health impacts, there may be severe economic impacts if the districts continue to be classified with nonattainment status under the CAA. These impacts could include the cost to local businesses of retrofitting facilities, the cost of EPA-imposed sanctions, the cost to local government to develop and enforce nonattainment plans, increased health care costs, and losses to tourist and agriculture based industries.

The Commission is not alone in its assessment of the potential significance of the cumulative effect from offshore development on coastal resources. The State Lands Commission DEIR for the State Lease Sale proposed for Point Arguello to Point Conception concluded that the most significant cumulative impacts will be the "... likelihood that progress toward attainment will be completely offset by the impact of new offshore emissions." In comments on the proposed Arguello Field development to Secretary Duffy, the ARB called for analyses to identify the impacts from all proposed, existing, and anticipated development in the southern Santa Maria Basin and western Santa Barbara Channel area to ensure that state and federal ambient air quality standards will not be violated or that reasonable further progress towards attainment of these standards will not be jeopardized.

In a letter commenting on the Chevron plan of development for the Arguello Field, Major General Jack L. Watkins, Commander at Vandenberg Air Force Base, also stated his concern that, "...air quality impacts of offshore oil development are not being considered on a cumulative basis," and recommended that oil development in federally controlled waters, "...have air quality management requirements consistent with the APCD." In addition, in a letter commenting on the Exxon Company, U.S.A., plan of development for the Santa Ynez Unit, Pasquale A. Alberico, Acting Director of the U.S. EPA's Office of Federal Activities, stated his concern that "...a comprehensive look needs to be taken of the cumulative impacts of offshore development and the ability of the State to accommodate these emissions and still meet the statutory requirements of the Clean Air Act."

Chevron's calculations for emissions from the proposed facilities in the Arguello Field development show no exceedances of the DOI exemption levels; therefore, Chevron determined that no significant onshore air quality impacts are expected to occur, and no further review of air quality impacts is required. However, Chevron performed a modeling analysis to assess the impacts of Platform Hidalgo (Environmental Research Technology Inc., 1983). This analysis considered both reactive and non-reactive pollutants, and included other Arguello Field platforms as well as the Santa Ynez Unit and Gaviota onshore facilities. This study concluded that only minor onshore air quality impacts would be associated with the combined operation of Platform Hidalgo and other Arguello Field development, and that the development would not result in violations of either the federal or state ambient air quality standards. This modeling analysis, however, was evaluated by the ARB and found to seriously underestimate maximum onshore impacts.

In its specific review of the Platform Hidalgo DPP/ER, the ARB did not request any additional air quality analyses from Chevron at this time. Instead, the ARB indicated it would review the analysis contained in the EIR/S for the Point Arguello Field and Gaviota Processing Facility to assess the onshore impacts associated with the emissions from Platform Hidalgo and other related OCS activities.

The EIR/S for this area has been completed. The document defines significant air quality impact as any exceedances of the DOI significance levels or state or federal standards. Further, for nonattainment pollutants, any contribution from the project emissions to additional exceedances of the standards, or interference with progress toward achieving attainment (by causing the levels that already exceed the standards to be higher) is a significant impact.

The EIR/S air quality modeling analysis predicts no exceedances of the standards for inert pollutants as a result of the emissions from Chevron's platforms. However, the EIR/S predicts exceedances of the short-term state standards for total suspended particulates (TSP) during construction activities, and for nitrogen dioxide (NO_2) during production activities of the Arguello Field development. The maximum short-term impacts from non-reactive pollutant emissions during Arguello Field production would occur as a result of emissions at the onshore processing facility. There are no predicted violations of the annual average standards.

The EIR/S predicts exceedances of the state standard for ozone for all trajectories and indicates that the maximum one-hour ozone level during production at the Chevron platforms (Hermosa and Hidalgo) would exceed the less stringent federal standard for one trajectory. The EIR/S concludes that the proposed Arguello Field development can, "...hinder the area from achieving attainment of the standard by contributing precursor pollutant emissions that can lead to ozone formation."

The ARB reviewed the formulation of the model used in the EIR/S analysis and found it to be an acceptable trajectory model. Further, the ARB found that the methodology used in constructing the trajectories is consistent with the guidelines for OCS modeling developed by the ARB and MMS for Lease Sale 73. However, the ARB cautions that trajectory models may not adequately assess cumulative impacts from OCS emissions, but are better suited for predicting direct shoreline impacts of a single source or cluster of sources. Thus, the results of the trajectory analysis should be considered to be only an indication of potential cumulative impacts, i.e., that ozone concentration levels are likely to increase as a result of the project activities but the extent of the impact on onshore air quality is unknown at this time. In this case, the ARB states that the results indicate emissions from Platform Hidalgo would increase onshore ozone concentrating and would contribute to the existing standards violations. A more sophisticated modeling approach would be needed to accurately predict the magnitude of the ozone increases.

Chevron agrees that trajectory models may be inadequate for cumulative impact analysis, and believes that a regional grid model, such as may be developed following the South Central Coast Cooperative Aerometric Monitoring Program (SCCCAMP), is the only valid way to assess potential cumulative impacts. Chevron also believes that the non-reactive modeling performed for the EIR/S analysis is technically inadequate.

While the Commission acknowledges that there are legitimate differences within the modeling community, the Commission finds, based on the information contained in the EIR/S analysis for the Arguello Field development, that exceedances of allowable onshore air quality standards could occur, and that onshore ozone nonattainment problems could be exacerbated as a result of the proposed project. Therefore, the Commission finds that the proposed project is inconsistent with Sections 30250 and 30253(3) of the Coastal Act with regard to air quality.

c. Maximum Feasible Mitigation.

Although the Commission finds that the proposed project cannot be found consistent with the air quality policies, the coastal dependent industrial facilities can nevertheless be permitted in accordance with Section 30260 of the Coastal Act if they meet the tests of this section.

It is the ARB's position that OCS emissions sources be treated similarly to onshore sources. Consequently, the ARB believes that projects must incorporate not only the best controls currently available, but mitigation measures which provide a level of protection to onshore air quality at least equivalent to the protection provided by the Lease Sale 73 Memorandum of Agreement (MOA) between the U.S. Department of the Interior and the State of California. The Commission agrees that it is appropriate to consider the provisions of the MOA in order to determine whether companies are proposing minimally acceptable levels of control.

Chevron is committed to employing pollution control measures that represent state-of-the-art for offshore equipment. The Platform Hidalgo design currently includes the following measures:

- Turbine generators will be operated using water injection to control NOx emissions. A 70% or better reduction in NOx emissions is expected.

- Only sweetened produced gas containing less than 50 ppm hydrogen sulfide will be used as fuel to the turbines. The use of low sulfur fuel will result in only trace amounts of sulfur dioxide emissions.

- Cogeneration will be used, i.e., heat will be recovered from the turbine exhaust streams for use on the platform. This eliminates potential emissions associated with gas or diesel-fueled process heaters.

- Project-related supply vessels will employ retarded injection timing to reduce NOx emissions (Radian 1982) to the extent that vessel operators and the American Bureau of Shipping considers it safe and feasible.

- Hydrogen sulfide monitors will be operated continuously on the platform.

- A fugitive emission inspection and maintenance program will be instituted to reduce fugitive hydrocarbon emissions.

- Low NOx engines will be used for emergency power generation.

Chevron's pipeline commitment further mitigates the air quality impacts of its project. This commitment distinguishes the concurrence with Chevron's project from the Commission's objection to Exxon's DPP proposed for the Santa Ynez Unit (CC-7-83).

The ARB believes these measures represent the best controls currently available for the project. In its comments on the Platform Hidalgo consistency certification, the ARB found that NOx emissions from Platform Hidalgo, in combination with other nearby proposed platforms, could contribute to violations of the state and federal ozone ambient air quality standard in Santa Barbara County. THerefore, in keeping with its position that mitigation measures must be provided for any emissions remaining after controls are applied, the ARB determined that further mitigation of NOx emissions, a precursor to ozone, would be necessary for the protection of onshore air quality. To determine the project's consistency with Section 30260, the ARB recommended that Chevron investigate further feasible mitigation measures (see Exhibit 4).

As discussed above, there are differing opinions on the extent of onshore impacts expected from offshore emission, based primarily on lack of adequate air quality and meteorological data and the limitations of currently available modeling techniques. Based on the conclusions of the EIR/S, the ARB believes that steps should be taken now to fully mitigate potential impacts from the project. Chevron maintains that the project as proposed will not cause exceedances of state or federal standards because te air quality analysis in the EIR/S is overly conservative and technically inadequate. Nevertheless, Chevron amended its consistency certification to provide for additional evaluation of potential impacts from the project. Prior to operation on Platform Hidalgo, Chevron will re-evaluate the projected emissions from platform operations to determine onshore impacts, using evaluation tools available at that time. Should this re-evaluation indicate platform emissions would cause onshore violations of the ozone standards, Chevron will institute further mitigation measures. This re-evaluation and subsequent determination of the extent and type of mitigation measures required will be made in consultation with the MMS, ARB, and Coastal Commission.

The Commission prefers that specific mitigation measures for the proposed project be presented at the time of the consistency certification. However, the Commission believes that Chevron's commitment for re-evaluating the project's expected impacts prior to platform operations and implementing further mitigation measures as appropriate is a reasonable approach in this case because efforts are underway now which, when completed, will provide needed information and guidance for making informed decisions on offshore oil and gas development projects. These efforts include:

- the Joint Interagency Modeling Study (JIMS), which will provide a new photochemical model to better assess onshore impacts of OCS emission, for use by EPA, ARB and Santa Barbara and Ventura Counties;

- revisions to Santa Barbara and Ventura Counties' AQMPs, using an emissions inventory which includes OCS emissions and the information generated by JIMS;

- the South Central Coast Cooperative Aerometric Monitoring Program (SCCCAMP), which will provide much needed air quality and meteorological data for the area and may result in the development of a regional model to assess the cumulative effect of OCS development; and
- revisio ns to the DOI air quality regulations.

The results of these or other studies will provide input to the re-evaluation of Platform Hidalgo impacts and support Chevron's commitment to fully mitigate any adverse impacts on onshore air quality from its platform operations.

Thus, the Commission finds that the air quality impacts from the proposed Platform Hidalgo are mitigated to the maximum extent feasible, and, therefore, that the proposed project is consistent with Section 30260(3) of the Coastal Act.

d. Potential Transportation to Los Angeles Area Refineries.

All of the Platform Hidalgo producers are committed to transporting crude oil to refineries and markets by available pipelines, and to actively participate in promoting pipeline construction. Concerns have been raised regarding the air quality impacts in the South Coast Air Basin if this crude is transported by pipeline into the Los Angeles area. The South Coast Air Basin is currently designated an attainment area only for sulfur dioxide. The Air Quality Management Plan (AQMP) adopted by the Southern California Association of Governments calls for removing refineries by the year 2000 to reach attainment. OCS development can affect emission quantities in the south coast basin in the use of the existing refineries, use of pipeline pumps and heaters, displacement of cleaner crude oil, and unloading of tankers.

Concerns have been expressed that producers' plans to transport oil into the south coast basin by pipeline will ensure the continued existence of the refineries and their emissions which conflict with the AQMP. Recent studies indicate that the cost of transporting crude oil from the Santa Barbara area to the Los Angeles area is about the same by tanker and pipeline. Accordingly, refinery decisions will be made independent of the transportation mode. If a pipeline is not used, tankers can be. Even if the Commission had the authority to prohibit Santa Barbara Channel and Santa Maria basin producers from refining or selling crude oil at south coast basin refineries, these producers are free to tanker in crude oil of any quantity and quality from other fields to use at these refineries. Thus, prohibiting a pipeline will not affect decisions regarding continued use of these refineries.

The Commission has never expressed a preference either for or against the use of a particular refinery. However, discussions with Chevron, Champlin, Shell, Arco, and Texaco indicate that these companies do not intend to abandon their refineries in the south coast basin. Chevron has advised the Commission that its El Segundo refinery is currently equipped to handle the higher levels of sulfur that are present in OCS crude oil. Texaco is currently completing extensive modifications to modernize its Wilmington refinery. The Commission and other agencies recently authorized Champlin Petroleum to add additional coking capacity at its Wilmington refinery to process heavy crudes like those found in the Arguello field. Since these companies intend to continue refining crude oil at these existing refineries, it is unlikely that these refineries will be phased out. As long as tankering is an economically competitive transportation mode, the presence of a pipeline is immaterial to decisions regarding phasing out of these existing refineries.

Pipelines can be the source of emissions of NOx, SO_2, suspended particulates, CO, and reactive hydrocarbons. Transporting crude oil from the Santa Barbara area will require the use of booster pumps and heating stations, some of which will be located in the south coast basin. Before the pumps or heaters can be constructed, however, they must have permits from the appropriate air quality districts. These districts have the authority to require measures to reduce the emissions and to require offsets at ratios greater than one to one. It is also possible to power pumps and heaters with electricity rather than internal combustion engines.

The alternative transportation method is to use tankers. Steaming through waters in the south coast air basin, mooring with and without tugs, and unloading the crude results in emissions which are greater on an annual average daily basis than those from pipelines (see part D-1).

Arguello crude refined in the south coast area could back out the lighter, lower sulfur Alaskan North Slope (ANS) crude, resulting in increased emissions of NO_2, particulate matter, CO, and hydrocarbons. However, it cannot be assumed that there is an unlimited supply of clean crude oil. The quality of both onshore and offshore California crude and crude oil produced throughout the world, is becoming heavier and higher in sulfur content as more marginal reserves are produced. Regardless of whether OCS crude is refined in the south coast basin, lower quality crude will enter the basin.

The Commission prefers that new pipeline systems provide flexibility in the choice of market destinations. Since the Gulf coast region is a major market destination, the Platform Hidalgo producers' commitment will provide incentives for pipeline companies to construct pipelines to out of state destinations such as the Gulf. The existence of a pipeline to Los Angeles does not necessarily commit the crude oil to south coast basin refineries. If the pipeline route goes via Bakersfield it could be linked by way of the proposed Celeron/All American pipeline to markets in the Gulf Coast region or other locations. Oil transported to the south coast basin directly could be transported to the Gulf Coast through the proposed Pacific Texas pipeline. Commitments made by the Platform Hidalgo producers are likely to result in the construction and use of pipeline systems to various out of state market destinations. The Commission encourages the selection of pipeline routes that will assure construction of a pipeline transportation system to a variety of market destinations.

The commitment to pipelines does not necessarily adversely affect air quality in the south coast basin for the following reasons: the Commission has no control over a producer's choice of refinery; and cannot require phasing out existing refineries outside the coastal zone, and the use of pipelines to transport crude oil results in lower emissions of SO_2 and hydrocarbons than does the use of tankers at the receiving area, the commitment to pipelines does not necessarily adversely affect air quality in the south coast basin. Every company which has expressed a commitment to pipeline use has conditioned its statement on receipt of the necessary permits for the pipeline and refinery projects. Due to the new source rule and offset requirements, new emissions sources built subject to air quality district permits will result in a net decrease in air emissions. In contrast, the continued and increased use of tankers is not regulated, and emissions will continue unabated or increase.

8. Visual and Scenic Resources.

Section 30251 of the Act states:

> The scenic and visual qualities of coastal areas shall be considered and protected as a 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.

Section 30262, quoted previously, specifically pertains to oil and gas development. Chevron's Platform Hidalgo will be one of three permanent offshore structures visible from the coast. Construction of the platform and pipeline also will present temporary visual impacts from the Point Conception area.

The scenic areas and views of the entire Santa Barbara County coastline are resources of public importance. The coastal area has major parks and recreation areas of statewide significance, and the tourist and recreation industries rely heavily on the natural scenic quality of the coast. The Santa Barbara County LCP states that the scenic quality of the coastal zone in the North Coast planning area (Gaviota to Santa Maria River) is outstanding. The Point Conception area offers highly valuable, relatively undisturbed, and varied views. One of the most striking views in the area is of the expansive open ocean from the elevated coastal terrace. Currently, there are no fixed structures in the offshore project area. In its 1978 report, Designation of Areas Not Suitable for Power Plants, the Commission described the Point Conception area as the "...largest remaining semi-wild area in the southern California coast," extending from Jalama State Beach southward to Point Conception.

According to Chevron's Environmental Report (ER), Platform Hidalgo and associated offshore construction activities are potentially visible from Jalama Beach County Park approximately 13 miles to the east of the platform site. Views of the platform site from Gaviota State Park, 26 miles to the southeast, would be restricted by the topographic orientation of Point Conception and relative distance. The project may also be visible to residents of the higher elevations of the Bixby and Hollister ranches, beach users along the Point Arguello to Point Conception shoreline, passengers on the Amtrack rail line and offshore boaters in the platform vicinity. Pipeline installation activities will occur closer to shore, although construction-related activity would be of short duration.

The ER states that coastal fog will obscure the offshore project area about 10 to 38 percent of the time, primarily July through October, and that the distance from shore will reduce its apparent size. The development planned for the Point Arguello field will introduce long-term industrial structures to a previously natural seascape. Helicopters, service and supply boats traveling to and from the site will add to the project's visual impact.

The Commission finds that the project will cause a permanent visual impact on the scenic and recreational qualities of the Point Conception-Point Arguello area and is therefore inconsistent with Section 30251 of the Coastal Act. However, the project is mitigated to the maximum extent feasible because the size and physical appearance of the platform cannot be significantly altered and it is the least damaging location since it is not feasible to move it any farther from shore. Therefore, the Commission finds the project is consistent with Section 30260.

9. Public Access and Recreation.

Sections 30210-30212 and Section 30252 of the Act provide for maximum public access to the coast and the maintenance and enhancement of public access. Section 30210 of the Act states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreation opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Act states:

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

Section 30212(a) of the Act states:

> (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby; or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Section 30252 of the Act states:

> The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisitions and development plans with the provision of onsite recreational facilities to serve the new development.

Furthermore, Section 30213, 30220, and 30221 of the Act provide that lower cost visitor serving and recreational facilities be protected, encouraged, and where feasible, provided, and coastal areas and oceanfront land be protected for recreational use.

Section 30213 of the Act states:

> Lower cost visitor and recreational facilities and housing opportunities for persons of low and moderate income shall be protected, encouraged, and where feasible, provided. Developments providing public recreational opportunities are preferred. New housing in the coastal zone shall be developed in conformity with the standards, policies, and goals of local housing elements adopted in accordance with the requirements of subdivision (c) of Section 65302 of the Government Code.

Section 30220 of the Act states:

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Finally, Section 30221 of the Act states:

> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The proposed project's potential effects on onshore public access and recreational areas result form both installation and operation activities. Helicopters will be used to transport personnel whenever feasible. Service and supply boats may use existing facilities at Port Hueneme or Carpinteria as onshore bases. Installation and operation may be divided into the following three phases.

a. Platform and Pipeline Installation Phase.

Approximately 150 persons are expected to be employed during the two month installation phase of Platform Hidalgo. Workers will not commute throughout installation and will live in quarters on the barge. During the hookup and commissioning phase (four to six months), 64 workers (75 at peak) will be employed. The work schedule will be 12 days on, 2 days off. Workers will be quartered on the barge or the platform as the project progresses. The installation of the subsea pipelines lasts approximately 3 to 6 weeks; however, mobilization, installation, and testing of the pipelines encompasses three months. The installation activity itself will require 100 workers. Workers will not commute and will also use quarters on the barge.

b. Drilling Phase.

During the five year development drilling period, a maximum crew aboard the platform at any one time is expected to be 80 persons and divided into approximately 50 contract drilling personnel, 15 company production personnel and 15 service persons.

The development drilling operations employees will be scheduled for a 7 day work week, (12 hours per day) followed by seven days off. Drilling crews are expected to contain 35 persons for both the day shifts (18) and night shifts (17). All crew persons will be quartered on the platform.

The service personnel will be contract welders, electricians, instrument persons, etc. who will be on board the platform from one to seven days, depending on the task to be completed. Transportation to the platform will be provided by helicopters.

c. Production Phase.

The crew requirement during the production phase following the completion of development drilling consists of 20 company operating personnel, 12 contract drilling persons involved in workover drilling operations, and five support-service employees (welders, electricians, etc.). The drilling and operating personnel will work a 7 day work week (12 hours per day) followed by 7 days off. The five service contractors will be on board as needed for variable lengths of time.

Vehicle destinations include Port Hueneme or Carpinteria Pier, in association with the offshore operations. An estimated 80 percent of all personnel vehicle trips would travel to or from the southeast via U.S. Highway 101. The remaining 20 percent of vehicle trips would be to or from the northeast via U.S. Highway 101. Traffic impacts on the regional highway system in Santa Barbara County should be insignificant because maximum traffic volumes would represent only a 1.3 percent increase over current traffic volumes of 16,000 vpd on U.S. Highway 101, and will be of limited duration. It should also be noted that a substantial percentage of personnel-related traffic is generated by persons already living in the area, and therefore does not represent the actual influx of new traffic to the area.

The proposed project will also create an incremental increase in truck traffic associated with the delivery of equipment and materials to support offshore construction, drilling and operational phases. The maximum projected increase would be 8 to 10 truck trips per day during overlapping phases. Since this activity occurs throughout the day and is not concentrated at any one time, the impact should be insignificant.

Platform installation and pipeline installation will require approximately two helicopter round trips per week. During hookup and commissioning, trips will occur approximately 10 times per week. This will increase to nineteen trips per week during drilling operations and fifteen trips per week during production operations.

Chevron's project, by itself, does not appear to cause significant impacts on traffic systems and public-access/visitor-serving facilities. According to the DPP, traffic volumes will increase by only 1.3 percent. While this input appears to be minimal, cumulative impacts of such additional traffic volumes, when considered with Exxon's Santa Ynez Unit development and with other potential energy development in the area, is significant because Highway 101 already has a high level of service.

Due to the cumulative impacts on the capacity of Highway 101, the Commission finds the proposed project inconsistent with Sections 30210-30212, 30252, and 30250(a) of the Coastal Act.

However, other portions of Chevron's proposed development of the Point Arguello Field, i.e. pipelines to shore, onshore pipelines and processing facilities will be subject to coastal development permit authority. Santa Barbara County's LCP and the Coastal Act require public access to be provided as mitigation for these aspects of Chevron's development. Chevron acknowledges that coastal access will be required. The specifics of the access requirements will be determined through the coastal development permit process.

Development of the Point Arguello Field cumulatively burdens public access and recreational opportunities. Increased traffic impedes public access to the beach and the increased probability of oil spills enhance the risk that all or portions of beaches may be rendered unusable for recreational activities. Further industrialization of this field will negatively affect the overall desirability of the region as a visitor destination. The Commission recognizes that this consistency certification is not the proper vehicle to solicit public access commitments from Chevron as Platform Hidalgo will not by itself (other than visual impacts) have significant adverse impacts on public access and recreational opportunities. However, the pipelines from Platform Hermosa will run to Point Conception and then follow an easterly route to Gaviota. Therefore, since this pipeline services Platform Hidalgo (and Texaco's Platform Harvest), Platform Hidalgo contributes cumulatively to access and recreation impacts. The Commission required dedication of surface easements for public access and recreation as a condition for approving a gas pipeline to connect Texaco's Platform Habitat in the OCS Pitas Point

Unit to a proposed onshore gas odorization and metering facility near the Chevron marine terminal in Carpinteria (see Pacific Interstate Offshore Company & Pacific Lighting Gas Supply Co., E-82-21 and A-4-82-459).

In the case of Platform Hidalgo, since personnel will not be commuting daily to the offshore platform and traffic will be kept to a minimum, the Commission finds that the impacts to public access and recreation are mitigated to the maximum extent feasible. The project is therefore consistent with Section 30260.

10. Archaeological Resources.

Section 30244 of the Act states:

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

The Environmental Report summarized the results of studies used to identify cultural and archaeological resources around proposed Platform Hidalgo and along the route of the proposed pipeline from Hidalgo to Platform Hermosa. Based upon a variety of information, cited below, it was concluded that there are no identifiable prehistoric cultural resources in the area of the proposed project. However, the side scan sonor records showed one anomaly that could be interpreted as a shipwreck.

The anomaly is over 3.5 miles from the platform site and about 600' from the proposed pipeline route and can be avoided during anchoring activities associated with platform and pipeline construction. The final route for the pipeline was selected to avoid the anomalies noted.

Previous studies by California State Lands Commission (1982), Horne and Barnett (1982), Intersea Research Corporation (1979), and Stickel (1977) constitute a data base which indicates a potential of submerged archaeological sites, isolated artifacts and shipwrecks. In summary, 15 shipwrecks have been documented in the Point Conception-Point Arguello area. Given the hazardous nature of coastline in the region, it is probable that there are also several undocumented shipwrecks. There is also a possibility of submerged archaeological sites and isolated artifacts in the area.

In August and September 1982, a marine geophysical survey of a 460 mile trackline for hazards and cultural resources was made by Nekton, Inc. for Dames and Moore. No relic landforms that may be associated with submerged archaeological sites were identified nor were any isolated artifacts. An anomaly was identified as a shipwreck, and two additional anomalies were identified as possible shipwrecks.

In 1979, a side-scan sonar target was identified by Intersea Research Corporation during a survey of the platform area site. This target was not encountered during the present investigation.

Since Chevron has located the pipeline route to avoid anomalies, the Commission finds that this provides reasonable mitigation and the project is consistent with Section 30244 of the Act as it relates to the protection of archaeological resources.

11. Cumulative Impacts/Consolidation of Facilities.

The Platform Hidalgo DPP is the first development proposal for a Lease Sale 53 tract, a sale the Commission found consistent with the CCMP. Since that sale the DOI has held Lease Sales RS-2, 68, 73 and 80. Development for tracts sold in 1968 and Lease Sale 48 are still in the planning stage. The cumulative effects of the exploration and development, especially the timing, pace, and nature of the development triggered by these sales has not been addressed by the DOI in a comprehensive manner. As a result, impacts on marine and coastal resources, most notably air quality, vessel safety, and land use planning have been addressed on a case-by-case basis with the burden falling on the OCS operator proposing the activity. Clearly, this process does not provide the protection from cumulative impacts nor does it provide the certainty OCS operators deserve.

Section 30250 of the Coastal Act provides protection against these cumulative impacts to the coastal environment:

> (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources ...

The final EIR/S for the Point Arguello Field and Gaviota Processing Facility Area Study and Chevron/Texaco Development Plans (November 1984) considered all proposed development of the Point Arguello Field, and studied the impacts from further potential oil and gas production in the Arguello Slope/Southern Santa Maria Basin area. The EIR/S considered both offshore and onshore oil development, as well as non-oil related development. This development is identified below.

a. Proposed development of the Point Arguello Field.

- Two Chevron oil and gas drilling and production platforms, Hermosa and Hidalgo, on OCS leases P-0316 and P-0450, respectively

- One Texaco oil and gas drilling and production platform, Harvest, on OCS P-0315.

- An oil and gas processing facility adjacent to the inland side of U.S. Highway 101 at Gaviota 28 miles west of Santa Barbara and 15 miles east of Point Conception. The processing facility would have an ocean outfall line for disposal of produced water offshore of Gaviota.

- A system of consolidated offshore and onshore pipelines to carry the produced oil and gas from the platforms to the processing facility. The dual pipeline system would carry Hidalgo and Harvest's products to Hermosa from which the combined oil and gas would be piped to a landfall 1.5 miles north of Point Conception and then overland along the coastal terrace to the facility at Gaviota.

- An overpass over Highway 101 and associated ramps and frontage roads to support the anticipated traffic increases through the facility. The overpass would service both Chevron and Getty

Trading and Transportation proposed facilities at Gaviota. Both companies are involved in this project component.

b. Additional Offshore Oil Development.

The cumulative impact analysis in the EIR/S assumed, in addition to implementation of the immediate projects for development of the Point Arguello field by Chevron and Texaco, the following further offshore oil development projects.

Santa Ynez Unit - Several fields in the Santa Barbara Channel (Hondo, Pescado, and Sacate) are proposed for development under a joint program. The first platform, Hondo A, has been operating since 1981. Three or four future platforms are projected under the development plan submitted by Exxon as operator for the unit. Schedule for installation of the next three platforms is indicated to be one each year, starting in 1988.

Coal Oil Point - Arco, as operator, has proposed a two-platform development of the Coal Oil Point Field. These platforms would be located in state tidelands near existing platform Holly, offshore Ellwood. A development plan has been submitted to the County and the Coastal Commission; installation of the platforms is indicated for 1986/1987.

Sockeye - This field is located at the east end of the Santa Barbara Channel. It is expected that Chevron will submit a development plan later this year calling for a single platform to be installed during 1987.

Central Santa Maria Basin - Several significant discoveries have been made on Leases P-0440 and P-0441, opposite Point Arguello. At the time, the EIR/S was prepared, only one development plan had been submitted (by Union for an initial platform on Lease P-0441). Exxon's DPP/ER (Shamrock) has now been submitted to the MMS and to the Coastal Commission. It is anticipated that further development of these two leases will probably involve two more platforms installed before 1990.

Southern Santa Maria Basin - Further development of this field is asumed to require five more platforms--installed over a period from 1987 to 1992.

Exploration - This continuing activity is assumed to require an average of six to eight rigs operating in federal and state offshore areas between the Central Santa Maria Basin and the east end of the Santa Barbara Channel until the late 1980s. Coal Oil Point is assumed to be the only development project in state tidelands -- although this portion of the OCS may be explored during the next five years. Exploration of any resulting discoveries in the mid-1990s would partly offset the decline in production from the fields placed in production earlier.

Cities Service's Platform Julius - In addition, although Platform Julius was not considered in the EIR/S, Cities Service will submit Platform Julius (located on OCS P-0409, 8½ miles west of Point Sal), to the MMS in December.

c. Onshore Oil Development.

Onshore development proposed consists primarily of the consolidated marine terminal at Gaviota proposed by Getty and related onshore processing plans, and oil transportation projects.

d. Non-oil Related Development.

The non-oil related development projects considered in the cumulative analysis include highway and airport expansions, a variety of commercial, light industrial and residential projects in western Goleta, and cluster residential development on the Bixby Ranch near Point Conception.

e. Cumulative Impact Analysis.

The following impacts identified in the evaluation of cumulative impacts in the EIR/S are those which are additive to the proposed development of the Point Arguello Field and additional offshore oil development (listed above) and to approach or further exceed thresholds of significance.

The development of both the proposed Chevron processing facility and the full-scale Getty treatment, storage, marine terminal and supply base at Gaviota would be expected to have locally or regionally significant impacts which include the four issues listed below.

1) Air Quality - Exceedances of the short-term state NO_2 and SO_2 standards and the Federal Ozone Standard would be expected because of the combination of marine terminal (tanker) plus processing facility emissions and would only be partially mitigable.

2) Onshore Water Resources - Cumulative water demanads would exceed the capacity of the local supplies that could be obtained onshore without significant adverse effects on streamflow; desalination would be an effective mitigation.

3) Coastal Access and Aesthetic Resources - Cumulatively, oil related projects proposed for the OCS and state waters will significantly impact the aesthetic attributes of the south coast area which support its recreation and tourism popularity. Increased industrial activity will conflict with non-industrial uses along the shoreline. Increased intensity of use from both oil and non-oil related population increases will further degraded the existing recreational amenities.

4) Commercial Fishing and Kelp Harvest - This activity would be adversely affected by the construction and operation of the marine terminal and supply base (Getty) by interference with set gear fishing, and potentially by supply vessel traffic damage to the kelp canopy.

Impacts from other aspects of cumulative development include the following: population growth and associated increases in demands for housing and services; loss of environmentally sensitive habitat areas; disruption of cultural resources; increased safety risks from product transportation; and 2-4 times greater probability of offshore oil spillage in the region than prevails today.

In addition to the impacts discussed above, parts D.3, 4, 5, 7, 8 and 9 above describe in detail the project's inconsistency with Section 30250(a), due to significant cumulative impacts on marine resources, commercial fishing operations, vessel traffic safety, air quality, visual resources, and public access and recreation. The Commission finds that the cumulative impacts from this project and from Chevron's Platform Hermosa, Texaco's Platform Harvest, Exxon's Santa Ynez Unit and Arco's Coal Oil Point development on these resources are significant and adverse and thus Chevron's proposal fails to meet the requirements of Section 30250(a).

f. Maximum Feasible Mitigation.

The project therefore must be analyzed under Section 30260 requirements. The Commission finds that the first requirement of feasible alternative locations for Chevron's project is met by Chevron for the proposed OCS facilities. The platform location could be moved within limited distances and still allow production of the hydrocarbon structure. However, a major relocation of the platform would not allow efficient production of the structure. In addition, minor changes in location are not necessary since coastal resource impacts would not be reduced due to similar substrate and habitats in the area.

Mitigation of adverse environmental effects to the maximum extent feasible is the third requirement of 30260. As stated in the previous sections, Chevron and its partner are proposing maximum feasible mitigation to reduce impacts on coastal resources. The Commission emphasizes that the commitment to use consolidated transportation and processing facilities is the major step towards developing maximum feasible mitigation measures to reduce impacts on the resources. Platform Hidalgo will share these facilities with Chevron's Platform Hermosa and Texaco's Platform Harvest, as well as other platforms which may be proposed in the future. Thus, site-specific impacts from processing plants, pipelines, roads and other associated developments will be confined to a relatively discreet area. Use of a common pipeline will minimize the risk of oil spills. Chevron has committed to re-evaluate Platform Hermosa's expected air quality impacts prior to platform operations and to implement further mitigation measures as appropriate. Due to consolidation and to Chevron's commitments to mitigate impacts to the maximum exent feasible, the Commission finds the project consistent with Section 30260 (3) (See Exhibit 5).

12. Public Welfare.

Under Section 30260(2) of the Act, the COmmission must determine that Chevron's project will not adversely affect the public welfare. Included in the concept of public welfare is consideration of the "national interest."

The Commission considers the national interest when it reviews federal licenses and permits. In addition to the Coastal Act, the Commission's approved CCMP includes a separate chapter (Chapter 11) that describes the process used for considering the national interest. The federal government has determined that the California coast is a resource of national significance, comprising more than half the western coastline of the contiguous 48 states. In reauthorizing the federal Coastal Zone Management Act in 1980, Congress identified ten national objectives to be achieved by states through their coastal management programs. Nine of the ten objectives recognize the critical need to protect coastal zone environmental resources. However, the Congress, the California Legislature, and the Commission also recognized that a balancing must be made with respect to the protection of land and water resources and the development of domestic energy resources. This balancing takes place under the provisions of the "public welfare" test embodied in Section 30260 of the Coastal Act. Thus, under Section 30260, the Commission is empowered to balance the national interest in both resource protection and energy development as is required under the CZMA.

To assist the Commission in considering the national interest in coastal projects, the CZMA regulations allow coastal states to secure the assistance of the Secretary of Commerce in "... determining the nature of the national interest in a particular facility when a request to site that facility occurs." (15 CFR 923.52). On May 27, 1983, the Executive Director requested that the Office of Ocean and Coastal Resource

Management (OCRM) contact other relevant federal agencies to provide the Commission with information on the national interest in Chevron's project, particularly on national defense, navigational safety, air quality, water pollution, commercial fishing, living marine resources, and other energy proposals.

To date, the Commission has received responses from the Departments of Energy, Air Force, Transportation, Commerce, Interior, Treasury, and the Federal Energy Regulatory Commission. While these comments stress the need for development of domestic oil and gas resources, they do not analyze the project's specific impacts on environmental resources. Comments from the Environmental Protection Agency stress the need for a complete cumulative impact analysis to adequately analyze air and water impacts of all OCS oil and gas development.

The Commission recognizes the national interest in meeting the nation's domestic energy needs and supports OCS lease sales and development projects in areas where petroleum resources are high and an infrastructure exists to support offshore oil development. In keeping with this policy, the Commission finds that the Platform Hidalgo and the accompanying pipeline can only be found to be in the public interest with mitigation for the adverse impacts identified in the previous sections of this report. The commitment of the Platform Hidalgo producers to use pipelines for transportation of the crude if they are available with accessible capacity to their market destinations, and the proposed consolidation of the transportation and processing facilities with Chevron's Platform Hermosa project mitigate the majority of these impacts. Other measures for protection of marine resources, commercial fishing activities, air quality, vessel traffic safety, visual and scenic resources, and public access and recreation complete mitigation of adverse impacts on coastal resource. These commitments allow the Commission to find the project consistent with the public welfare since the impacts are mitigated to the maximum extent feasible. Therefore, the Commission finds the proposed construction and operation of Platform Hidalgo and the marine pipeline between Platforms Hidalgo and Hermosa consistent with Section 30260(2) and hence with the California Coastal Act of 1976.

APPENDIX I

Substantive File Documents

California Coastal Commission Findings and Reports

General Policy Statement on Conflicts Between the Commercial FIshing and Oil and Gas Industries, October 10, 1984.

General Policy Statement on the Ocean Disposed of Drilling Muds and Cuttings, October 10, 1984.

Consistency Determination File CD-28-83, Department of the Interior, Lease Sale 73.

Consistency Certification FIle CC-27-83, Texaco USA, Inc., Platform Harvest.

Consistency Certification File CC-12-83, Chevron U.S.A., Point Arguello Field.

Consistency Certification File CC-7-83, Exxon Company, USA, Santa Ynez Unit.

Policy Statement on Oil Spill Response Measures, December 15, 1983.

Policy Statement on Conflicts Between Vessel Safety and Offshore Oil and Gas Operations, July 28, 1982.

Pacific Interstate Offshore Company (A-4-82-459).

Pacific Interstate Offshore Company (E-82-21).

Environmental Documents and Studies

Branon, A. C. and K. R. Rao. 1979. Barium, strontium and calcium levels in the exoskeleton, hepatopancreas and abdominal muscle of the grass shrimp, Palaemonetes pugio: relation to molting and exposure to barite. Comp. Biochem. Physio., 63A: 261-274.

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California Air Resources Board. Report of the California Legislature on Air Pollutant Emissions from Marine Vessels (Draft), June 1983.

California Department of Fish and Game. February 9, 1983. A report on the fates and biological effects of oil well drilling fluids.

California State Lands Commission, Program EIR. Leasing, Exploration, and Development of Oil and Gas Resources on State Tide and Submerged Lands, Point Conception to Point Arguello, Santa Barbara County, California. April 1982.

California State Lands Commission. Finalizing Addendum of the Environmental Impact Report for the State Tidelands Lease Sale from Point Conception to Point Arguello, 1982.

California State Lands Commission and Bureau of Land Management. Proposed Celevon/All Amenrican Pipeline Projects, August 1984.

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Dames & Moore. Site-Specific Marine Biological Survey; Leases P-0446, -0447, -0450, -0451 and -0452; Southern Santa Maria Basin Area. For Chevron USA Inc., Job No. 00113-649-15, December 9, 1982.

Dames & Moore. Marine Biology, EPS Baseline Studies, Santa Ynez Unit Development, Offshore California. Prepared for Exxon Co. USA, 1982a.

Dames and Moore. April 15, 1981. Fate and effects of drilling fluids discharges in Lower Cook Inlet, Alaska, and on Georges Bank. Dames and Moore, Seattle, Washington.

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Jenkins, K. D. and B. M. Sanders. 1984. Effects of drilling fluids on metal metabolism on marine organisms: proposal submitted to Shell California Production, Inc.

Klapow, L. A. and R. H. Lewis. 1978. Analysis of toxicity data for California marine water quality standards. Jour. of WPCF, 51(8): 2054-2070.

Lehrman, D.E. et al, A Study of Transport Into, Within, and Out of Coastal Areas of Southern Santa Barbara County and Ventura County, Meteorology Research, Inc., and California Institute of Technology, Division of Chemistry and Chemical Engineering for Ventura County Air Pollution Control District, June 1981.

Little, Arthur D., Inc. Point Arguello Field and Gaviota Processing Facility Area Study and Chevron Development Plans EIR/EIS, Final Report, November 1984.

McClelland Engineers, 1983a. Geophysical Investigation, Proposed Platform Hidalgo, Point Arguello Field, Offshore California. Report prepared for Chevron U.S.A. Inc.

McClelland Engineers, 1983b. Sites and Foundation Investigation Platform Hidalgo, Point Arguello Field, OCS Lease P 0450, Offshore California. Report prepared for Chevron U.S.A. Inc.

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Point Arguello Field and Gaviota Processing Facility Area Study and Chevron/Texaco Development Plans EIR/EIS, November 1984.

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Letters

To L. Thomas Tobin, California Coastal Commission from Susan P. Callister, Chevron U.S.A., November 15, 1984.

To California Coastal Commission from Chevron U.S.A., Inc., November 1, 1984.

To L. Thomas Tobin, California Coastal Commission from J. E. Jennings, Phillips Petroleum Company, October 31, 1984.

To L. Thomas Tobin, California Coastal Commission from Susan P. Callister, Chevron U.S.A., Inc., October 19, 1984.

To F. Robin, Chevron U.S.A., Inc. from L. Thomas Tobin, California Coastal Commission, September 27, 1984.

To Honorable William Clark, Secretary of the Interior, U.S.A.I. from Gordon Duffy, Secretary of Environmental Affairs, State of California (with attachments), August 29, 1984.

To California Coastal Commission from Thomas W. Dunaway, Pacific OCS Region Minerals Management Service, July 2, 1984.

To California Coastal Commission from Thomas W. Dunaway, Pacific OCS Region Minerals Management Service, June 28, 1984.

To Michael L. Fischer, California Coastal Commission from Susan P. Callister, Chevron U.S.A., Inc., June 1, 1984.

To Michael L. Fischer, California Coastal Commission from Gordon Duffy, Air Resources Board, November 2, 1984.

To Gordon Duffy, Secretary of Environmental Affairs, State of California from James Boyd, California Air Resources Board, November 2, 1983.

To Gordon W. Duffy, Secretary of Environmental Affairs, State of California from Jack L. Watkins, Major General U.S.A.F., Vandenberg Air Force Base, July 18, 1983.

To Peter L. Tweedt, OCRM, NOAA Pasquale A. Alberico, U.S. Environmental Protection Agency, May 23, 1983.

Memoranda

To Gloria McGregor, SCAG from Jody Loeffler, California Coastal Commission, November 9, 1984.

To John Doyle, Office of Environmental Affairs, State of California from James D. Boyd, California Air Resources Board, November 8, 1984.

To John Doyle, Office of Environmental Affairs, State of California from James M. Boyd, California Air Resources Board, September 11, 1984.

To John Doyle, Office of Environmental Affairs from James M. Boyd, California Air Resources Board, August 7, 1984.

To L. Thomas Tobin, California Coastal Commission from Jack C. Parnell, California Department of Fish and Game, August 6, 1984.

To Michael L. Fischer, California Coastal Commission from Gordon Duffy, Secretary of Environmental Affairs, July 5, 1984.

To Michael L. Fischer, California Coastal Commission from James D. Boyd, California Air Resources Board, January 25, 1984.

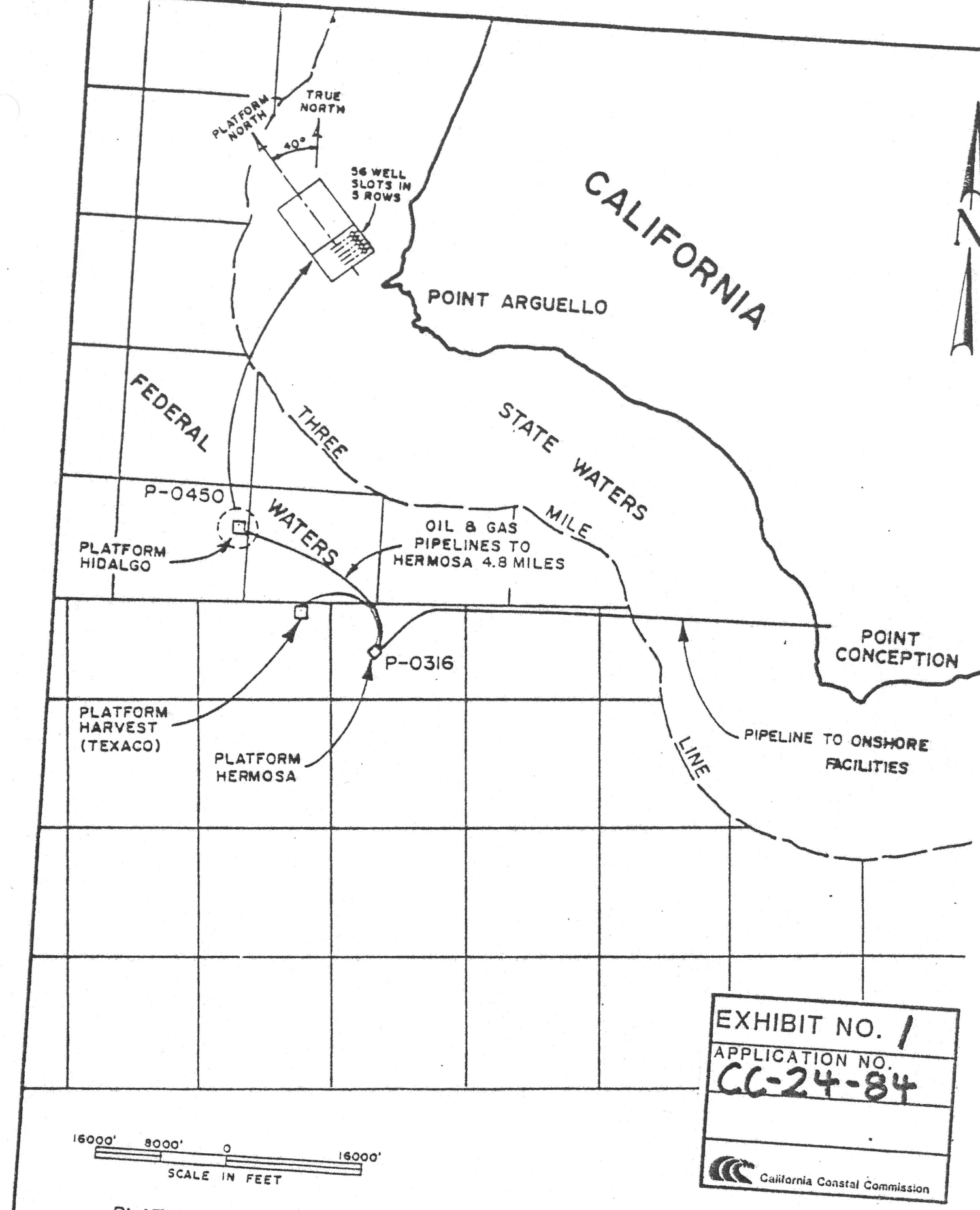

EXHIBIT NO. 1
APPLICATION NO. CC-24-84
California Coastal Commission

PLATFORM LOCATION
LAMBERT GRID ZONE 6
X = 658,540 E. Y = 875,876 N.
WEST LONGITUDE 120° 42' 08.44"
NORTH LATITUDE 34° 29' 42.06"

UTM ZONE 10
X = 710,970 m E.
Y = 3,819,245 m N.

PLATFORM HIDALGO
POINT ARGUELLO FIELD
OCS P-0450
OFFSHORE SANTA BARBARA COUNTY, CALIFORNIA
FIGURE 1.1

Chevron U.S.A. Inc.
2120 Diamond Boulevard, Concord, California
Mail Address: P.O. Box 8000, Concord, CA 94524
(415) 680-3045

June 1, 1984

Pt. Arguello Field Development and
Production Plan Supplement:
Platform Hidalgo and Associated Pipelines
OCS P-0450
Consistency Review and Certification

Mr. Michael Fischer, Executive Director
California Coastal Commission
631 Howard Street
San Francisco CA 94105

Dear Mr. Fischer:

The Development and Production Plan and Environmental Report (DPP/ER) for Platform Hidalgo and its associated pipelines should reach your office later this month. It will be forwarded by the Minerals Management Service so that your staff may commence its review pursuant to the Commission's consistency authority. Hidalgo is the second proposed platform for Chevron's Arguello Field development. The DPP/ER for Platform Hidalgo and its associated pipelines is a Supplement to the base DPP/ER for the Point Arguello Field (Platform Hermosa, associated pipelines and processing facilities) which your Commission found consistent with California's Coastal Plan on November 15, 1983.

We plan to install Platform Hidalgo in 1986. It will be located about 6.5 miles southwest of Point Arguello and 13.6 miles northwest of Point Conception. Production from Hidalgo will go by pipeline to Chevron's Platform Hermosa. In keeping with Chevron's ongoing commitment to consolidate energy facilities, the oil and gas lines from Hidalgo to Hermosa will join consolidated industry lines and will go from Platform Hermosa to the Gaviota onshore facilities, which will be sized to accommodate potential production estimates for the entire Point Arguello area.

Hidalgo will be a 3-deck, 8-leg drilling production platform which will be installed by conventional methods in approximately 430 feet of water. We have included a map of the area which shows Platform Hidalgo's location in relation to the shore, Texaco's proposed Platform Harvest and Platform Hermosa.

We have also attached a copy of the Executive Summary from the DDP which gives the development and production overview of the project and includes a discussion of the Joint EIS-EIR. Your agency is a party to the Memorandum of Understanding written to allow for the joint Federal and State environmental review of this project. Two members of your staff are members of the Joint Review Panel that was formed to oversee the preparation of the Joint EIS/EIR which includes Hidalgo.

The Environmental Report that accompanies the DPP includes a detailed evaluation of proposed development and production activities in relation to California's approved Coastal Zone Management Program. The project is thoroughly assessed in relation to each pertinent section of the Coastal Act, including but not limited to Section 30211—Public Access, Sections 30230 and 30231—Protection of the Marine Environment, Section 30232—Protection Against Spills, Section 30234—Commercial Fishing and Recreational Boating Facilities, Section 30244—Archaeological or Paleontological Resources, Section 30251—Coastal Visual Resources and Special Communities, Section 30253—Hazard and Energy Conservation, Section 30260—Locating Industrial Development, Section 30261—Marine Terminal Facilities, and Section 30262—Oil and Gas Development.

Pursuant to 30CFR Part 930, the proposed activities described in the Development and Production Plan for Platform Hidalgo and its associated pipelines do not significantly affect any land or water use in the Coastal Zone in the State of California and are therefore consistent with California's approved Coastal Zone Management Program.

We look forward to working with you and members of your staff during the remainder of the environmental review process for the Point Arguello project. As we have attempted to schedule matters at this time, it appears that the EIS-EIR for the Point Arguello project, the consistency hearing for Hidalgo, and our Coastal permits (outfall line and pipeline in State waters) should be on the Commission's agenda together in late fall or early December.

After you receive the Hidalgo Supplement DPP/ER, we will contact Mr. Tobin to arrange for a meeting to discuss the project and scheduling.

Very truly yours,

Susan P. Callister

SPC:mj
Enclosures

cc: Mr. L. Thomas Tobin
California Coastal Commission

PHILLIPS PETROLEUM COMPANY
DENVER, COLORADO 80237
8055 EAST TUFTS AVENUE PARKWAY

October 31, 1984

Subject: Point Arguello Field
Hidalgo Platform
Crude Oil Transportation

Mr. L. Thomas Tobin
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, California 94105

Dear Mr. Tobin:

Phillips Petroleum Company and Chevron own equal interest in offshore Lease OCS P-0450 where Chevron is the operator. It is our understanding that the California Coastal Commission will hold hearings on consistency certification for the Chevron U.S.A. Inc. project for development of this lease during November 1984, and that the Coastal Commission staff is presently preparing its report to the Commission on this matter. For your information and to assist you in preparing your report to the Commission, we are transmitting herewith a statement of Phillips Petroleum Company's position on transportation of the Phillips' portion of crude oil to be produced form the Hidalgo platofrm in P-0450.

Phillips owns no refinery facilities within the State of California and for this reason, Phillips plans to transport its share of the produced crude to its own refinery and markets on the Texas Gulf Coast. Although two pipeline companies have made permit applications for crude oil pipelines from California to Texas, neither pipeline is expected to be in place by early 1987 when first oil is scheduled to be produced from the Hidalgo platform. Phillips proposes to utilize an existing or future marine terminal and tankering to move its crude oil to the Texas Gulf Coast until such time as this oil refining center is served by pipeline.

On 22 May 1984, Phillips' Oil Transportation Plan was submitted to the County of Santa Barbara along with the request for a finding by Santa Barbara County which would permit Phillips as a particular operator (producer) to utilize a marine terminal and tankering until such time as an economically competitive common carrier pipeline to Phillips' preferred markets is available. The County's response letter dated July 1, 1984, is attached for your information.

Should you have questions concerning our plans for crude oil transportation or the attached position statement, please contact the undersigned in Denver, Phone No. (303) 850-3318.

Sincerely,

J. E. Jennings

jej33.1084.10
Attachment
cc: Mr. Dick Harris (r) Sue Callister
Chevron U.S.A. Inc.
2120 Diamond Boulevard
Concord, California 94520

PHILLIPS PETROLEUM COMPANY'S POSITION
HIDALGO PLATFORM CRUDE OIL TRANSPORTATION

Phillips Petroleum Company holds a lease ownership interest in several OCS tracts Offshore California, including a 50% interest in OCS Tract P-0450 where the Hidalgo Platform is to be installed. The platform will be operated by Chevron. Phillips has and continues to maintain an active interest in OCS crude oil transportation options as evidenced by our participation in and financial support of several studies, including the recent Santa Barbara County Oil Transportation Plan.

Phillips' oil produced from Platform Hidalgo will be transported, along with oil produced by other area producers, through a common carrier pipeline from a central location in the Point Arguello Field (Platform Hermosa) to oil dehydrating facilities onshore at Gaviota.

Phillips owns no refinery facilities within the State of California, and places a high priority on security of supply to its existing refineries. In order to move our share of the produced crude from Gaviota to our refineries and markets on the Texas Gulf Coast, it will be necessary to utilize:

1) A pipeline from California to the Texas Gulf Coast, or

2) Marine terminals for tanker loading.

In accordance with Coastal Zone Ordinance Section 35-154.5(i), Phillips would plan to utilize a crude oil pipeline to transport our part of the Hidalgo Platform oil production from the dehydration facilities at Gaviota to the Texas Gulf Coast as soon as this oil refining center is served by pipeline. Should a California to Texas pipeline system not provide a viable, economic, and competitive means of oil transportation in Phillips' opinion, Phillips would seek approval of another transportation mode as provided in CZ Section 35-154.5(i).

Prior to completion of a crude oil pipeline system from California to the Texas Gulf Coast, Phillips proposes to utilize existing or future marine terminals, provided such terminals and tanker transportation offers a viable, economic, and competitive means of oil transportation.

Another option which Phillips would consider is the sale or trade of all or a part of its crude oil produced Offshore California to California refiners who utilize then existing California intrastate pipelines for transportation of oil to their refineries. Without the ability to move its Offshore California crude oil to its own refineries on the Gulf Coast, Phillips cannot limit itself to this option alone.

jej33.1084.07

Santa Barbara County
RESOURCE MANAGEMENT DEPARTMENT

DIANNE GUZMAN, AICP
Director

Deputy Directors
Comprehensive Planning
Environmental Review — Jeffrey T. Harris
Current Planning — Albert J. McCurdy

July 1, 1984

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JEJ

Mr. John Jennings
Phillips Petroleum
8055 East Tufts Parkway
Denver, CO 80237

Dear Mr. Jennings:

This is in response to Phillips' Oil Transportation plan submitted to the County on May 22. In light of the Oil Transportation policies recently adopted by the Board of Supervisors no infeasibility determination will need to be made at this time. The following describes the effect of the County's recent action and our plans for implementation.

Under the Board's interpretation of County policies, Phillips is not required to use a pipeline until such time as the refining center of your choice is served by a pipeline. After such a pipeline is installed Phillips will be required to use the pipeline for oil shipped to that refining center. As an alternative, after pipeline tariffs are established, Phillips may submit information demonstrating that the incremental cost of pipelines (if any) relative to marine transportation are unreasonable given the environmental impacts of the alternative transporation mode. After reviewing this and other applicable information the County will make a decision as to whether marine transportation will be allowed.

Although no action on your plan is needed at this time, I would like to thank you and Mr. Hopper for providing us with the information and working with us during the development of the oil transportation policies. I believe the policies will streamline the County's project review process and avoid the need for speculative decision-making.

If you have any questions, please do not hesitate to contact me or Richard Taylor of the Energy Division staff.

Sincerely,

Philip A. Overeynder
Deputy Director
PAO:RST:gc
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123 East Anapamu Street, Santa Barbara, CA 93101 (805) 963-7135

State of California

CC-24-84 File

Memorandum

To : John Doyle
Chief of Offshore Development

Date : November 8, 1984

Subject: Additional Comments on Chevron's Platform Hidalgo

From : James D. Boyd
Executive Officer
Air Resources Board

We recently received a request from the California Coastal Commission for further guidance on the consistency determination for Chevron's Platform Hidalgo. Specifically, the Commission would like to know whether further mitigation, beyond the installation of the controls Chevron has proposed, should be required of Chevron. The consistency hearing to decide this issue is scheduled for the Commission's November 27-30 meeting.

On January 23, 1984, we submitted comments to the Commission on Texaco's nearby Platform Harvest. We recommended that the Commission require further mitigation from Texaco in the event that the "Point Arguello Field and Gaviota Processing Facility Area Study and Chevron and Texaco's Development Plan", EIR/EIS shows an adverse onshore air quality impact from Platform Harvest.

We have completed our review of this EIR/EIS, and can now make recommendations applicable to all platforms associated with the Point Arguello Field.

The air quality analysis for the Point Arguello Field Area Study EIR/EIS indicates that oxides of nitrogen (NO_x) emissions from Platform Hidalgo, in combination with emissions from other nearby proposed platforms, could cause violations of the California one-hour standard for nitrogen dioxide, and could contribute to violations of the federal and state ozone standards.

Our review of the modeling performed for the EIR/EIS indicates that this modeling may overestimate resulting nitrogen dioxide concentrations. By using more realistic data, no violations of the state's one-hour nitrogen dioxide standard would be predicted. The EIR/EIS modeling assumed that the existing onshore concentrations of ozone and nitrogen dioxide are the maximum values recorded. The maximum value for ozone, however, does not occur at the same time as the maximum value for nitrogen dioxide. By taking into account the fact that the highest ozone and nitrogen dioxide concentrations do not occur simultaneously, modeled nitrogen dioxide concentrations would not be great enough to cause violations of the state one-hour nitrogen dioxide standard.

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APPLICATION NO. CC-24-84

Our analysis also indicates the modeling analysis for ozone predicts the correct direction of ozone concentration changes, but does not necessarily predict the correct change in concentration. In this case, the results indicate that emissions from Platform Hidalgo would increase onshore ozone concentrations and would contribute to the existing standards violations. A more sophisticated modeling approach would be necessary to accurately predict the magnitude of the ozone increases.

The air quality analysis indicates that NO_x emissions from Platform Hidalgo, in combination with other nearby proposed platforms, could contribute to violations of the state and federal ozone ambient air quality standard in Santa Barbara County. Thus, further mitigation of NO_x (ozone precursor) is necessary to ensure that onshore air quality is protected. Requiring further mitigation in these circumstances is consistent with the Lease Sale 73 and 80 air quality stipulations as we understand them. Our longstanding policy has been that further mitigation should be provided when OCS NO_x emissions will prevent the attainment of onshore ozone standards. We recommend as we have done in comments on other projects that Chevron use the following procedure to determine if further mitigation is feasible.

1) Determine whether the emissions from Platform Hidalgo could be further controlled through the installation of additional control technology although the controls Chevron is proposing for Hidalgo are currently considered best available control technology.

2) If further controls are not feasible on Platform Hidalgo, Chevron should investigate whether the NO_x and/or hydrocarbon emissions from any Chevron-owned facilities in southern Santa Barbara County can be further controlled. Our information on this question indicates that Chevron has facilities which could provide NO_x emission reductions to offset Platform Hidalgo NO_x increases. According to a recent emissions inventory, Chevron emitted 617 tons of NO_x in 1980 from its Carpenteria facility. Most of these emissions came from gas-fired internal combustion engines. Chevron has subsequently retrofitted these engines with catalysts to reduce NO_x emissions, in order to offset NO_x increases from exploratory drilling in state waters off the Santa Barbara County coast. Some of these reductions may be available to offset the emissions from Hidalgo.

   In addition, the same emissions inventory indicated that Chevron emitted 361 tons of NO_x in 1980 from Platform Hope. These emissions came from gas-fired internal combustion engines. These emissions can be reduced by

approximately 80 percent through the installation of NO_x catalysts or by the retrofit of low NO_x emitting combustion equipment on the engines.

Either of the two Chevron facilities described above should have sufficient reductions available to fully offset Platform Hidalgo's emissions.

As another alternative, offsets from Chevron-owned facilities in northern Santa Barbara could be used, if the Santa Barbara County Air Pollution Control District concurs that offsets from that area are acceptable for Hidalgo.

3) If the emissions from Chevron-owned facilities onshore cannot be controlled any further, Chevron should determine whether any onshore emission sources in southern Santa Barbara not owned by Chevron can be further controlled to offset Platform Hidalgo emissions. If emissions from these sources can be reduced, Chevron should make arrangments to control these emissions in order to offset the emission increases from Platform Hidalgo.

If Chevron undertakes the above steps, we believe that Chevron would comply with Section 30260 (3) of the Public Resources Code (requiring adverse environmental effects to be mitigated to the maximum extent feasible).

If you have any questions or if we can be of further assistance, please contact Peter Venturini, Chief, Stationary Source Division, at (916) 445-0650.

Chevron U.S.A. Inc.
2120 Diamond Boulevard, Concord, California
Mail Address: P.O. Box 6000, Concord, CA 94524-6000

Land Department
Western Region

EXHIBIT NO. 5
APPLICATION NO.
CC-24-84
California Coastal Commission

November 15, 1984

Point Arguello Field: Supplementary DPP/ER
Platform Hidalgo and Associated Pipelines
Consistency Certification

California Coastal Commission
631 Howard Street
San Francisco, CA 94105

Attention: Mr. L. Thomas Tobin

Gentlemen:

This letter serves to reconfirm committments made to your staff regarding our Plan of Development for OCS P-0450 which is before the Coastal Commission for Consistency Certification.

1. If the Exxon Corporation does not complete its studies of chemical dispersants for cleaning up oil spills by April 1, 1985, Chevron will begin planning efforts for a study to begin for Point Arguello Field crude on or before June 1, 1985. This study program by Chevron will provide data to determine the most effective and least toxic products to clean up oils produced from the Pt. Arguello field. The study program will be submitted to the California State Department of Fish and Game, the U. S. Coast Guard, the Minerals Management Service, the Environmental Protection Agency, and the Coastal Commission by May 1, 1985 for approval. The study will be completed six months after approval of the study program by the agencies listed above.

2. Chevron will implement feasible mitigation measures that may be outlined in the Joint Government/Industry Muds Mitigation Study. This study is currently being conducted as a result of a committment made as a part of Chevron's prior Consistency Certification for the Pt. Arguello Field (including Platform Hermosa and its associated pipelines and facilities).

3. As we have previously stated to the Commission on other matters (reference CC-16-84) Chevron will not moor any of its on-contract support vessels within the ten fathom curve just outside Port Hueneme, the area traditionally known as the Hueneme Flats.

4. After installation of Platform of Hildago and its associated pipelines, post-construction surveys will be run to ensure that no artificial obstructions exist within the construction area that are related to installation of the platform or pipelines. This will be done in consultation with and pursuant to MMS requirements. The type of surveys to be conducted shall be determined by Chevron; i.e., trawling, side-scan sonar, or other ways.

5. As stated in the Environmental Report, Chevron's installation of Hildago and its associated pipelines has been scheduled so it will not conflict with the whale migration season.

6. Prior to operations on Platform Hildago, Chevron will re-evaluate projected emissions from the platform's operations to determine onshore impacts using tools available at that time. If these emmisions show onshore violations of ozone standards in either Santa Barbara County or Ventura County caused by the platform's emmisions, then Chevron shall mitigate. This re-evaluation and determination shall be done in consultation with the Minerals Management Service and the Commission.

7. A statement from our partner for the project, Phillips Petroleum Company, outlining its crude transportation policy is attached hereto. Both Phillips' and Chevron's policies conform to Santa Barbara County requirements for crude transportation.

Chevron looks forward to the Commission's concurrence with our Consistency Certification on November 28, 1984.

Very truly yours,

CHEVRON U.S.A. INC.

By Susan Callister

Susan P. Callister
Senior Attorney

SPC/ai
Attachment
cc: Mr. Thomas Dunaway
Minerals Management Service

PHILLIPS PETROLEUM COMPANY'S POSITION
HIDALGO PLATFORM CRUDE OIL TRANSPORTATION

Phillips Petroleum Company holds a lease ownership interest in several OCS tracts Offshore California, including a 50% interest in OCS Tract P-0450 where the Hidalgo Platform is to be installed. The platform will be operated by Chevron. Phillips has and continues to maintain an active interest in OCS crude oil transportation options as evidenced by our participation in and financial support of several studies, including the recent Santa Barbara County Oil Transportation Plan.

Phillips' oil produced from Platform Hidalgo will be transported, along with oil produced by other area producers, through a common carrier pipeline from a central location in the Point Arguello Field (Platform Hermosa) to oil dehydrating facilities onshore at Gaviota.

Phillips owns no refinery facilities within the State of California, and places a high priority on security of supply to its existing refineries. In order to move our share of the produced crude from Gaviota to our refineries and markets on the Texas Gulf Coast, it will be necessary to utilize:

1) A pipeline from California to the Texas Gulf Coast, or

2) Marine terminals for tanker loading.

In accordance with Coastal Zone Ordinance Section 35-154.5(i), Phillips would plan to utilize a crude oil pipeline to transport our part of the Hidalgo Platform oil production from the dehydration facilities at Gaviota to the Texas Gulf Coast as soon as this oil refining center is served by pipeline. Should a California to Texas pipeline system not provide a viable, economic, and competitive means of oil transportation in Phillips' opinion, Phillips would seek approval of another transportation mode as provided in CZ Section 35-154.5(i).

Prior to completion of a crude oil pipeline system from California to the Texas Gulf Coast, Phillips proposes to utilize existing or future marine terminals, provided such terminals and tanker transportation offers a viable, economic, and competitive means of oil transportation.

Another option which Phillips would consider is the sale or trade of all or a part of its crude oil produced Offshore California to California refiners who utilize then existing California intrastate pipelines for transportation of oil to their refineries. Without the ability to move its Offshore California crude oil to its own refineries on the Gulf Coast, Phillips cannot limit itself to this option alone.

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