P0315 Pl. Harvest

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NOTED-DUNAWAY

REGULAR CALENDAR

PRELIMINARY STAFF RECOMMENDATION ON CONSISTENCY CERTIFICATION

PROJECT DESCRIPTION

Applicant for Federal Permit: Texaco USA, Inc.

Project Location: On offshore lease tract OCS P-0315, approximately 11 miles west of Point Conception, Santa Barbara County (see Exhibit 1)

Project Description: One 50 well slot drilling and production platform; two subsea oil and gas pipeline from Texaco's Platform Harvest to Chevron's Platform Hermosa. The hydrocarbons will be transported through Chevron's consolidated pipeline to onshore consolidated processing facilities.

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 Texaco USA, Inc. for its Development and Production Plan for OCS P-0315 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 Texaco'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 has been submitted to so determine; and (2) how the activity is consistent with the specific mandatory provisions of the CCMP.

Timing of Commission Review. The applicant controls the schedule for consistency review by its submittal of the DPP to the MMS. Once the MMS determines that the plan is complete, MMS forwards it to the Commission, which starts the six month schedule for consistency review. Even though the MMS has determined that an EIS is required, the six month schedule for a state's consistency review remains unchanged.

Due to schedule limitations imposed by the federal regulations which implement the CZMA, the Commission must complete its review of the Texaco DPP prior to the preparation of the joint EIR/EIS for the project and before action is taken on the permits. Therefore, the Commission does not have the benefit of all the environmental documents in reviewing this project, and must base its determination on the Environmental Report (ER) and other information provided by Texaco as part of the DPP.

B. PROJECT DESCRIPTION AND HISTORY

Texaco USA, Inc. proposes to expand development of the Point Arguello Field by:

- Installing a 50 well slot drilling and production platform field (Harvest) on OCS lease P-0315, approximately 11 miles west of Point Conception; and

- Installing two subsea oil and gas pipelines connecting platforms Harvest and Chevron's Hermosa (Exhibit 1).

The hydrocarbons from Platform Harvest will be transported from Platform Hermosa to consolidated onshore processing facilities via a consolidated pipeline (Chevron USA, Inc, CC-12-83). Texaco expects these facilities to be at either Corral Canyon/El Capitan or at Gaviota. Texaco and its partners, Sun, Pennzoil, and Koch, commit to transporting the processed crude oil to refineries by regional pipeline, if one is available. Until a pipeline(s) is/are build, and during emergencies after one is built to the market destinations the crude will be transported by other available means. Platform Harvest producers will continue their participation in ongoing agency/industry planning processes which will determine locations of the facilities.

Produced natural gas will be treated on Platform Hermosa and delivered into the existing regional pipeline for distribution to the southern California area.

Texaco's Platform Harvest will be one of up to four anticipated platforms in the Point Arguello field. The Commission found in CC-12-83 the first of these platforms, Hermosa, consistent with the CCMP. In CC-12-83 the Commission also concurred with installation and use of a common carrier pipelines designed to handle production from these four platforms from Hermosa to the onshore processing facilities.

Two proposals for these facilities have already been proposed; one by Chevron at its existing gas processing plant site at Gaviota, and the other by Exxon at Los Flores Canyon. Currently, both facilities are subjects of Santa Barbara County permit applications and EIR/EIS's studying the environmental impacts of the proposed developments in the Point Arguello Field and Santa Ynez Unit's areas.

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 following discussion clearly demonstrates the superiority of onshore pipeline transportation of crude oil over transportation by tanker. This conclusion is based on the smaller volume of oil spills from onshore pipeline operations and the greater potential of catastrophic spills from tanker operations to the marine environment. State and federal planning studies dating from 1975 support this position by recognizing that onshore pipelines provide environmental benefits that oil transportation by marine tanker fails to provide. Specifically, the DOI's Draft Environmental Statement, Oil and Gas Development in the Santa Barbara Channel-Outer Continental Shelf-off California, 1975, states that:

> The Council of Environmental Quality (CEQ) has analyzed the relative probability of oil spills during oil transport by tanker and subsea pipeline. They found that although the statistics vary greatly with the size of oil field and other factors, in general subsea pipelines have fewer spills and less total volume of oil spilled than do tankers (CEQ 1974, Report to the President). Although pipelines on land might have comparable rates of oil spillage as subsea pipelines, pipeline inspection, repair of leaks, and containment of spilled oil is much simpler from a pipeline break on land than on sea. This would be especially true during bad weather. For these reasons oil transport by onshore pipeline would appear to have less environmental risk than transport by tanker or barge. (emphasis added).

The same federal report reaches an even stronger conclusion, namely:

> The potential for adverse environmental impact is greater, however, for tanker transport than for a land based pipeline. Once constructed, a pipeline would have minimal adverse environmental impacts, whereas marine tankers would present the continual danger of oil spills during loading or unloading operations or due to collision during transit. (emphasis added).

Likewise, the Rand Corporation Report, Energy Alternatives for California: Paths to-the-Future (Executive Summary), prepared for the State Assembly Committee on Resources, Land Use, and Energy (Dec. 1975), similarly points out that:

> The primary policy issues for the Santa Barbara OCS are those of development.... Useful conditions that could be imposed include the consolidation of onshore facilities, coordination with other energy developments, and construction of onshore oil pipelines to reduce or eliminate coastal oil terminals (p. 14).

Recent studies prepared by the California State Lands Commission (1982) recognize that onshore pipelines are preferred over transportation by tanker. In the Finalizing Addendum of the Environmental Impact Report for the State Tidelands lease sale from Point Conception to Point Arguello, the State Lands Commission makes the following statement regarding a reviewer's a comments on tankering versus pipelining of oil:

significant amounts of hydrocarbons. By contrast, pipeline transfer of oil completely contains vapors. Any pollutants emitted would stem from pumping operations that are also necessary for tanker loadings. (See Section D-8)

The Commission has therefore consistently found that the studies and data on oil spills and air quality demonstrate that pipeline transportation of oil is clearly preferable to the use of tankers.

This preference is supported by information in the Lease Sale 73 EIS, which states that while the rate of spills from pipelines may be slightly higher than from tankers (based on Department of Interior data), pipelines may still be environmentally preferable, since tankers carry very large volumes of oil and thus pose the risk of a catastrophic spill and consequent environmental disaster, as opposed to the smaller spills from pipelines. The DOI recognizes the advantages of a crude pipeline transportation system by containing pipeline stipulations in its OCS lease sales. The FEIS for Lease Sale 73 states:

> The intent of this measure is to transport hydrocarbons by the safest and environmentally preferable method. This stipulation requires, when feasible, pipelines to be used instead of tankers to transport oil. The use of pipelines would reduce air quality impacts from the transportation of hydrocarbon products and trade off the marginally higher oil spill rate of pipelines versus the lower tanker spill rate (1.6 to 1.3 spills per billion barrels of oil transported). (Page II-22, emphasis added)

A report by the Royal Commission on Environmental Pollution (Eighth Report, Oil Pollution of the Sea; 1981) states:

> "Tanker accidents are widely and rightly regarded as posing the gravest threat of oil pollution, as vividly demonstrated by the Amoco Cadiz disaster..."

The Santa Barbara County LCP gives priority to pipeline transfer of oil by permitting pipelines in all land use designations. Permits for facilities related to oil development activities would be conditioned on pipeline use, if feasibility is determined by the County. Technical studies have shown that pipelines are technologically feasible. Moreover, the recent discoveries of vast quantities of oil in the Santa Maria Basin and Santa Barbara Channel will have a positive effect on the economic feasibility of pipeline transportation.

The All American Pipeline Company and the Pacific Texas Pipeline Group have developed proposals for pipeline transportation of crude from California to the East and Gulf coasts by way of the Texas oil distribution area. These proposals would probably require the addition of heating devices to existing lines from Midland to refineries in Louisiana, the east coast, or other areas in Texas.

In a recent letter to the Commission, All-American has indicated that their application has been "Deemed Complete" by the Bureau of Land Management and the California State Lands Commission, and their application to Santa Barbara County has been filed. The Company estimates that all permits will be obtained by late 1984 and that a 30 inch heated pipeline to Texas will be operational by 1987. The capacity of such a pipeline could accommodate over 400,000 BPD of the heavy crude currently found in the Santa Barbara Channel/Santa Maria Basin.

PLATFORM HARVEST STATEMENT

1. Recognizing environmental and coastal concerns, the Platform Harvest producers will transport crude oil from Platform Harvest to refineries or market outlets by pipeline if pipelines are available with accessible capacity to producer's market destinations.

2. As an initial step to promote pipeline construction, Texaco will participate in an industry study for a crude oil pipeline to its preferred market destination. Texaco recognizes that sufficient industry support is needed before a pipeline transportation system can be built. In support of this pipeline construction effort, Texaco will actively participate in the pipeline project to assure that it has an available pipeline with accessible capacity to its market destination.

3. Platform Harvest producers will not sell oil to other companies as a means to avoid commitments to transport oil by pipeline. Any oil produced from Platform Harvest that is sold to another company by the Platform Harvest producers will also be transported by pipeline, if a pipeline is available with accessible capacity to that purchasers market destination.

4. As an interim measure, until pipelines to producers market destinations are available with accessible capacity or during emergencies, oil produced from Platform Harvest will be transported by other available methods. Once a pipeline is available, with accessible capacity to a producer's market destination, no Platform Harvest oil will be shipped by that producer to that market destination from a marine terminal except during emergencies. Use of marine terminals will also be consistent with the transportation policies of the applicable Local Coastal Program. The Platform Harvest Producers recognize that Commission policy provides for only limited use of marine terminals and that existing marine terminal capacity, and even future capacity, may not provide adequate transportation opportunities for the Platform Harvest producers.

5. The Platform Harvest producers will continue to participate in the joint government/industry studies presently being conducted to evaluate various transportation facilities. These studies cover the movement of oil to markets both within California and out of the state. The Platform Harvest producers will cooperate with pipeline companies proposing such pipeline routes.

DEFINITIONS:

Available: In the context of this statement, the term "available" means that the pipeline exists and that the producer has access to it.

Accessible Capacity: In the context of this statement, the term "accessible capacity" means that the pipeline operator will provide room in the pipeline for the producer to transport the desired amount of crude and that access is provided for this transport.

Market Destination: In the context of this statement the term "market destination" means the location where a producer will sell the oil to obtain a reasonable rate of return for the product.

2. 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 the biological productivity of coastal waters and that will maintain 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, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alternation of natural streams."

Texaco's proposal raises significant marine resource issues under these Coastal Act sections because the development plan will result in: (1) offshore disposal of drilling fluids and cuttings; (2) disturbance of marine mammals and other marine organisms from a platform, pipelines, construction equipment, crew and supply boats, and helicopters; (3) increased risk of oil spills; and (4) adverse effects on commercial and sport fishing. Two issues, disposal of drilling muds and drill cuttings and commercial fishing, will be discussed under following Sections 3 and 4 of this report.

Resources of the Point Arguello - Point Conception Area. Platform Harvest is proposed on Lease OCS P-0315, located approximately 11 miles west of Point Conception in 670 feet of water. The prevailing northerly and southerly ocean currents come together at Point Conception, creating a complex hydrographic regime. Because of the convergence of the cold and warm masses, the Point Arguello - Point Conception area has long been recognized as the transition zone between two biogeographical provinces, the northern cold, temperate "Oregonian" province and the southern, warm, temperate California province. The Point Arguello - Point Conception area is the range limit for many northern and southern species. These are some short range endemic organisms which are thought to occur only in this area.

The Point Arguello - Point Conception area has had minimal human disturbance due to its proximity to Vandenburg Air Force Base and thus a lack of onshore development, and to the often extremely severe weather conditions. Consequently, the biological resources in this area are in much better condition than in many other areas in Southern California. It has a rich array of biological resources including marine mammals, seabirds, invertebrates, and a healthy fishery. Upwelling occurs in the area, enriching the waters and thereby increasing primary productivity

The Nekton survey noted three primary types of bottom habitat within the study area. These were: soft bottom, hard bottom, and areas identified in the geohazards survey as "tar mounds." The majority of the survey area is soft bottom, and the proposed platform location is a soft bottom area. Within the study area and within 300 meters of the platform site and 85 meters of the pipeline alignment are significant rock outcrops. Generally, rocky outcroppings with vertical relief are considered to support a greater number and diversity of marine species. Moreover, rocky outcroppings are a much less common habitat type than soft bottom areas. The platform and pipeline have been sited to avoid direct construction disturbance to the rocky outcrops, but the areas could be impacted by drill muds disposal, sedimentation resulting from construction activities, ship anchors, and oil spills.

The Nekton report describes the hard bottom materials as heavily bored siltstone. The vertical relief of the rock outcop areas varied from a fairly level rock pavement area to high relief rock outcrops of 14 feet and greater. The abundance, diversity, and type of faunal assemblages found on the rocky outcrops appear to be controlled by the level of turbidity and siltation. Typically, as turbidity and siltation increase in a rocky outcrop area, the number and diversity of organisms drops. Siltation is a natural process caused by movement of sediments by ocean waves and currents. Siltation can also be caused or increased by construction activities and dumping of drill muds and cuttings. The platform is located on a soft bottom site and over 300 meters from the important rock outcrops. The installation of the pipeline and the platform will undoubtedly cause increased siltation.

As noted by Nekton, Inc., five reconnaissance marine biological surveys have been undertaken in the Point Conception area in the past three years. These studies have yielded some previously undiscovered organisms which may or may not be rare or endemic to the area. Correlation of the results of the studies is necessary, but will not be completed for some time. A description of the characteristic fauna found at the platform and pipeline sites in one such study appears on pages 12-14 in the Project Summary Report.

Texaco states that no blasting for pipeline installation is anticipated offshore, but the lay barge method will be used. The habitat directly surrounding the pipeline will be significantly disturbed, but the impact can be far more localized than with blasting. Texaco should be required to keep all pipeline construction disturbance within a minimum corridor and to avoid all rocky areas.

The construction of a new platform and the installation of pipelines will have a significant impact on newly identified or rare species, rocky habitat areas, and kelp beds due to siltation, drill muds disposal, and trenching. Therefore, this portion of the project cannot be considered consistent with the marine resource protection policies, Sections 30230-30232, of the Act.

Because the platform and pipelines to Chevron's Platform Hermosa have been found by the Commission to be coastal dependent industrial facilities (see Section C), these portions of the project can be considered under the special provisions of Section 30260 of the Act, cited previously. Through siting of the platform and pipeline on soft bottom substrates 300 meters from rocky outcrops, Texaco has made a significant effort to reduce the impacts of platform and pipeline construction on important benthic habitats. Texaco has side-scan sonar maps showing fairly precise locations of the rocky outcrops. These maps will be used by the pipelaying contractors. Texaco has agreed to condition the pipeline construction plan so that the contractor must place the entire pipeline outside of rocky areas and that the

The present response time of the Clean Seas oil spill response vessels of five to six hours is not adequate given these conditions. Risk of oil spills from this region will increase significantly with new development from Lease Sale 53 and 73 tracts . Therefore, a new response vessel (with similar response capabilities to Mr. Clean II) should be located in the vicinity of the proposed platform site. Texaco has arranged to provide such a vessel near the platform site. This vessel will be acquired by Chevron and Texaco for response to new production platforms in this area. (Also see Section E-5)

3. Drilling Fluids and Cuttings

As discussed above in the section on marine resources, the biological resources in the Point Arguello - Point Conception area include marine mammals, seabirds, invertebrates, and a healthy fishery. Of these resources, drilling fluids and cuttings are most likely to affect fish and invertebrates. Hard bottom habitat and areas with vertical relief would likely be the most susceptible to degradation by these discharges. The effluent could settle out of the water column and destroy or weaken associated life forms in such areas.

Larval forms of fish in particular are susceptible to toxic substances used in some drilling fluids. Negative effects on fish could in turn affect both recreational and commercial fisheries as well as the birds and mammals which consume the fish. The Department of Fish and Game, in a report on drilling muds prepared for the Commission (J. Steele, 1983) recommended that until definitive information on the effects of discharges is available, the Commission should be concerned about the possible accumulative impacts to California's coastal resources from drilling in the OCS.

In addition, the Commission has conducted its own review of the literature and concurs with the Department's concerns. For example, Tagatz et al (1980) found that the presence of high mud concentrations on the sediments can inhibit settlement and recolonization by many types of organisms. Schatten (1982) found that barium interfered with the fertilization and early development of sea urchin embryos. Sweeney (1981 testimony before the EPA) has stated that small amounts of copper and other heavy metals in sea water are exceedingly toxic to phytoplankton. Brannon and Rao (1979) investigated sublethal responses of organisms to used drilling muds and observed decreased growth rates in oysters, grass shrimp larvae, oppossum shrimp, and killifish embryos, as well as developmental anomalies in fish embryos, impairment of osmoregulation in shrimp, and hypoglycemia in crabs, all at concentrations similar to or slightly lower than those that were acutely toxic.

Adverse physical effects have also been noted. Physical effects, in contrast with the above chemical effects, include direct smothering, change of substrate, clogging of gills, and interference with ingestion in filter-feeding organisms. Such effects are easier to observe than are chronic chemical effects.

For these reasons, the Commission finds that Texaco's proposed discharges of muds and cuttings will affect the use of land and water in the coastal zone, and therefore, the Commission finds it necessary to exert consistency review authority over this DPP and the future EPA general permit which will cover Texaco's discharges (see also findings in Chevron's DPP staff report, CC-12-83).

However, scientific research, both industry and government-sponsored, yields conflicting conclusions on these effects. Scientists are unable to agree on the degree of concentration of mud components in the water that will cause harm to

in modeling the ocean environment, when applied for short-term simulation (24 hours or less), the plume models seem to provide reasonable prediction concerning the behavior of the discharge (Proceedings of MMS Workshop on Effluent Dispersion and Fate Models, February 1983). It should be noted, however, that the predictions of plume behavior are much more reliable than the predictions of bottom deposition rates. The Offshore Operators Committee (OOC) MUD model was used to address the fine particles and fluid component of the drilling muds, while Dames and Moore's Drilling Effluents Fate and Transport Model (DRIFT) was used to model the fates of the cuttings component of the effluent discharge.

In order to evaluate the results of the models, the Commission makes the following assumptions about biological impacts which guide its analysis. The Commission assumes, with respect to impacts on benthic communities, that the hard bottom and high relief hard bottom habitat areas, located approximately 300 meters from the platform, are the most sensitive to the physical effects, such as smothering. The Commission further assumes with respect to impacts on organisms in the water column, that whole mud concentrations (or mud constituents concentrations) close to or exceeding measured 96-hour LC_{50} values are a potential concern if organisms are exposed to such levels for several days or are exposed for less time but at frequent or regular intervals. The effect of effluent discharges may also be measured in terms of changes in ocean temperature, salinity, dissolved oxygen, suspended solids, light transmittance, and trace metals. In addition, synergistic effects of two more substances on an organism are a concern, but such effects are much more difficult to measure and analyze. Therefore, the Commission will concentrate its analysis at the present time on the results of the OOC and DRIFT model simulations of the transport and fate of muds and cuttings, respectively.

Before reviewing the results of these two modeling efforts, the Commission notes that its review of Texaco's DPP is not the only time the Commission will formally consider the discharge of effluents from Platform Harvest. While the Commission's concurrence with Texaco's consistency certification at this time certifies that Texaco's DPP is consistent with the CCMP, Texaco's project is still subject to the General NPDES permit, which must also be consistent with the CCMP. The Commission will be conducting its review of the NPDES permit this spring, and will be analyzing not just the individual and cumulative effects resulting from this platform, but will be analyzing the effects of all drilling activities which will be subject to the NPDES permit for the next five years. Thus, the present relatively limited review of drill muds under Texaco's DPP will not preclude the Commission from imposing additional stipulations on drilling effluent discharges from this platform or any other when it considers EPA's consistency certification for the NPDES permit. The Commission now returns to its review of the models.

The OOC model was run with a total of six simulations. Three simulations used a typical discharge rate of 80 barrels per day along with oceanographic conditions found to occur most frequently during three current regimes which exist west of Point Conception. Three additional simulations were performed using the same current inputs, but assuming a high volume discharge in a short time period (500 barrels in one hour).

Exhibit 3 plots the mud solid dilution factor as a function of distance from discharge for both the typical and high volume discharges. The results show that the dilution of discharged muds occurs very rapidly. For example, under the Oceanic Current, a typical discharge would be diluted by approximately 450,000:1 within 3.6 hours at a distance from the discharge point of 1,293 feet. This is equivalent to a concentration of approximately .675 ppm. The 96-hour LC_{50} value for exposure to a whole fluid, in the most sensitive species, is 100 ppm.

Coastal Act Policy Analysis. The marine resource policies of the Coastal Act require that the productivity of coastal waters be sustained and healthy populations of all species of marine organisms adequate for long-term commercial, recreational, and scientific purposes be maintained. This requires that long-term chronic sublethal, and cumulative impacts be found (through the presentation of substantial evidence) not to occur. However no such evidence exists in the record. Therefore, the proposal is not consistent with Sections 30230 and 30231.

Texaco's DPP provides for the regulated ocean disposal of drill muds as a part of exploratory and production drilling on OCS lands off Southern California, a region where OCS operations exist and have increased over the past several years. The Commission is extremely concerned about the cumulative effects on the environment and the coastal economy of California, particularly San Luis Obispo and Santa Barbara Counties, where most of the exploratory drilling is occurring. The Department of Fish and Game and Get Oil Out, Inc. have expressed similar concerns about increased industrial development in the OCS, based partly on the offshore disposal of drilling fluids and cuttings.

These impacts could become unacceptable if they remain unmitigated or if the present level of drilling significantly increases, or if persistent, cumulative, chronic effects are identified which affect the use of land or water in the coastal zone. There is ample evidence to support this finding. The Commission finds that there is a lack of convincing evidence which proves there is no cumulative impact on the environment. Moreover, Platform Harvest may increase impacts, and therefore is inconsistent with Section 30250(a).

However, the Commission has examined the alternatives for discharging the drilling fluids and cuttings above and found that Texaco has selected the least damaging alternative. The monitoring program proposed by Texaco involves chemical analysis of drilling mud samples and seafloor sediments, a commitment to corrective action, a biological field study program, and Executive Director approval of the actual work program developed for the monitoring program (see Exhibits 4 and 5). The Commission finds that Texaco's commitment to corrective action will mitigate to the maximum extent feasible any adverse effects which may later be found to occur. Moreover, the Commission notes that the results of Chevron's study (tentatively) titled, "Drilling Fluids and Cuttings Disposal Operating Techniques and Control Technologies for Use Offshore California," may provide the necessary technological solutions for any corrective actions which Texaco may have to perform.

Having reviewed the alternatives above, the Commission finds 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 proposed muds discharge plan is the least environmentally damaging, consistent with Section 30260. The monitoring program, combined with the commitment to corrective action, mitigates to the maximum extent feasible the individual, as opposed to the cumulative, impacts of Texaco's proposed project. However, to reiterate a point made above, the Commission will be conducting another review of the drilling fluids and cuttings issue when it considers EPA's consistency certification on the General NPDES permit. Thus, while the Commission certifies that Texaco's DPP is consistent with the CCMP, Texaco'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 Texaco's project could not proceed.

Production from Platform Harvest will increase the chance of oil spills, which could adversely impact commercial fisheries. Economic losses to the fishing industry can occur by (1) tainting marine organisms by direct coating or ingestion of hydrocarbons; (2) reducing the total available catch; (3) contaminating fishing gear and vessels, requiring either cleaning or replacement of the gear and cleaning of the vessels; and (4) preventing fishermen from leaving port due to placement of oil containment booms. Additional discussion of impacts from oil spills is provided in Section D-2.

Crew and supply boats traveling between Port Hueneme, Ellwood Pier, and Platform Harvest will conflict with nearshore (set gillnetting and trapping) fishing activities by running over buoys and surface lines, leading to loss of the gear. To mitigate against this conflict, Texaco has established vessel access corridors extending beyond the 30 fathom contour. Although this action will displace a small portion of the set gear fishery, it will concentrate the vessel traffic to a single corridor and will reduce conflicts between the two industries.

Texaco has also agreed to: (1) ongoing participation in joint industry workshops and information programs, and the Petroleum Transportation Committee; (2) use of a continuous-welded pipeline to avoid fittings that could snag trawl gear; (3) consolidation of pipeline facilities with Chevron's Platform Hermosa project to minimize the number of seafloor pipeline and amount of construction activity necessary; (4) protection of irregular pipeline surfaces that cannot be avoided to allow trawl gear to pass over the surface without snagging; and (5) equipment identification.

In addition to analyzing individual impacts of proposed development, the Commission also analyzes the effects of projects in connection with 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 oil and gas and commercial fishing industries. Future development and production facilities for oil and gas will be proposed in Lease Sales 53 and 68 tracts and future exploration and development could occur in Lease Sales 73 and 80 areas offshore central and southern California. In addition to future activities in the federal OCS, activity may increase in state waters, as evidenced by the proposed State Tidelands lease sale between Points Arguello and Conception.

California's offshore waters support significant numbers of commercial recoverable fish. In 1982, over 695 million pounds of fish and shellfish, worth $241 million to commercial fishermen, were landed in California. When contributions to support, processing, transportation, and marketing industries were considered, using a multiplier of 3.1, the total value of California's commercial fishing industry is nearly $750 million. Current state and federal management practices and regulations are designed to sustain levels of the exploitable fish stocks.

The Commission is aware of numerous conflicts between the commercial fishing industry and oil and gas activities in the Santa Maria Basin and the Santa Barbara Channel as a result of reviewing consistency certifications and coastal development permits for plans of exploration and development.

Numerous fishing representatives from Avila Beach, Morro Bay, Santa Barbara, and San Pedro, and the Department of Fish and Game, have testified on various exploration and development proposals (CC-8-81, CC-23-82, CC-26-82, CC-40-82, CC-2-83, CC-5-83, CC-6-83, CC-7-83, and CC-23-83) that these developments could have

The third requirement of 30260 requires that adverse environmental effects be mitigated to the maximum extent feasible. Texaco has agreed to mitigation measures which will mitigate against the impacts of the pipeline and platform by establishing support boat routes; designing the pipeline to have the least impact on trawlers; discussing potential problems as the arise with the commercial fishermen; and by identifying equipment in the event that it is the cause of damage to trawl gear. Identification simplifies compensation for gear loss or damage. With these measures, the Commission finds the proposal consistent with Section 30260(3).

Even though the project is mitigated to the maximum extent feasible, traditional trawl and set gear fisheries will be displaced. Compensation for this lost space is an option to mitigate this impact; however, it is very difficult to determine the form of compensation, the parties which should be compensated, and the amount necessary to fairly compensate them. Also, the problem is cumulative as more areas in the Santa Maria Basin and the Santa Barbara Channel are developed for oil and gas exploration and development, and more fishing areas are deleted. Oil company and fishing industry representatives have established a joint committee to address this problem along with other issues raised by the use of these areas by the two industries. The objectives of this group are to act as a liaison between the industries, to serve as a clearinghouse for disseminating information, study conflicts between the two industries, and to look at the cumulative impacts of oil and gas development on the fishing industry. The Commission believes the compensation issue would be better resolved by the industries. However, the Commission would be willing to address the issue if it cannot be resolved and still remains an issue.

5. 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 spills off the coastline. Unfortunately, this equipment does not currently have the capability to clean up large oil spills in the open ocean. Spill cleanup 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, or the 1969 Santa Barbara oil spill from Union's Platform A. On August 6, 1983, a Spanish supertanker with 73 million gallons aboard burst into flames and split in half off the African coast, causing a massive spill. Clean up of large spills is extremely difficult. A 1980 report from the International Tanker 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 saviors 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 ended up on local beaches. While oil spill cleanup equipment can function with about 50 percent recovery efficiencies in

4. Oil storage capability of 1000 barrels which can reach the platform site within six hours;

5. Dispersant application equipment;

6. Additional data on the effectiveness and toxicity of dispersants;

7. A 30' deployment boat to be located onboard the onsite spill response vessel; and

8. Weather collection equipment to collect data to assist in oil spill trajectory analysis.

The equipment will be provided through a joint venture of Chevron Platform Hermosa and Texaco. The large vessel will respond to spills from Hermosa and Harvest.

Clean Seas Oil Spill Cooperative. Texaco's Oil Spill Contingency Plan for Platform Harvest recognizes that assistance from the Clean Seas oil spill cooperative for the Santa Barbara Channel and Santa Maria Basin will be necessary for spills which exceed the onsite capability. 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. Clean Seas has equipped 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 Texaco's onsite capability and for initial response to large spills. Cleanup 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 offshore response capability provided by Clean Seas is its 130 foot oil spill response vessel, Mr. Clean I, stationed in Santa Barbara Harbor, and Mr. Clean II, located at Port San Luis. The response time of both these vessels to Platform Harvest is approximately five to six hours. A six hour response time is the maximum allowed by the Commission or the Coast Guard/MMS. Both these vessels are located at the outer time range limit to respond to an emergency at Platform Harvest. This is why Texaco and Chevron have elected to provide a large vessel at or near the site with both advancing and stationary skimmers and with additional boom.

Use of Dispersants. Under Coast Guard requirements, oil companies operation 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.

The Coastal Commission has recently adopted a policy on dispersants. It states:

> Oil spill cooperatives, or individual operators, shall demonstrate that the most effective and least toxic dispersants are being provided for spill response. The Commission shall

Furthermore, Section 30232 of the Act, quoted previously, required that any development or transportation of crude oil must provide protection against spillage.

Platform Site. Texaco proposes to site Platform Harvest approximately eleven miles northwest of the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS) (see Exhibit 7). Although there are no platforms currently in the area, four platforms, including Harvest, are planned for the area. Chevron's Hermosa, proposed to be located approximately 11,000 feet (approximately two miles) east of Harvest, has already been certified by the Commission.

Presently, vessels traveling through the Santa Barbara Channel that have a destination on the North American coast commonly turn north after passing Point Conception, near the end of the existing Santa Barbara Channel VTSS. They then pass through the general area of the proposed platform site. Coast Guard radar tracking confirms this route, as does information contained in the State Lands Lease Sale EIR.

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 Harvest. Such a potentially congested situation requires more than the Coast Guard minimum requirements for aids to navigation.

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 DPP states that visibility in the western Channel is less than two miles about five percent of the time, less than five miles ten percent of the time, and less than ten miles approximately thirty-eight percent of the time. The DPP states that waves over 10.7 feet occur about 7.4 percent of the time. In January, March, and December of 1981 and 1982, waves exceeded 10.7 feet 19.9 percent, 21.7 percent, and 16.0 percent of the time, respectively. The DPP states that waves exceeding six feet significant height occur 17.7 percent of the time. The Chevron DPP for Platform Hermosa, citing a study from the State Lands Commission DEIR (1982), stated that wave height exceeded nine feet 49 percent of the time during the months of January to March 1980.

The Texaco DPP does not give figures for anticipated vessel traffic increase in the Channel except in relation to its own project. The Chevron "Hermosa" DPP anticipated Channel vessel traffic to increase 16 to 60 percent by the next decade. That DPP also 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. Exxon's Santa Ynez Unit crude oil, according to Exxon's DPP, is headed for refineries "probably in the U.S. West and Gulf Coast areas." No figures are given for vessel trips 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, where, after blowouts, collisions are the greatest cause of accidents resulting in structural damage.

Platform Harvest producers have committed to using a pipeline to transport their processed oil to their market destinations if one is available with accessible capacity. Until such a pipeline is available, the producers will transport their oil by other available methods.

Under Section 30232, protection against the spillage of crude oil must be provided in relation to its transportation. Because the Harvest Partners may need to use other transportation methods (such as tankering) until a pipeline is available or during emergency disruptions to pipeline service, an increased risk of oil spills will exist. Therefore, the Commission finds that this DPP is not consistent with Section 30260 because the impacts have been mitigated to the maximum extent feasible.

7. 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, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30260 of the Act states in part that:

> Oil and gas development shall be permitted in accordance with Section 30262, if the following conditions are met:
>
> (a) The development is performed safely and consistent with the geologic conditions of the well site.
>
> (e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.
>
> 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;

Texaco has submitted a detailed site and foundation seismic study (Woodward-Clyde, 1983) for Platform Harvest. Woodward-Clyde (1983) has selected the Arguello fault as the source for calculating both the Design and Rare Event Earthquakes. The Design Earthquake is that event that can be expected to occur at some time during the platform's intended design life. A 6.5 magnitude earthquake producing a ground acceleration of 0.15g at the platform site has been selected as the Design Earthquake (Woodward-Clyde, 1983). The Rare Event or Ductile Event Earthquake is a rare intense earthquake that has very little likelihood of occurrence during the useful life of the facility and for which the platform system should be designed such that some damage, but no collapse, may be allowed under ground shaking associated with it. A 7.0 magnitude earthquake producing a ground acceleration of 0.285g at the platform site has been selected as the Ductile Event (Woodward-Clyde, 1983). Both designated events are representative of potential nearby events (within 10 km of the planned facilities) on the Arguello fault.

Comparing seismic design data for Texaco's Platform Harvest with that submitted by Chevron for Platform Hermosa shows similar acceleration values for the Design and Rare Event earthquakes. The selected Certified Verification Agent and the Minerals Management Service will review all data used to arrive at the above mentioned values. Thus, the Commission finds that Texaco has met the seismic consistency requirements of Section 30253 of the Coastal Act.

Liquefaction. The development of high pore-water pressures in certain types of sediments due to ground vibrations, such as 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.

Intersea Research Corporation (1980) shows Platform Harvest and the associated marine pipeline route to be located within an area of unstable sediments. Detailed studies by McClelland Engineers (1983) concluded that these sediments appear to be stable under static conditions and Woodward Clyde (1983b and 1983c) indicates that these sediments have a potential for downslope movement during periods of strong ground motion. Liquefaction and associated sea floor slumping have occurred and are more likely to occur within the slopes of the numerous sea floor channel-like depressions that are numerous on the Arguello slope. Texaco's proposed pipeline route has avoided these areas and the platform site is situated on more stable sea floor between two channel areas that trend directly downslope. Liquefaction at the platform site is considered unlikely, however, should near surface liquefaction occur during a seismic event, the deep seated piles (driven several hundred feet into the sea floor) will maintain platform stability. The pipeline will be engineered so that it will be supported buoyantly should the seafloor undergo liquefaction due to a large earthquake.

The Commission concurs with Texaco's contention that any potential hazard posed by liquefaction can be successfully engineered at the platform site and along the marine pipeline. Therefore, the Commission finds that the project meets Section 30253 of the Coastal Act.

Faulting. Special engineering is necessary where pipelines 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. Texaco's detailed studies show little to no evidence of active, potentially active, or inactive faults either trending directly toward or passing through the proposed platform site. The marine pipeline, however, does cross a

8. Air Quality

Section 30253(3) of the Act states that:

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

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

Air pollutant emissions from the proposed project will occur as a result of the construction and operation of the proposed offshore platform and pipelines, as well as from the associated onshore processing and storage facilities. Construction and drilling emissions will be of short duration, while emissions from production will occur throughout the life of the project.

During the construction and development phase, emissions of nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO_2), and total suspended particulate matter (TSP) will be produced from turbines used to provide power for drilling, construction equipment, tug, crew, and supply boats and helicopters, and vehicular traffic associated with the transportation of personnel, equipment, and materials. The production phase will produce emissions of NOx, SO_2, TSP, and reactive hydrocarbons (referred to as volatile organic compounds, or VOC) from both the offshore facilities and associated onshore facilities as a result of power generation, oil and gas processing, crude oil storage, tanker activities and/or pipeline facilities, evaporative losses, and venting and flaring produced gas.

With the control measures proposed in the DPP and consistency certification, Texaco contends that the air pollutant emissions from the project will meet all applicable standards and conform to both federal and local rules and regulations, and, therefore, that the project is consistent with the CCMP to the maximum extent practicable.

The federal and local air quality regulations include: the DOI regulations established under the OCS Lands Act Amendments (OCSLAA), the U.S. EPA standards for attaining and maintaining air quality 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 pollution control districts' regulations and management plans for meeting the federal and state standards under the CAA and Health and Safety Code.

The DOI regulations specify levels of emissions from OCS facilities, based on distance from shore, to determine whether the facilities are subject to further review and air quality analysis. If projected emissions of NOx, SO_2, CO, or TSP are above these levels, computer modeling is performed to determine whether the onshore impacts will be "significant." The calculated pollutant concentrations are compared to the DOI significance levels; if exceeded, Best Available Control Technology (BACT) is applied, or the lessee may reduce emissions to levels below the exemption or significance levels. Any VOC emissions above the distance-based exemption levels are considered to significantly affect onshore air quality, requiring the application of BACT, reduction to the exemption level, or offsets.

The DOI regulations also provide for emissions controls for "exempt" facilities if the facility, either individually or in combination with other facilities, is shown to significantly affect onshore air quality. However, these provisions are optional and to date the MMS has declined to use them. The ARB and local APCDs believe that the DOI regulations do not protect state ambient air quality standards and that the exemption levels are so high, significant onshore impacts are not mitigated. For example, the Santa Barbara County APCD "New Source Review" rule requires that all new or modified sources emitting more than five pounds per hour of any air pollutant except CO install BACT (the cutoff for CO is higher). If the new source will emit more than ten pounds per hour of any air pollutant, then emission offsets may be required if they interfere with the attainment or maintenance of any national primary ambient air quality standard. (Pollutant offsets are mandatory at 25 pounds per hour or 250 pounds or more per day.) These five and ten pounds per hour maximums translate to 22 and 44 tons per year. Under the DOI regulations, the minimum emission rate to trigger review of potential onshore impacts is 100 tons per year at three miles from shore, increasing by 100 tons per year each additional three miles. Thus, 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. Since OCS facilities do not fall under the direct jurisdiction of the APCD, their emissions as allowed by the DOI could adversely affect the County's ability to attain and maintain national and state ambient air quality standards. This is of particular concern because the DOI regulations are unclear whether retroactive emission controls on existing offshore sources can be imposed after an onshore air quality problem has developed.

The DOI regulations also fail to recognize California's unique meteorology. Air quality modeling studies conducted by the ARB indicate that emissions from OCS development may exceed the DOI significance levels, even though the emissions are below the DOI distance-based formula. A 1980 tracer study conducted in the Santa Barbara Channel concluded that any tracer released in the Channel is eventually transported onshore (Lehrman, 1981). The prevailing wind flow in the project area also indicates that offshore emissions will be transported onshore. Thus, these emissions will directly affect the coastal zone and must meet the national and state ambient air quality standards.

Under the Clean Air Act (CAA), California is required to develop a State Implementation Plan for attaining and maintaining the national ambient air quality standards established by the EPA. Santa Barbara currently violates the standards for ozone and TSP (North County) and is designated a nonattainment area. If these standards are not met within the current deadline, the EPA could impose strict air pollution controls, resulting in restrictions on onshore industrial and commercial growth and withholding of federal highway and sewage funds. (In early September, EPA proposed to reduce the size of nonattainment areas for ozone and TSP. 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. Similarly, the County believes that future growth in the Lompoc area will eventually cause violations of the TSP standards and that the entire area should retain the nonattainment designation.)

Air pollutant emissions in the area will increase as offshore development continues, making it 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 or mitigated in Santa Barbara County's Air Quality Attainment and Maintenance Plan. The Commission is not alone in its assessment of the potential significance of the cumulative effect from offshore

federal or state ambient air quality standards. After reviewing the modeling, however, both the ARB and the Santa Barbara County APCD state that the impacts to onshore air quality are underpredicted. The modeling does not use maximum project emissions or background concentrations which would allow "worst case" onshore concentrations to be addressed. For example, the modeling does not address construction and installation emissions or maximum emissions from intermittent equipment, and the trajectories used for the ozone modeling do not appear to be worst case trajectories. Moreover, the modeling does not include emissions from platforms in the Point Arguello area proposed by Getty and Conoco, emissions from existing OCS platforms, or emissions from future platforms other than those in the Point Arguello and Santa Ynez Unit areas. The ARB states that even though the analysis does not consider worst case conditions, "many of the modeled concentrations approach ambient air quality standards." Thus, since the emissions used in the model appear to be underpredicted, the actual pollutant concentrations could exceed the air quality standards, which, in turn, could result in EPA-imposed restrictions.

Texaco disagrees with the ARB's and Santa Barbara County APCD's assessment of the modeling analysis, primarily because of inherent weaknesses in photochemical trajectory models and lack of data. In Texaco's view, the modeling is the best "screening" impact analysis that can be performed with these limitations on models and current data. While the ARB believes the project emissions and background data do not represent worst case conditions, Texaco contends the project emissions used in the model are representative of the area since the inputs to the model include six Point Arguello area platforms (three hypothetical in addition to Texaco's Platform Harvest and two proposed by Chevron), and the background air quality data is within the ranges measured during the ARB's 1980 tracer study. Even though the issue of cumulative impacts is unresolved, Texaco believes that the modeling analysis "clearly indicates that the three platforms actually proposed (including Platform Harvest) will not significantly impact onshore air quality."

The EIS/EIR for the Point Arguello Field/Santa Maria Basin will address the onshore impacts expected to result from the emissions from Platform Harvest and associated activities and the cumulative impacts from Harvest, other platforms, and related facilities and activities. In addition, a cooperative effort between state, federal, and local regulatory agencies and industry is underway to develop and implement an extensive air quality and meteorological monitoring program. However, since these studies are not yet available, the Commission must rely on technical assistance from the ARB and APCD to determine the adequacy of the current modeling analysis for the Point Arguello Field development. Without an adequate air quality analysis, the Commission cannot determine the extent of onshore air quality impacts expected to result from the proposed project; thus, the Commission cannot determine if the project will prevent onshore areas from attaining or maintaining the national or state ambient air quality standards. Therefore, the Commission finds that it lacks sufficient information to find the proposed project consistent with Sections 30250 and 30253(3) of the Coastal Act with regard to air quality.

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 if it meets the tests of this section.

To respond to these concerns, Texaco has agreed to install further effective and safe pollution control equipment as identified in the EIS/EIR. Moreover, the ARB and Texaco have agreed to additional provisions to protect onshore air quality. Under this agreement, when the EIS/EIR is complete, representatives of the Commission, Texaco, ARB, and MMS will determine whether the air quality analysis shows a need for further migitation; if further mitigation is required, these representatives will identify the extent and precise mitigation measures which Texaco must provide. Texaco has amended its DPP and consistency certification in accordance with the ARB agreement to include this additional mitigation to be specified and carried out through the EIS/EIR. If questions as to interpretation arise at a later time, further action by the Commissions would be necessary. Only with this assurance can the Commission find that Texaco's project meets the air quality standards required by the ARB through the CCMP. Thus, the Commission finds that the air quality impacts from the project are mitigated to the maximum extent feasible, and, therefore, that the project is consistent with Section 30260(3) of the Coastal Act.

All of the Platform Harvest producers are committed to transporting crude oil to refineries and markets by available pipelines, and to actively participate in promoting pipeline construction (see Section D-1). 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. Emission quantities in the South Coast Basin are affected by OCS development in the following ways: 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 in 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. Because of this similarity, 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 and Texaco indicate that these companies do not intend to abandon their refineries in the South Coast Basin. Texaco, in fact, is currently completing extensive modifications to its Wilmington refinery to allow refining Arguello crude. These modifications, approved by the South Coast Air Quality Management District, will cost $186 million. The Commission and other agencies recently authorized Champlin Petroleum to add additional coking capacity at its Wilmington refinery to provide capacity for heavy crudes like those found in the Arguello field. Chevron has also advised the Commission that it requires only minor retrofits to allow it to refine its Arguello crude at El Segundo. Because of these companies' intentions 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.

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.

Because the Commission has no control over a producer's choice of refinery, and cannot require phasing out existing refineries outside the coastal zone, and because the use of pipelines to transport crude oil results in lower emissions of SO_2 and hydrocarbons than does the use of tankers, 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. Because of 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.

9. 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 resources 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. Texaco's Platform Harvest will be the only permanent offshore structure visible from the coast. Construction of the platform and pipeline may 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.

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, Sections 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 impacts on onshore public access and recreational areas would be due to both construction and operation activities. During construction, possible impacts include use of campgrounds and other facilities for the work crew, increased traffic on major traffic arteries and expanded staging and marshalling areas around Port Hueneme and Ellwood Piers.

Texaco has included a section on cumulative impacts of its project in the Environmental Report. According to Texaco, cumulative impacts would result from any of three sources: (1) presence and operation of offshore facilities; (2) onshore facilities; and (3) accidental oil spills. The ER cites major impacts to Ellwood Pier and Port Hueneme if no new supply bases are built in the western Santa Barbara Channel, possible major visual intrusion during all phases of operation due to offshore facilities and activities, moderate impacts to employment and housing during the peak construction and drilling periods, and moderate cumulative impacts from presence and operation of offshore facilities to marine mammals, navigation, transportation, and aesthetics. Moderate cumulative effects from onshore facilities could occur to air quality, land use, and transportation. If an accidental oil spill occurs, the ER cites major cumulative impacts to marine birds and mammals, endangered species, commercial fisheries, and estuaries/coastal wetlands.

The ER identifies activities concurrent to Platform Harvest that would likely result in cumulative effects: Chevron's Platform Hermosa, on the adjacent lease; Exxon's Santa Ynez Unit development, Arco's Coal Oil Point Project, and exploratory drilling in the Santa Barbara Channel/southern Santa Maria Basin. The cumulative impacts from these projects would, according to the ER, "be generally short term, minor in magnitude and related to the overlap of construction phases associated with the development projects."

Platform Harvest will be the second in a potential series of platforms producing from the Arguello Field. Chevron has received a consistency certification from the Commission for its Platform Hermosa and associated pipelines on OCS P-0316. Chevron will probably propose another platform on OCS P-0450, and Getty may locate a platform on its lease OCS P-0449.

Platform Hermosa will be the central platform for the Point Arguello field, designed to accommodate pipeline hook-ups from up to three additional platforms, including Platform Harvest. The on and offshore pipelines leading from Hermosa are designed with a throughput capacity of 200,000 BPD of oil and 120,000 MSCFD of gas to serve other operators, such as Texaco, in the Arguello field.

Because Texaco proposes to use the same transportation and processing facilities as Chevron's Platform Hermosa project, cumulative impacts of additional facilities would be minimized. The Platform Harvest producers are committed to using a pipeline if one is available to their market destinations. Texaco commits to use a pipeline to transfer its crude to its Wilmington refinery if one is available. Tankering would occur as an interim transportation method and during emergencies after the pipeline it built. Tankering will increase oil spill and vessel traffic risks and will reduce the maximum usage of any pipeline system constructed for the Point Conception area.

As indicated in the ER, major impacts to Ellwood Pier and Port Hueneme would result from implementation of the four large developments proposed by Texaco, Chevron, Exxon and Arco. Table I illustrates the number of one-way crew and supply boat movements per month between the platforms, Ellwood Pier and Port Hueneme, respectively.

In addition to the impacts discussed above, Sections D-2, 3, 4, 6, 8, 9 and 10 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, Exxon's Santa Ynez Unit and Arco's Coal Oil Point development on these resources are significant and adverse and thus Texaco's proposal fails to meet the requirements of Section 30250(a).

The project therefore must be analyzed under Section 30260 requirements, quoted in Section D. The Commission finds that the first requirement of feasible alternative locations for Texaco's project is met by Texaco 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, Texaco and its partners are proposing maximum feasible mitigation to reduce impacts on coastal resources. The Commission emphasizes that the commitment to use of consolidated transportation, and processing facilities is the major step towards developing maximum feasible mitigation measures to reduce impacts on the resources. It is only with this commitment that the Commission can find the project consistent with Section 30260(3).

12. Public Welfare

Under Section 30260(2) of the Act, the Commission must determine that Texaco'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

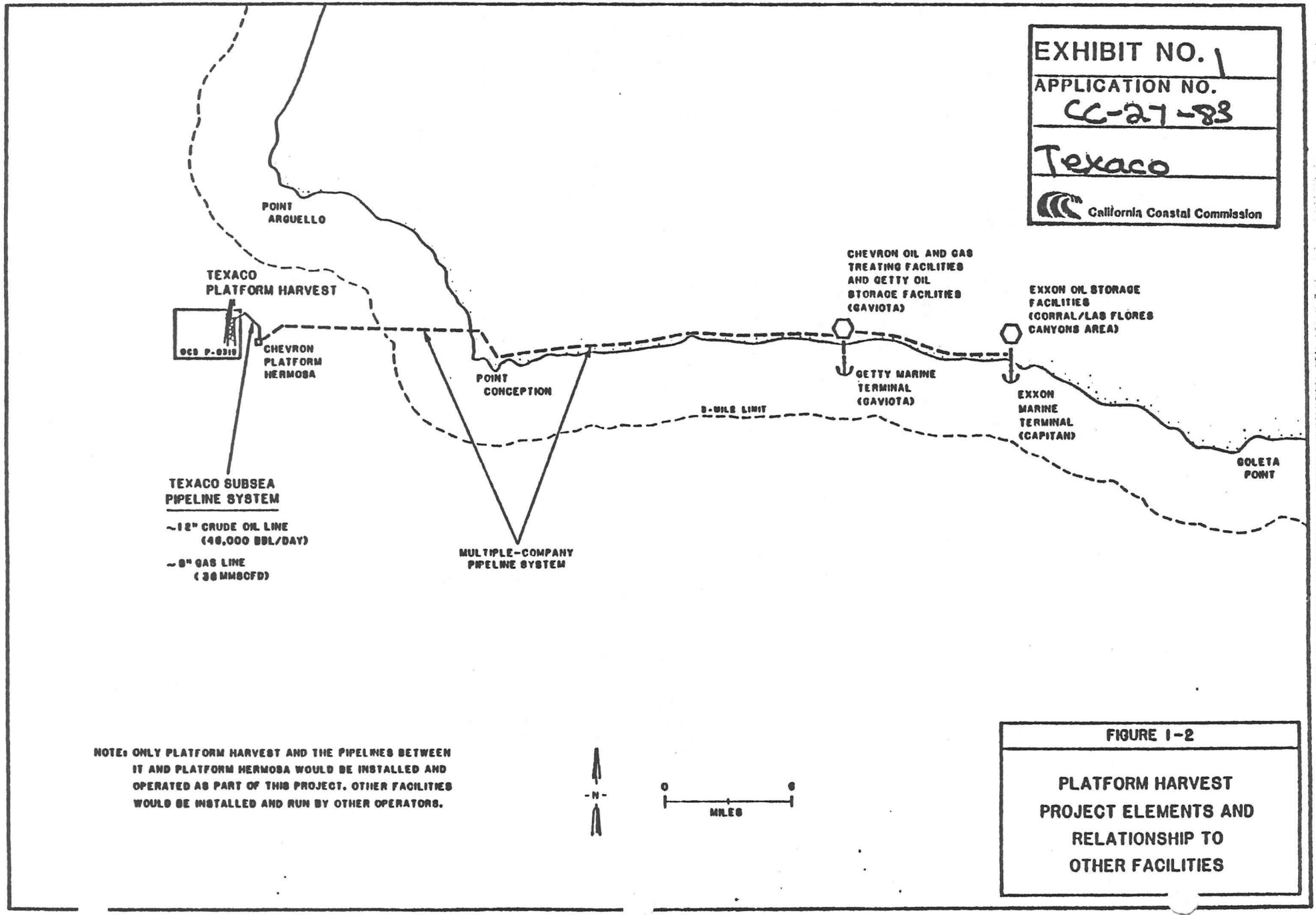
EXHIBIT NO. 1
APPLICATION NO. CC-27-83
Texaco
California Coastal Commission
POINT ARGUELLO
TEXACO PLATFORM HARVEST
OCS P-0315
CHEVRON PLATFORM HERMOSA
POINT CONCEPTION
CHEVRON OIL AND GAS TREATING FACILITIES AND GETTY OIL STORAGE FACILITIES (GAVIOTA)
EXXON OIL STORAGE FACILITIES (CORRAL/LAS FLORES CANYONS AREA)
GETTY MARINE TERMINAL (GAVIOTA)
EXXON MARINE TERMINAL (CAPITAN)
3-MILE LIMIT
GOLETA POINT
TEXACO SUBSEA PIPELINE SYSTEM
~12" CRUDE OIL LINE (46,000 BBL/DAY)
~8" GAS LINE (36 MMSCFD)
MULTIPLE-COMPANY PIPELINE SYSTEM
NOTE: ONLY PLATFORM HARVEST AND THE PIPELINES BETWEEN IT AND PLATFORM HERMOSA WOULD BE INSTALLED AND OPERATED AS PART OF THIS PROJECT. OTHER FACILITIES WOULD BE INSTALLED AND RUN BY OTHER OPERATORS.
-N-
0
6
MILES
FIGURE 1-2
PLATFORM HARVEST PROJECT ELEMENTS AND RELATIONSHIP TO OTHER FACILITIES

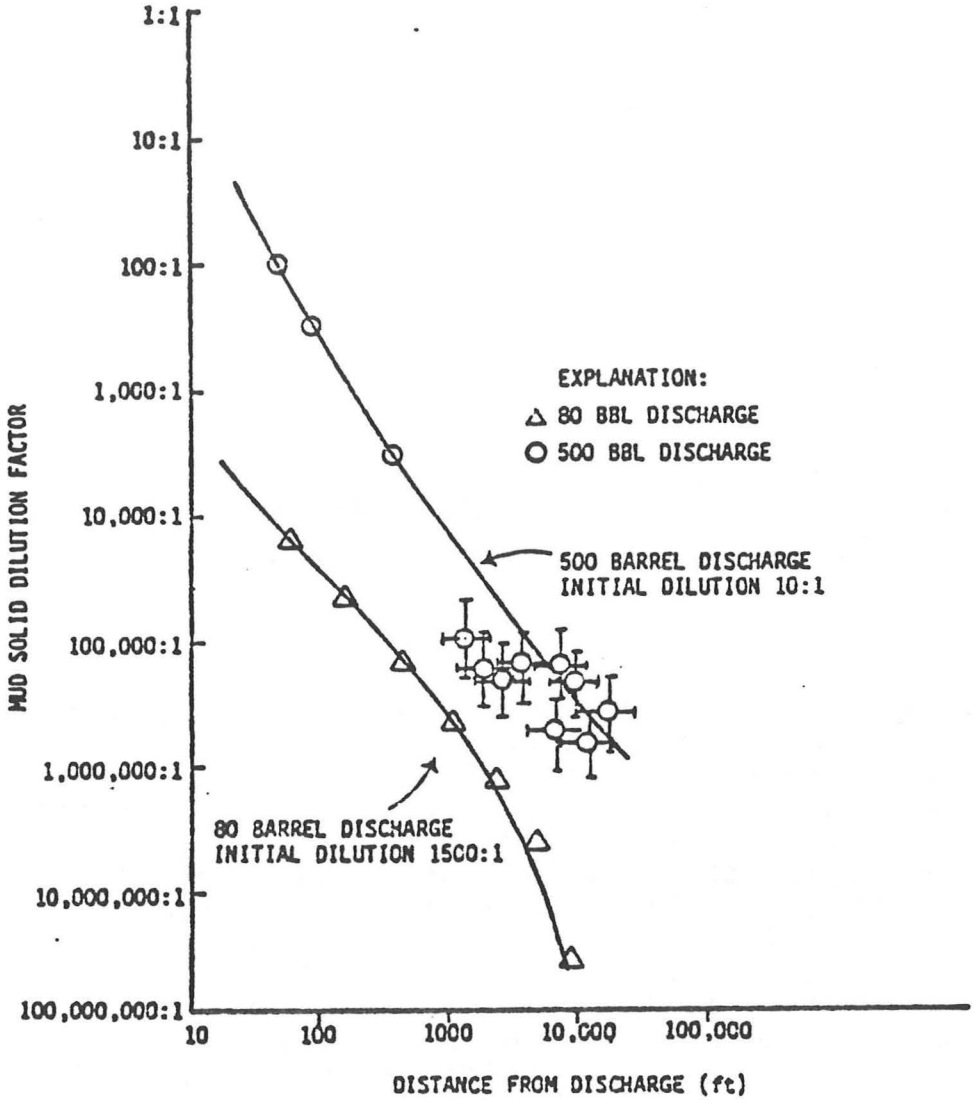

FIGURE 5-1

SOLID MUD COMPONENT DILUTION vs DISTANCE FROM DISCHARGE POINT

EXHIBIT NO. 3

APPLICATION NO. CC-27-83

Texaco

California Coastal Commission

provide a longer-term record of biological observations at deep-water, hard-bottom habitats and soft-bottom sediment chemistry than is presently available for locations offshore Point Conception. Combined with the Texaco-sponsored monitoring program currently being conducted on our Jade and Anita leases in State waters, the proposed survey program is expected to add measurably to our understanding of the impacts of drilling mud discharges on the benthic biota of the Santa Barbara Channel.

CHEMICAL TESTS TO BE PERFORMED

Chemical analyses will be performed on drilling muds samples and on seafloor sediments. Drilling muds testing procedures will involve a total digest using nitric acid and analysis of the concentrations of arsenic, cadmium, total chromium, copper. cyanides, lead, mercury, nickel, silver, zinc, and barium (following sulfate removal) using atomic absorption spectrophotometry. (See footnote 1) Oil and grease content of drilling muds will be analyzed using a solvent extraction procedure. (See footnote 2) Seafloor sediment samples will be analyzed for oil and grease content using a solvent extraction procedure. (See footnote 3)

COMMITMENT TO CORRECTIVE ACTION

Texaco is committed to minimizing the impacts associated with Platform Harvest discharges to the maximum extent feasible. If unacceptable adverse impacts directly attributable to platform discharges are identified as a result of the proposed study, Texaco will coordinate with responsible agencies to develop and implement mitigation measures that will minimize the identified impacts to the extent feasible within reasonable economic and technical limits.

BIOLOGICAL FIELD STUDY WORK PROGRAM

Texaco intends to conduct a biological impact monitoring program as a part of the Platform Harvest Project. This monitoring program will include periodic site-specific field investigations as described in our earlier letter. Each field investigation will include up to 150 minutes of video tape and approximately 50 photographs to be obtained by remote controlled vehicle or manned submersible at hard bottom areas in the vicinity of Platform Harvest. Survey sites will include the four hard-bottom features located nearest to Platform Harvest (refer to the attached map), unless earlier survey results or agency preference suggest that other locations would be more appropriate. Site-specific current data to be collected by Texaco will also be used to refine the survey program as appropriate. Sediment samples will be collected at three locations (corresponding to the original biological survey stations 1, 2, and 4; refer to the attached map). These samples will be analyzed to determine their oil and grease content.

AGENCY INVOLVEMENT IN THE PROPOSED INVESTIGATIONS

Texaco welcomes the involvement of the California Coastal Commission and U.S. Minerals Management Service in the proposed drilling muds mitigation program. We are fully committed to meeting the obligations specified in this and our earlier letter, and will pass on this commitment to the contractors selected to accomplish the proposed investigations by specific contract provisions. We will communicate with the Coastal Commission staff and MMS when survey schedules are finalized, and will provide both agencies with all final reports prepared as a result of these investigations.

* * *

If you have any questions which remain unanswered, please contact me at 213/739-7799.

Sincerely,

C. S. Alpert

C. S. ALPERT

CSA/ls
14/27E

Attachments

cc: Eugenia Laychak

Exhibit 4-4

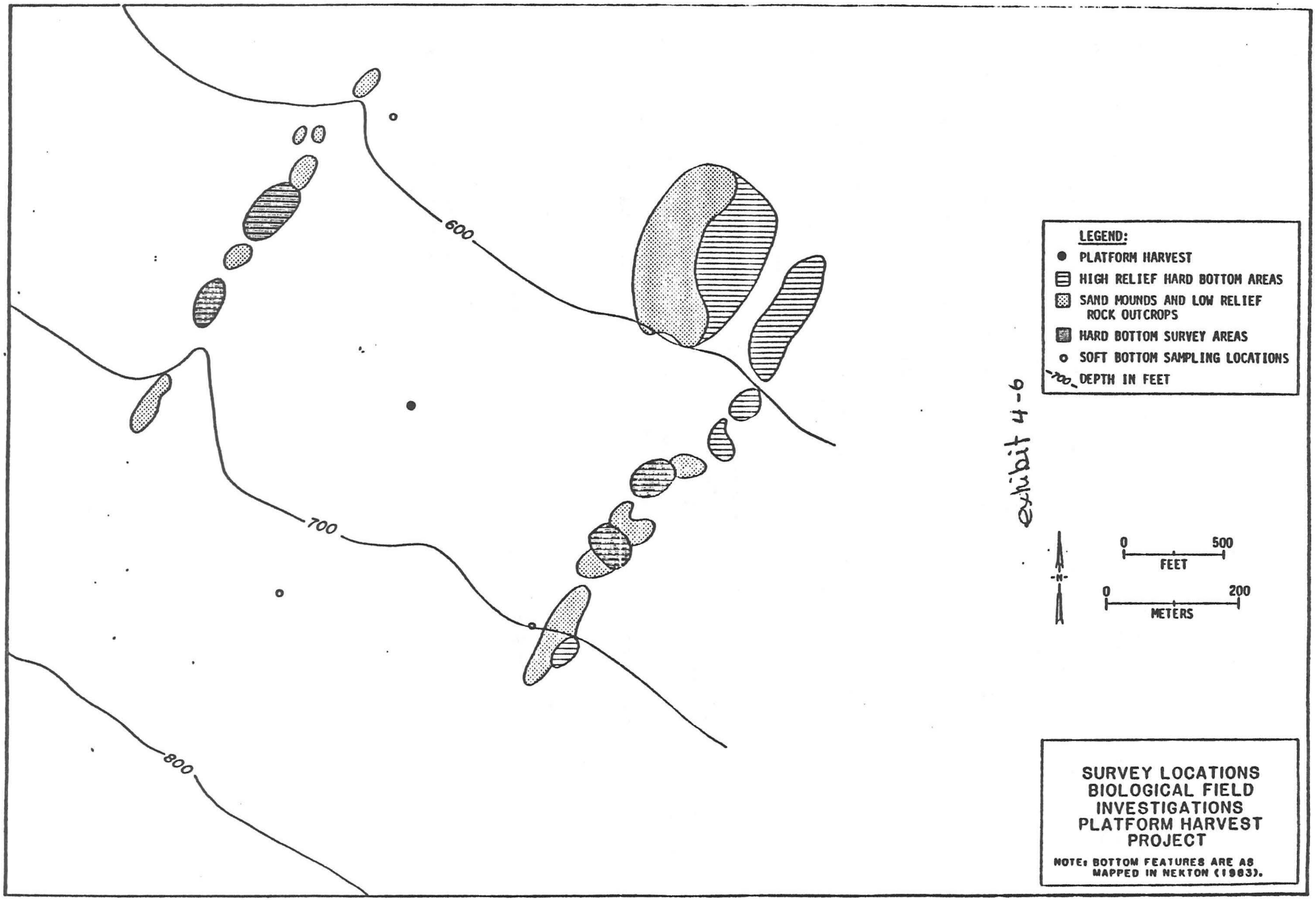
600
700
800
LEGEND:
PLATFORM HARVEST
HIGH RELIEF HARD BOTTOM AREAS
SAND MOUNDS AND LOW RELIEF ROCK OUTCROPS
HARD BOTTOM SURVEY AREAS
SOFT BOTTOM SAMPLING LOCATIONS
100 DEPTH IN FEET
N
0 500
FEET
0 200
METERS
SURVEY LOCATIONS
BIOLOGICAL FIELD
INVESTIGATIONS
PLATFORM HARVEST
PROJECT
NOTE: BOTTOM FEATURES ARE AS MAPPED IN NEKTON (1983).

Exhibit 4-6

Biological Impact Monitoring

A biological impact monitoring program will also be included as part of the Platform Harvest Project. This program will consist of qualitative site-specific photographic and/or video survey at the nearby hard bottom habitats and quantitative analysis of oil and grease content in sediments collected at the original biological survey locations 1, 2, and 4 (where pre-project data were collected). This survey will be conducted in the first six months following the commencement of drilling, second 12 months following the first survey, and lastly 18 months following the second survey. This approach will allow the identification of major changes. The proposed schedule is intended to provide an early indication of short-term changes as well as a continuing investigation of longer-term changes.

We look forward to discussing this proposal with you at our meeting on Tuesday, January 10, 1984.

Very truly yours,

Charles Alpert

CHARLES S. ALPERT

CSA
f12/f8

cc: E. Metz

exhibit-5-2

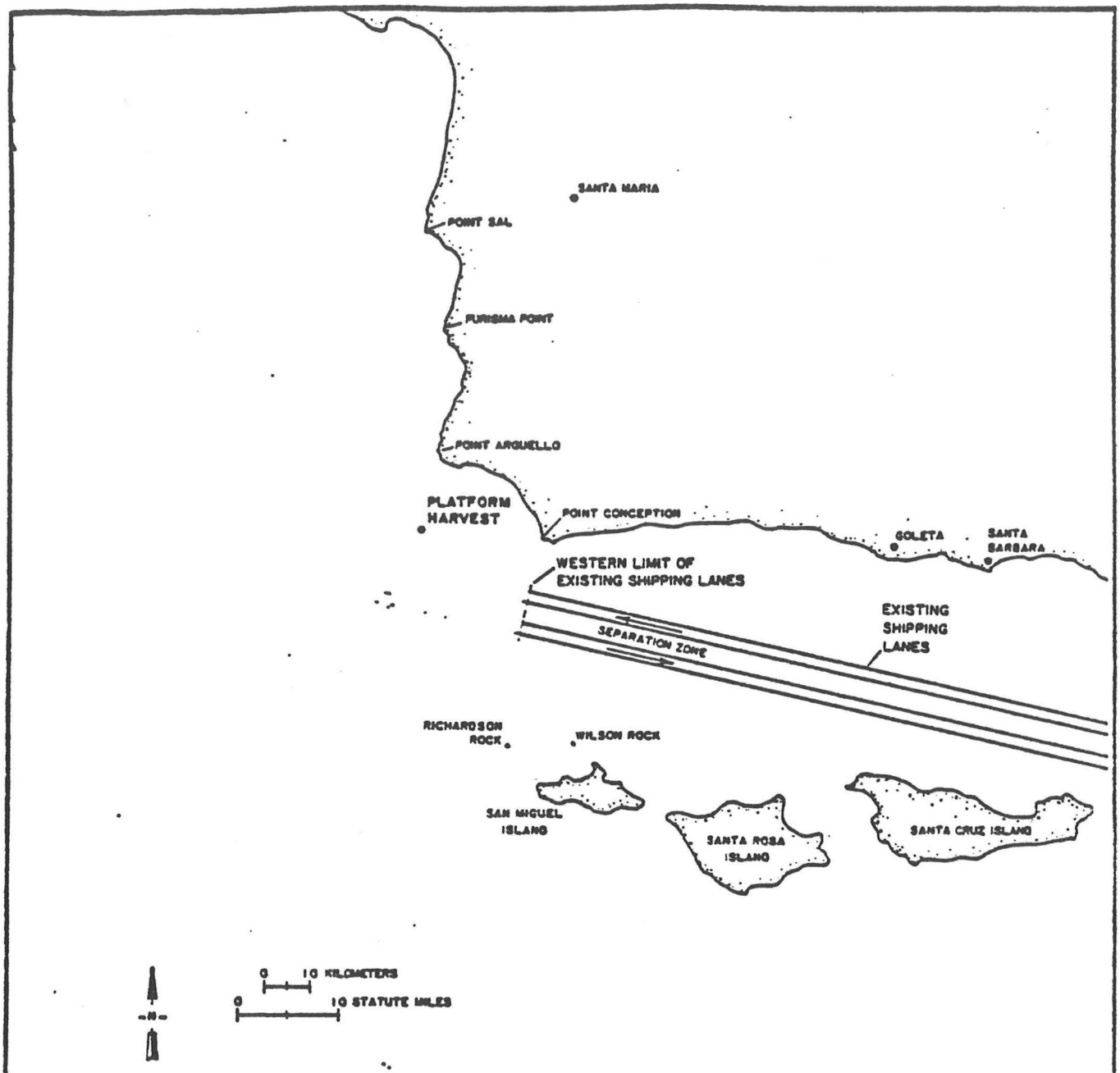

FIGURE 3.d-2

PROPOSED TRAFFIC SEPARATION SCHEME WESTERN SANTA BARBARA CHANNEL

EXHIBIT NO. 7

APPLICATION NO. CC-27-83

Texaco

California Coastal Commission