CC-36-86
July Hearing
FINAL FINDINGS

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GEORGE DEUKMEJIAN, Governor

CALIFORNIA COASTAL COMMISSION
631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
(415) 543-8555
TDD ONLY (415) 896-1825

MINERALS MANAGEMENT SERVICE
PACIFIC OCS REGION
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JUL 29 1986
REGIONAL MANAGER
LOS ANGELES

Noted - Van Auker

Honorable Donald P. Hodel
Secretary of the Interior

July 28, 1986

Honorable Malcolm Baldrige
Secretary of Commerce

Anthony J. Calio, Assistant Administrator
National Oceanic and Atmospheric Administration

Peter Tweedt, Director
Office of Ocean and Coastal Resources Management

William Grant, Regional Director
Minerals Management Service

Clair Ghylin, General Manager
Land Department, Chevron U.S.A. Inc.

REGARDING: CHEVRON U.S.A., INC., DEVELOPMENT AND PRODUCTION PLAN FOR PLATFORM GAIL AND ASSOCIATED PIPELINES

Dear Sirs:

After a public hearing on July 8, 1986, the Coastal Commission objected to Chevron's proposal to install and operate Platform Gail on OCS P-0205. On July 10, 1986, the Commission adopted the attached findings. The Commission received the Development and Production Plan in a formal transmittal from the Minerals Management Service on January 30, 1986. Thus, the Commission's action took place within the time requirements established in Section 307 of the Coastal Zone Management Act.

The Commission objected to Chevron's project mainly because of: a) the proximity of the proposed platform to Anacapa Island and the Channel Islands National Park and Marine Sanctuary and the resulting risk of oil spills and other impacts to the important marine and coastal resources: b) the proximity of the platform to the vessel traffic safety lanes and the resulting risk of collisions; c) impacts to commercial fishing remaining after mitigation agreed to by Chevron;

d) impacts to air quality remaining after mitigation agreed to by Chevron; e) unmitigable impacts to scenic resources; and f) crude oil transportation via pipeline. The attached findings fully explain the reasons for this objection.

The Commission findings identify alternatives for Chevron to consider. Chevron has re-submitted a revised consistency application and the project has been scheduled for a September Commission meeting.

Should you have any questions, please contact me or Susan Hansch, Manager, Energy and Ocean Resources Unit.

Sincerely,

Susan M. Hansch for

PETER DOUGLAS
Executive Director

PD/SH/ces

Enclosure

CALIFORNIA COASTAL COMMISSION
631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
(415) 543-8555
TDD ONLY (415) 896-1825

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COMMISSION FINDINGS ON CONSISTENCY CERTIFICATION

APPLICANT FOR FEDERAL PERMIT: Chevron U.S.A., Inc.

PROJECT LOCATION: Offshore on Lease OCS P-0205 approximately 24 miles southeast of Santa Barbara, 11 miles southwest of Ventura and 6 miles north of Anacapa Island in the Santa Barbara Channel. (see Exhibit 1.)

PROJECT DESCRIPTION: Platform Gail: One thirty-six (36)-slot drilling and production platform on Lease OCS P-0205 in 739 feet of water. Three (3) new subsea pipelines (oil, gas and a spare) running approximately 6 miles to the northwest from Platform Gail to Platform Grace.

SUBSTANTIVE FILE DOCUMENTS: See Appendix A.

SYNOPSIS

After a public hearing on July 8, 1986, the Commission on a 6 to 6 vote objected to Chevron's proposal to install and operate Platform Gail on P-0205. (An affirmative vote of a majority of Commissioners present is necessary to concur on a consistency certification.) On July 10, 1986, the Commission adopted findings. This document contains the Commission's findings.

The Commission objected to Chevron's project mainly because of: a) the proximity of the proposed platform to Anacapa Island and the Channel Islands National Park and Marine Sanctuary and the resulting risk of oil spills and other impacts to the important marine and coastal resources; b) the proximity of the platform to the vessel traffic safety lanes and the resulting risk of collisions; c) impacts to commercial fishing remaining after proposed mitigation; d) impacts to air quality remaining after proposed mitigation; e) unmitigable impacts to scenic resources; and f) crude oil transportation via pipeline. The following findings fully explain the reasons for this objection.

On June 10, 1986, the Commission considered the Staff Summary of Consistency Certification, presented to facilitate a review and discussion of the Coastal Act issues and advise Chevron of steps which would be necessary for the Commission to find concurrence with the consistency certification. The Commission postponed taking action until the July 8-11, 1986 meeting in Los Angeles, and expressed their concerns with several aspects of the project proposal in relation to anticipated adverse impacts and California Coastal Act requirements.

Chevron committed to substantial mitigation measures to: transport crude oil by pipeline; comply with Ventura County APCD requirements; fully offset operation air impacts; offset construction air impacts in an effort to meet the requirement that they achieve mitigation to the maximum extent feasible; use low emission crew and supply boats; conduct post-construction seafloor surveys to identify snags and hazards for commercial fishermen; contribute to a cumulative impact analysis of impacts to the commercial fishing industry; supply gear loss contingency money and an insurance trust fund for affected trawlers; instigate oil spill drills to test equipment readiness; provide funds for a bird clean-up program for preparedness in the event of an oil spill; fund construction projects to improve recreational opportunities on Anacapa Island; install a Racon and warning system on the platform to improve vessel traffic safety; and to undertake other mitigation measures as described herein.

On June 27, staff distributed its recommendations and identified remaining concerns. Many of these issues were resolved prior to Commission action including: acceptance by MMS of all of Chevron's proposed amendments to the Development and Production Plan; receipt of various written clarifications regarding project refinements; the results of Chevron's study to locate additional construction offsets to mitigate air quality impacts; and results of a July 2, 1986 meeting between Commission staff and Chevron with respect to Chevron's platform tow specifications and the Commission's June 10, 1986 adopted recommendations to the MMS on the Structural Integrity of Foreign Fabricated Platform Jackets after Trans-Pacific Tows. However, the Commission voted to object to Chevron's proposed project.

TABLE OF CONTENTS

		Page
	Synopsis	Cover
	Response to Questions	1
	Summary of Issues	9
I.	Resolution	15
II.	Findings and Declarations	15
	A. Procedural Considerations	16
	B. Commission Review of Development Plans	20
	C. Overview of Findings	21
	D. Project Description and History	23
	E. Coastal Act Issues	
	1. Marine and Coastal Resources	25
	2. Ocean Disposal of Oil Development Wastes	32
	3. Commercial Fishing	36
	4. Crude Oil Transportation	45
	5. Containment and Cleanup of Crude Oil Spills	47
	6. Vessel Traffic Safety	56
	7. Geologic Hazards	60
	8. Air Quality	65
	9. Onshore Facilities	79
	10. Recreation and Scenic Resources	82
	11. Archaeologic Resources	88
	12. Public Welfare	88
	Substantive File Documents	93
	Exhibits	

RESPONSE TO QUESTIONS

During the June 10th meeting, the Commissioners raised several questions and identified areas where they wished additional information prior to reaching a decision. The following briefing describes Commissioners' questions and staff responses. Additional detail is addressed in the findings.

Minerals Management Service:

1. What is the role of Minerals Management Service in the Commission's consistency certification?

Chevron submits a Development and Production Plan and an Environmental Report to the Minerals Management Service (MMS), who then submits it to the Commission for consistency review. To ensure that the DPP ultimately "approved" by MMS includes Chevron's amendments in response to APCDs, ARB and the Commission, MMS must "recognize" or "agree to amend" Chevron's proposed changes to the DPP. After MMS recognizes the DPP changes, the Commission can be assured that they are part of the DPP and may take appropriate action. MMS cannot "approve" the DPP until after the Commission's consistency certification. The Commission received correspondence from MMS on July 3, 1986, before the July 8, 1986 hearing, that incorporated all of Chevron's proposed amendments to the DPP, including Chevron's proposals made at the hearing with regard to air quality. MMS's letter of July 2, 1986 with Chevron's June 30, 1986 letter as an attachment, anticipated these specific proposals and incorporated them with the amended DPP.

2. How will MMS enforce the revised DPP?

MMS has advised Ventura County Air Pollution Control District (APCD) that they will not take responsibility for enforcement of Chevron's proposed changes to the DPP because many of these proposed changes offered by Chevron go beyond basic federal oil and gas development requirements administered by the MMS. MMS will enforce only those provisions contained in the DPP that pertain to federal requirements. The APCD has entered into a separate agreement with Chevron for enforcement. The Commission's consistency certification would be dependent upon Chevron's changes to the DPP. Assuming the Commission concurred with a consistency certification and Chevron violated any part of the DPP as amended, the Commission may take Chevron to court (much like a land use permit) to enforce its action on consistency.

Marine Resources

1. What is Chevron doing to protect the endangered brown pelican?

Platform Gail is proposed to be located as close as 6.5 nautical miles from critical breeding habitat for the endangered brown pelicans on Anacapa Island. In the event of an oil spill, there does not exist a coordinated program for the rescue and rehabilitation of oiled birds. Chevron proposed to partially fund such a program as part of an

industry-wide contingency fund, to reduce the loss of birds should an oil spill occur. In addition, Chevron agreed to participate in oil spill exercises and drills to become better prepared should an emergency arise.

2. What is the status of and what would be the affect upon the giant black seabass?

The Department of Fish and Game (DFG) was contacted with regard to concerns raised by Sections 30230, 30231, and 30260 and the Commissioner's question.

Closure of sport fishing for the giant or black sea bass occurred in 1982. Only two per vessel are allowed to be possessed or sold if taken as incidental catch by gill or trammel net. Set gill net data from in and near the kelp beds (within a mile of shore) at Anacapa Isalnd show landings of this species during the summer. The Coronado Islands and San Nicolas Island are other areas where they are taken incidentally with gill nets in comparatively high abundance. A Field Guide to Pacific Coast Fishes of North America states that: the bass aggregate for spawning in the summer, they live at least 70 years, adults weigh up to 500 lbs., and juveniles are found in shallower waters over sand and in kelp beds. A significant adverse impact on the bass could occur during an oil spill. If oil was caught in the kelp beds, it could affect the water column for a longer period of time than in open waters, and affect the early life stages of the bass.

Oil Spills

1. What is the effectiveness of Chevron's proposed oil spill equipment?

The Clean Seas oil spill cooperative has agreed to conduct a full training exercise in coordination with Chevron off East Anacapa Island. The exercise would be conducted after consultation with Marine Sanctuary officials, the Coastal Commission and MMS. These agencies would be given the opportunity to observe the exercise. Exercises such as these help to prepare for the future protection of island resources including the brown pelican, in the event of "real" oil spills.

Chevron amended their verbal statement at the Commission meeting regarding the potential effectiveness of oil spill cleanup equipment at the platform site (Exhibit 16a). This letter more accurately reflects the spill recovery capability of the Walosep skimmer in calm water. Originally Chevron representatives stated that oil spill "equipment would be 60% to 90% effective at the site 84 to 96% of the time." The letter states that one skimmer in the Clean Seas inventory (Walosep) has been tested and produced these efficiencies in calm water tank tests. They now believe that mechanical oil spill recovery may be possible to operate 84% to 96% of the time because this is when seas will be less than six feet, but Chevron no longer claims that the equipment will be 60% to 90% effective during these conditions.

Vessel Traffic Safety

1. Why were the vessel traffic lanes relocated?

The United States Coast Guard, working with the oil and shipping companies, agreed to move lanes as a "one-time-only" modification of the Santa Barbara Channel Vessel Traffic Safety System (VTSS). Such a move was to meet the concerns of all lessees in the Channel and was to be done only if Chevron, after exploratory drilling, decided to develop the Sockeye Field. The VTSS was moved one-half mile south on February 1, 1985 (Exhibit 2). This move allowed Chevron to locate Platform Gail near the center of the Sockeye Field without being in either the traffic lanes or the buffer zones.

2. What are the shutdown procedures on the platform?

There are 20 Emergency Shut Down (ESD) buttons on the platform. There are also automatic sensors for high levels of combustable gas, H_2S, and fire which, when activated, automatically trip the ESD. This shut-down system takes, at the maximum, 15 seconds to shut-down the platform. Gas is automatically vented to flare. The pipeline shuts down when pressure drops, which happens in a matter of seconds. The sub-surface safety valve, 200 feet below the mudline, closes within a maximum of 2 minutes. Platform Gail, which has electrical, as versus pnumatic controls, can probably close the sub-surface valve in less than one minute.

3. What is the difference between an ARPA and a Racon?

A Racon is a transponder which, when triggered by a ship's radar pulse, will respond with a signal on the same frequency. Accordingly, it can be picked up by the radar on the passing vessel and identified as a specific target, in this case Platform Gail. An Automatic Radar Plotting Aid (ARPA) can track ships, tell the radar operator what the closest point of approach between a ship and the platform would be, and how much time there would be to the closest approach point. In addition, it would display the speed and course of the ships. An inner and outer guard zone can be selected by the radar operator, and if a ship penetrates the guard zones, both visual and audible alarms are automatically activated.

4. What are the procedures to ensure the currency of charts on vessels?

All vessels over 1,600 gross tons must have a current chart, Coast Pilot, and light list. The Marine Safety Office in Long Beach states that they check approximately 65% of vessels transiting north through the Santa Barbara Channel just prior to sailing to see if they have these items current.

Jacket Fabrication and Inspection

1. Where is Platform Gail being constructed and what measures is Chevron taking to assure jacket integrity?

Chevron has contracted to construct Platform Gail in Japan. The jacket would be transported by barge to the proposed site after concurrence is granted.

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. Chevron has submitted a description of the quality control and inspection procedures used during the fabrication of the jacket and what procedures would be followed during the post-tow inspection. (Exhibit 17). In general, Chevron would undertake the following quality control and inspection procedures:

Inspection at the Mill. The contractor and the Certified Verification Agent would perform regular inspections at the mill to ensure that the steel meets the specifications. Mechanical and chemical testing would be witnessed and certificates must be approved by the Certified Verification Agent and the fabricator. Testing would be performed on every plate for critical members, such as joint cans, and areas subject to fatigue loading.

Inspection of Welds at the Fabrication Yard. All primary member welds would be 100% inspected visually and non-destructively (either radiographic, or ultrasonic and magnetic particle). Secondary member welds would be 100% visually inspected and partially tested non-destructively. For Chevron's Platform Gail, primary member welds are classified as welds to or between members 18 inches and larger in diameter, and other full penetration welds in plates, such as padeyes and ring stiffeners.

Erection and Assembly. Trace-ability records would be prepared. All welds would be inspected as described above. Inspection would be witnessed by the contractor, the Certified Verification Agent, and Chevron.

Loadout and Seafastenings. After the jacket is loaded onto the barge, seafastenings would be welded between the jacket and barge. All full penetration welds would be 100% non-destructively tested by ultrasonic or magnetic particle and 100% visually inspected. Secondary welds would be 100% visually inspected and spot tested using non-destructive methods. Inspections would be conducted by the fabricator, the Certified Verification Agent, Chevron, and the marine surveyor.

Trans-Pacific Tow. Chevron has committed to install tow monitoring equipment to record barge and jacket motions during the trans-Pacific

tow. This information would be used to evaluate the structural integrity of the jacket after the trans-Pacific tow is completed.

Post Tow Inspections. Upon arrival to the West Coast, the jacket would undergo another inspection. A plan of inspection would be pre-prepared and would concentrate on the joints that have been highly loaded during transportation. All of the critical joints would be inspected by magnetic particle. This inspection would be witnessed by the CVA who would be on board the barge upon arrival. In addition, all other joints would be inspected visually. The structure would not be launched until the inspection process has been completed and accepted by the Certified Verification Agent.

Chevron responded on July 2, 1986 to meet the Commission's concerns as expressed in the Commission Adopted Recommendations to the Minerals Management Service on the Structural Integrity of Foreign Fabricated Platform Jackets After Trans-Pacific Tows. The following paragraphs describe the Commission's recommendations (numbered in parentheses, starting on page 7 of the June 26, 1986 memo) and Chevron's specific committment.

(1) State-of-the-art instrumentation shall be available to and used by tow captains to ensure that the amount of roll, pitch, and yaw that a jacket is subjected to during the trans-Pacific tow is within the suggested limits of the designer.

Chevron committed to this recommendation in full. This recommendation goes beyond existing MMS requirements.

(2) A tow monitoring system shall be installed on all ocean tows (i.e. of more than 10 days). Instrumentation would monitor barge motions, determine motion and forces induced in the transported components. The appropriate CVA should review this data for compliance with company tow specifications. All company tow specifications must be pre-approved by the CVA. Should the CVA determine that exceedence of the approved tow specifications occur, pre-determined sacrificial members installed along the plane of maximum stress and fatigue be used for destructive examination of the welds in compliance with American Welding Society testing specifications. Results of these tests should be used to further determine what additional members and joints be examined by non-destructive techniques.

Chevron committed to install instrumentation (on the barge) to monitor and record barge motions during the trans-Pacific tow. Chevron's compliance with this recommendation exceeds existing regulatory requirements. Chevron has no plans to install sacrificial members. Staff has not developed specific recommendations such as the number of members, their location, and if in fact such a requirement would truly be beneficial. In addition, Chevron has complied with the more stringent post-tow inspection requirements cited in recommendations 3 and 4.

(3) Critical nodes (locations within the jacket frame where main members meet) must be inspected not only visually, but by selected non-destructive techniques.

Chevron has agreed to this recommendation. This recommendation goes beyond existing requirements. CVA will witness the non-destructive inspection.

On June 10, 1986 the Commission voted to include the following additional recommendations to the Minerals Management Service:

(4) Upon completion of the trans-Pacific tow, all welds shall be inspected visually and, in addition, all critical welds shall be inspected by selected non-destructive techniques (radiograpic, magnetic particle, liquid penetrant, ultrasonic). Randomly selected non-critical welds shall also be non-destructively tested. In addition, a statement as to the strength of each inspected weld shall be recorded and submitted to the Minerals Management Service.

Chevron has agreed to comply with these recommendations. This recommendation goes beyond existing MMS requirements.

(5) After milling, each plate produced for critical members shall be inspected visually, destructively and non-destructively. A representative sample from each heat (batch) for non-critical members shall be tested non-destructively and chemically. After fabrication, all critical welds and randomly selected non-critical welds shall be inspected by non-destructive techniques. The integrity of all welds shall be verified by the Certified Verification Agent. The loadout operation, from the first movement of the jacket to the final positioning of the jacket on the transport barge, shall be videotaped. The videotape shall be reviewed by the Certified Verification Agent to determine that the loadout was executed to conform to specifications. In addition, the launch of the jacket shall be videotaped and reviewed by the Certified Verification Agent.

The above recommendations shall apply to jackets with tow times in excess of 10 days.

Chevron has agreed to comply with the recommendations on the inspection of critical and non-critical members at the mill. This recommendation goes beyond existing MMS requirements. Chevron has not indicated its response to the recommendation to videotape the launch and loadout of the jacket.

Chevron's quality control and inspection procedures have attempted to respond to the recommendations to the Minerals Management Service adopted by the Commission on June 10, and July 10, 1986. Based on the

existing regulatory requirements promulgated by the Minerals Management Service, Chevron has met or exceeded these requirements and addressed most of the Commission's recommendations.

Pipeline Stability

1. What would be the impact upon Chevron's proposed pipelines of a landslide on the seafloor?

The subsea pipelines are high-strength, thick-walled, and of a small diameter (8.6 inch). Generally, the pipelines could tolerate a deflection of between 2 1/2 to 5 % of the length involved in a subsea slump. That is, if there were a landslide or slump on the sea floor near the pipelines, a specific 1,000 foot section of line could tolerate at least 50 feet of deflection or movement without rupturing. If the pipeline were moved beyond that distance, crimping or rupture might occur.

After placement of the pipelines on the seafloor, they are expected to settle and become partially covered by the soft sediments on the bottom. The pipelines have been designed to withstand predicted seafloor movement in the adjacent landslide area. Pipeline shut-off valves can be activiated on the platform to close the pipeline in the event of an emergency.

Air Quality

1. What are air quality offsets?

Banked offsets accrue when a company voluntarily cleans up or removes a pollution source, therefore lowering the pollution vented into the atmosphere within a given air basin. Credits to the company are awarded and maintained by the Air Pollution Control Districts much like a bank account. Companies can draw upon their balance and make deposits annually. In Ventura County, a distance or offsite factor may be used to increase the number of offsets required to mitigate a proposed project. For example, if a project were proposed in a nearby air basin, and banked emission offsets from a distant air basin were the only ones available to mitigate the project, a discount factor would be applied to compensate for the distance between the two air basins. More of the banked air quality improvement (offsets) from one air basin would be used while the impact (emissions) occurred in another basin. Distance or offsite factors are expressed as 1.1:1, meaning that the applicant would have to offer 1.1 tons of offsets for every 1 ton of pollutant generated. Factors range from 1.1:1 to 1.6:1 in Ventura County. Chevron is providing an offsite factor of 1.1:1 for operations emissions.

2. What is Chevron doing to mitigate air quality impacts?

Several Commissioners voiced concerns that Chevron was not doing enough to offset the air quality impacts from construction and operation of the proposed project and that Ventura County's air quality would

become even more degraded. Chevron responded with substantial proposals to address both construction and operation emissions. Their revised committments include: use of water-injected turbines (the equivalent of "scrubbers") to reduce emissions by 70%, commitment to use low-emission crew and supply boats, and withdrawal of all of Chevron's accumulated air emission credits or banked offsets within the affected air basin during the construction period.

Chevron has submitted the results of their promised modeling study to determine the appropriate number of offsets necessary to reduce impacts associated with operations over the 32 year life of the project. The consulting agencies, ARB and Ventura County APCD, found that, for every ton of the project's peak NO_x emissions generated, at least one ton of NO_x onshore would have to be reduced to fully mitigate operation impacts. Chevron committed to this mitigation measure.

In response to Commission concerns, Chevron contracted for a study of available offsets within the affected onshore air basin in an attempt to purchase additional offsets from other companies. Chevron found 55 tons of NO_x offsets available in order to fully mitigate construction emissions however, they agreed to purchase up to 50 tons at the hearing. MMS accepted this specific proposal as part of the DPP in their letter dated July 2, 1986 with attachment. Results of the study were available July 5, 1986, immediately prior to the Commission's hearing July 8-11, 1986.

Electric Grid Power

1. Why isn't Chevron using electrical grid power?

Based upon available information, it is uncertain if platform electrification could reduce operational air emissions and therefore reduce the need for onshore offsets. While Chevron proceeded to build the platform on design speculation which did not incorporate electrification, the project mitigation measures now offered by Chevron attempt to offset projected operation emissions from the gas-fired, water-injected turbines. Chevron's committment to retire 10 tons of offsets in perpetuity (after construction) would result in a net air quality benefit for Ventura County.

Part of the reason that gas-fired turbines were selected by Chevron was the need for heat to keep the crude oil flowing through the pipeline and the availability of gas on the platform as a result of production of the field. Electricity is less efficient for generating heat than gas. Another reason was the distance from shore a cable would have to be installed to accommodate Platform Gail. Platforms Grace and Hope lie within the utility corridor stretching from the onshore Carpenteria facility and Platform Gail. The distance is approximately 20 miles. Neither Grace nor Hope are electrified. Platforms Gina and Gilda, within approximately 8 and 5 miles respectively of Platform Gail are both electric, however, they are designed for another oil company (Union) which has less need for platform heat and were not designed to accommodate future power demands from Chevron's proposed project.

Chevron prepared an analysis of electric grid power versus turbines at the request of the Air Resources Board (ARB) and Ventura County APCD. Both agencies determined that electric grid power was not necessary in this case to mitigate emissions resulting from operations and both agencies support Chevron's proposals to mitigate project emissions.

Visual, Scenic and Recreational Resources

1. What is Chevron doing to mitigate the visual impact of Platform Gail on visitors to the Marine Sanctuary and Channel Islands National Park?

People will travel great distances and make great effort to reach this park expecting a remote wilderness experience. The presence of oil platforms that are visible (and in Gail's case, painted white with strobe lights) cannot but diminish the quality of this remote wilderness recreational experience. Chevron has agreed to participate in a mitigation program (and committed $150,000) to enable the National Park Service and Marine Sanctuary Program to make improvements to recreational and interpretation facilities on Anacapa and thus improve the recreational opportunities and experience of visitors to the National Park and Marine Sanctuary.

SUMMARY OF ISSUES

Minerals Management Service Approval

In leasing tracts in the Outer Continental Shelf (OCS), the Minerals Management Service (MMS), a division of the federal Department of Interior (DOI), is primarily responsible for ensuring that oil companies comply with all federal regulations and with Chevron's approved Development and Production Plan (DPP). The California Coastal Commission through the Coastal Zone Management Act (CZMA), as recognized by the OCS Lands Act, and provided for in the federally approved California Coastal Act (CCA), must evaluate whether Chevron's proposal is consistent with state and local requirements. The Commission has the right to concur or object to a consistency certification made by the oil company and MMS, measured against the California Coastal Act.

In determining consistency with Chevron's proposal, the Commission relies primarily on two documents, the DPP and an Environmental Report prepared by Chevron. However, the Commission may request other data necessary for its review. MMS has prepared an Environmental Assessment to comply with the National Environmental Policy Act (NEPA), which was submitted to the Commission on June 19, 1986. This delayed process poses a hardship on the Commission to evaluate environmental effects of the project without environmental documentation. Nevertheless, the Commission requested information on March 31, 1986 from MMS and Chevron to enable the Commission to proceed with its review. Although MMS initially responded on April 15, 1986, additional information and clarifications were received from MMS and Chevron.

Chevron has offered many revisions to the DPP in order to achieve consistency with the Act, and to obtain Commission concurrence. Since MMS is responsible for issuing the final determination or approval of the DPP, it must play a critical role prior to Commission action.

The MMS, as administrator of federal OCS leaseholds, must review Chevron's DPP for conformance with federal requirements and "recognize or accept" any changes to the DPP. The Commission may determine that the project as proposed in the original submittal is sufficient and consistent. In this case, Chevron agreed to amend the DPP for the Commission's consistency purposes, and MMS responded by recognizing amendment of the DPP in writing prior to the July 8, 1986 hearing when the Commission took action.

Chevron has submitted to the Commission, the Air Resources Board, and the Ventura County Air Pollution Control District a number of modifications to the DPP which required "acceptance and transmittal" by MMS to the Commission. Additional commitments have been made by Chevron in response to Commission concerns. MMS acceptance of modifications to the DPP were transmitted to the Commission. MMS may not "approve" the DPP until it receives the Commission's consistency certification, or if the Commission objects, the objection is overturned on appeal by the Secretary of Commerce.

The Commission received the DPP in a formal transmittal from MMS on January 30, 1986. The Commission must make its consistency certification within the time requirements set forth in the CZMA, cited above. The Commission took action before July 29, 1986, within the time deadlines. MMS provided written acceptance, on July 3, 1986 incorporating all of Chevron's proposed modifications to the DPP including specific proposals made at the Commission hearing with regard to air quality.

Oil Development - Pipeline Commitment

Crude oil produced from Platform Gail would travel via new subsea pipeline to Platform Grace, then via existing pipeline to Platform Hope and onshore at the Carpinteria gas processing facility. The DPP states that crude oil would be transported to El Segundo via existing pipelines for refining. Chevron has made clear that the crude would be transported to producer's future market destinations via pipeline consistent with Commission policies applied to prior DPPs such as Platform Julius, proposed by Cities Service Oil and Gas.

In previous cases, oil companies have committed to transport oil to refineries or market outlets by pipeline if pipelines are available with accessible capacity. As an interim measure, until pipelines to producer's market destinations are available with accessible capacity or during emergencies, oil produced from the platform would have to be

transported by other available methods. Any use of alternative modes of transportation, although not anticipated, must be consistent with the transportation policies of the applicable Local Coastal Program. Such a commitment from Chevron was supplied and would be necessary in order to find the proposed project consistent with Coastal Act policies, and thereby with the approved California Coastal Management Program.

Marine and Coastal Resources

Platform Gail would be located within 6.5 nautical miles from critical breeding habitat for the endangered brown pelicans on Anacapa Island. An oil spill occurring near the Island during a critical stage in the life cycle of these birds could have a signiticant impact on the California population. The US Fish and Wildlife Service (USFWS) is responsible for issuing a Section 7 determination at the request of MMS, evaluating the risk to endangered populations from the proposed project. The Section 7 determination was received on June 19, 1986 and stated:

> "It is our Biological Opinion that implementation of the subject project as proposed is not likely to jeopardize the continued existence of the California brown pelican, California least tern, light-footed clapper rail, American peregrine falcon, or salt marsh bird's beak.
>
> In summary, this project has the potential to result in the taking of several listed endangered species through the accidental spill of oil from the platform or connecting pipelines. Spills have the potential to cause mortality at any time of the year for several species and in any location, at least where the California brown pelican is concerned. However, spills at certain times (spring, summer, early fall) near listed species concentration areas could be disastrous. However, the probability of spills occurring and making contact is extremely low. Furthermore, containment and cleanup equipment and techniques will further reduce the potential for contact with oil. In addition, several requirements were listed to further reduce the potential for established levels of incidental take. Measures to further the conservation for all listed species in the project area were given."

Other impacts to marine resources as a result of the proposed project would include smothering of some benthic organisms and changes to water quality as a result of waste discharges. The Commission finds the proposal inconsistent with California Coastal Act Sections 30230, 30231, and 30240 and 30250(a). Although Chevron is providing mitigation measures in the form of a $50,000 contribution to a bird cleanup center, and additional oil spill prevention measures, the Commission finds the proposed project inconsistent with Sections 30260(3) and 30262, because it is not mitigated to the maximum extent feasible.

Ocean Disposal of Oil Development Wastes

Chevron cannot discharge drilling muds, cuttings, produced water, sewage effluent, deck drainage and a variety of other wastes without a

permit from the Environmental Protection Agency (EPA) under their National Pollutant Discharge and Elimination System (NPDES). Although Chevron's plans are geared toward an expired general permit, they have since applied for an individual permit from EPA. The Commission must review all NPDES permits as part of its consistency authority. The Commission is not taking action on consistency for waste discharges at this time because Chevron will submit its consistency certification to the Commission for later review. If the Commission were to take action on this issue at this time, they would object based upon inconsistency with the CCMP.

Commercial Fishing

Chevron proposes to locate their pipeline and platform in prime trawling areas for English and petrale sole, and rockfish. The area is also trawled for spot prawn and ridgeback shrimp. The Department of Fish and Game indicates that the following other commercial species are also caught in the project's vicinity: mackeral, anchovies, bonito, halibut, shark, lobster, shrimp and sea urchins.

As discussed briefly above and in greater detail below, the Commission finds that there would be adverse impacts and that the proposal is inconsistent with the marine resources sections of the Coastal Act which address commercial fishing (Sections 30230 and 30231). Chevron considered relocating the pipeline to avoid potential commercial fishing conflicts, but engineering and geologic constraints resulted in the proposed route. To offset the individual impacts of the proposed project Chevron has offered, among other mitigation measures, to survey the construction area and conduct test trawls to identify and reduce snags or anchor scars that would impede commercial fishing activities.

To offset cumulative impacts Chevron has offered to contribute money toward an industry-wide cumulative impact analysis. To offset the displacement of trawlers from the proposed pipeline and platform location Chevron has offered money toward a contingency fund to replace lost gear and money to defray some of the liability insurance costs of fishermen. However, the Commission finds Chevron's proposal is not mitigated to the maximum extent feasible for commercial fishing impacts under Coastal Act Section 30260.

Oil Spills

Chevron has modified its Development and Production Plan (DPP) to include additional oil spill clean-up measures. Although the Oil Spill Cooperative-Clean Seas had considered selling the TideMar VII barge (used to contain collected oil) moored in Santa Barbara, and had planned to provide a similarly large storage vessel from Los Angeles, it will keep the barge in Santa Barbara for now, in order to respond more quickly if a large oil spill occurred. Chevron also intends on participating in a near-platform, near-shore, and near-Anacapa Island oil spill exercise to test the readiness of clean-up and containment equipment. If Clean Seas were to remove the barge from Santa Barbara, Chevron has agreed to apply to the Commission to amend this consistency certification.

Vessel Traffic Safety

Chevron originally proposed installing an Automatic Radar Plotting Aid (ARPA) on Platform Gail, but has since changed its decision. Chevron and the Commission have evaluated the usefulness of an ARPA in such close proximity to the shipping lanes and determined, with the help of the Coast Guard, that it would not be effective. In addition to the other mitigation measures originally proposed, Chevron committed to install a Racon and prepared a Vessel Collision Contingency Plan. Nevertheless, the Commission finds the project inconsistent with Section 30262 and Section 30260 in that significant hazards to shipping remain.

Geologic Hazards

The proposed platform is to be located on an ancient buried landslide. The pipeline is proposed to be laid along the toe of an active landslide at approximately the 750 foot contour. The pipeline would cross the landslide at its least steep point and head into shallower water toward Platform Grace. Chevron designed the platform to withstand anticipated geologic conditions by investigating all geologic constraints and adding deep founded piles to stabilize the platform. The pipeline was routed to avoid active slump areas and designed to handle expected stress. Therefore, the Commission finds the proposal consistent with Coastal Act Sections 30253, 30262, and 30260.

Air Quality

The Commission requested comments from state and local agencies in early March to assist in its evaluation of whether Chevron's proposal was consistent with state and local requirements under Section 30253. Letters were received from the Air Resources Board (ARB), and both Ventura and Santa Barbara County Air Pollution Control Districts (APCD). The ARB, after exchanging correspondence and meeting with Chevron for the past several years, is satisfied with Chevron's proposed mitigation measures. The ARB concluded that the agreed-upon modeling for operations resulted in an appropriate onshore NO_x offset ratio of almost one for one. For example, for every ton increase in NO_x emissions from Gail, almost a full ton of NO_x onshore must be reduced to fully mitigate operation impacts from the project.

The Santa Barbara County APCD, in a letter dated March 25, 1986, requested a cumulative impact analysis, a full EIS, and additional information be provided in order to determine consistency with its requirements. The Santa Barbara County APCD, in a letter dated June 16, 1986, noted that Chevron must either demonstrate that this new source of production would not result in an increase of emissions at the Carpinteria facility, or modify their existing permit accordingly.

The requirements of the Ventura County APCD were not considered when Chevron prepared their initial modeling study. An agreement was reached between Chevron and the County that contained key mitigation measures, such as: half offsets for construction, use of low-emission crew and supply boats, an enforcement agreement, and an agreement to model

offshore operations emissions to devise additional mitigation measures in the future. Ventura County stated that the project is consistent with their rules, regulations and practices, represents a departure from their normal plan requirements for onshore development, but is the best that could be expected under the circumstances of limited time.

The lack of information on cumulative impacts and the fate of the unmitigated emissions is of significant concern to the Commission. Chevron proposed changes to the DPP following the Commission's discussion. The changes include: specific offset commitments for operations emissions since the modeling effort has been completed; commitment to use only low-emiting crew and supply boats; use of all Chevron's banked emissions to offset construction emissions; and a commitment to purchase 50 tons of offsets to provide for nearly full construction mitigation.

The results of Chevron's contract to seek and obtain additional construction offsets was available on July 5, 1986, in advance of when the Commission made its decision. However, the Commission finds that Chevron has not provided mitigation to the maximum extent feasible and therefore is inconsistent with Coastal Act Section 30260(3).

Onshore Facilities

Gas from the platform would be processed at the Carpinteria facility under an existing permit issued by the Santa Barbara County Air Pollution Control District. The compatibility of surrounding land uses to the facility must be addressed in light of Coastal Act policies. No modification of existing facilities is planned by Chevron and additional onshore permits are not required at this time. The Commission notes that use of the Carpinteria facility by Chevron for Platform Gail may preclude use by future oil and gas development projects.

Water would be provided primarily by desalination units on the platform during operations and on the work barges during construction. In addition, water would be purchased from onshore sources. Existing water supplies are severely impacted onshore with significant over-draft situations in both Ventura and Santa Barbara Counties. The Commission finds Chevron's proposal inconsistent with Section 30250.

Scenic Resources and Recreation

The platform and construction of the pipeline would cause additional visual intrusion to a seascape which contains existing oil and gas structures. Platform Gail would be the closest to the Marine Sanctuary and National Park boundary of any oil and gas structure in the Channel. While construction would be short-term, the platform would add an additional industrial component to coastal views from major recreation areas and offset visitors' wilderness experiences within the National Park and Natural Marine Sanctuary. The Commission finds no feasible direct mitigation measures exist to lessen visual impacts, however, mitigation for loss of recreational value is an appropriate offset.

Chevron has agreed to contribute $150,000 to the non-profit group, The Friends of the Channel Islands National Park and Marine Sanctuary. The funds would be used for recreational enhancement projects on Anacapa Island as described in more detail in the findings. However, the Commission finds the proposal is inconsistent with Coastal Act Section 30251 and is not mitigated to the maximum extent feasible. Therefore, Chevron's proposal is inconsistent with Coastal Act Section 30260.

Archaeologic Resources

A survey prepared for the DPP did not identify any offshore archaeologic resources that would be adversely affected by the proposed project. The Commission finds the proposal consistent with both Coastal Act Sections 30244 and 30260.

Public Welfare

The Commission finds the proposed project inconsistent with many sections of the Coastal Act. However, the Commission finds that it may consider Chevron's proposal under Coastal Act Section 30260, which allows the Commission to override inconsistency with other Coastal Act policies for coastal dependent projects. Additionally, pursuant to Section 30262, the criteria of Section 30260 apply to all oil and gas development. The Commission finds that the proposed site is not the least environmentally damaging location and the proposed project is inconsistent with Section 30260(1). As described herein, the Commission finds the project is not mitigated to the maximum extent feasible. Section 30260(2) requires a determination regarding the public welfare. The Commission finds that even though concerns (written clarifications and study results) were received prior to the Commission's hearing on July 8, 1986, they are not able to concur with respect to public welfare, as described herein.

I. RESOLUTION

Objection

The Commission hereby objects to the consistency certification made by Chevron U.S.A. for proposed Platform Gail (a thirty-six slot drilling and production platform on Lease OCS P-0205) and three new subsea pipelines (from Platform Gail to Platform Grace) because the installation and operation of this platform would not be carried out in a manner consistent with the mandatory policies of the California Coastal Act, and the California Coastal Management Program (CCMP). This objection may be appealed to the Secretary of Commerce within 30 days of the Commission's decision pursuant Section 307(C)(3)(B) of the CZMA in accordance with Department of Commerce regulations found in 15 CFR 930 (Subpart H).

II. FINDINGS AND DECLARATIONS

The Synopsis, Response to Questions, Summary of Issues, Exhibits and Appendices shall be incorporated by reference as Commission Findings within the following, adopted Findings and Declarations.

The Commission finds and declares as follows:

A. Procedural Considerations

Appeal

Regulations adopted by the Secretary of Commerce to implement Section 307 of the Coastal Zone Management Act (CZMA) require that the Commission's findings notify the applicant of its right to appeal the Commission's objection to the Secretary of Commerce. Chevron may appeal the Commission's decision in accordance with the provisions of Subpart H of the Secretary's regulations, Title 15 C.F.R. Section 930.120 et seq. Any appeal must be filed within 30 days of the Commission's action. The grounds for appeal are that the project is consistent with the objectives or purposes of the CZMA or necessary in the interest of national security.

The appeal regulations specify that, where the Secretary fails to override a state objection, the applicant shall submit a new plan and consistency certification. Specifically, the regulations (15 C.F.R. Section 930.83) provide that:

> If the State agency objects to the person's OCS plan consistency certification, and if, pursuant to Subpart H, the Secretary does not determine that each of the objected to Federal license or permit activities described in detail in such plan is consistent with the objectives or purposes of the Act, or is necessary in the interest of national security, the person shall submit an amended or new plan to the Secretary of the Interior or designee and to the State agency along with a consistency certification and data and information necessary to support the new consistency certification. The data and information shall specifically describe modifications made to the original OCS plan, and the manner in which such modifications will ensure that all of the proposed Federal license and permit activities described in detail in the amended or new plan will be conducted in a manner consistent with the State's management program.
>
> If a new consistency certification is submitted, the period for the Commission's review would be three months, rather than the six months provided for the review of the initial consistency certification. (15 C.F.R. Section 930.84.)

Resubmittal

Regulations adopted by the Department of Interior (DOI) make clear that the applicant is permitted to resubmit an amended OCS plan as an alternative to appealing to the Secretary of Commerce. Specifically, the regulations state:

> If a development and production plan is disapproved because a State objects to the lessee's coastal zone consistency certification, the lessee shall modify the plan to accommodate the State's objection(s) and resubmit the plan to: (i) The Director for review...;(ii)

> Through the Director, to the State for review pursuant to the Coastal Zone Management Act and the implementing regulations....Alternatively, the lessee may appeal the State's objection to the Secretary of Commerce. (30 C.F.R. Section 250.34-2(h)(2); emphasis added.)

DOI must disapprove a plan which has not received state concurrence, unless concurrence is conclusively presumed, or the Secretary of Commerce overrides the state objection. (30 C.F.R. Section 250.34-2(g).)

Content of Findings

In addition to requiring that a state objecting to a consistency certification notify the applicant of the right to appeal, the Department of Commerce regulations contain specific requirements for the objection findings. Section 930.79 specifies that if the state agency objects to one or more of the federal license or permit activities in the OCS plan, the findings must contain a "separate discussion for each objection in accordance with the directives within Section 930.64(b) and (d)." Under Section 930.64(b), the objection must (1) describe how the activity is inconsistent with specific elements of the management program, and (2) identify alternative measures, if they exist, which would permit the proposed activity to go forward in a manner consistent with the management program. Under 930.64(d), the objection may be based on the applicant's failure to supply information requested in writing by the state agency. Where the Commission objects on this basis, its findings must describe the nature of the information requested and the necessity of having such information to determine the consistency of the activity with the management program.

The Commission's regulations reflect these requirements. Section 13660.8 provides that an objection shall indicate:

> (1) the effect which the activity will have on land and water uses of the coastal zone,
> (2) how the activity is inconsistent with a mandatory provision of the CCMP;
> (3) alternative measures or conditions (if they exist) which would make the activity consistent with CCMP policies,
> (4) if a decision to object is based upon grounds that the applicant has failed to provide information requested by the Executive Director, the type of information requested and the necessity of that information for a consistency certification must be described, and
> (5) the applicant's right of appeal to the Secretary of Commerce on the grounds that the activity is consistent with the objectives or purposes of the CZMA or necessary in the interest of national security.

Content of the Development and Production Plan

The Commission recognizes the extensive measures agreed to by

Chevron to mitigate the impacts of the project as initially proposed. These commitments were outlined in letters from Chevron to the Commission and to Thomas Dunaway, Regional Supervisor of the Minerals Management Service. In its June 30, 1986 letter to Thomas Dunaway, Chevron stated:

> The information contained in this letter is provided as a supplement to that contained in our letter dated June 26 in which we outlined what we felt were the final points of additional information for our DPP. A letter dated June 27, 1986 setting forth remaining issues on which the Commission staff needs information accompanied the Staff Report on Platform Gail. You will note Paragraphs 11 and 13 of that letter are directed to the Minerals Management Service as follows:
>
> 11. A letter to Minerals Management Service asking that all the proposed amendments to the DPP be recognized and accepted by MMS and transmitted to the Commission in advance of the hearing on July 8, 1986.
>
> 13. Written confirmation from Minerals Management Service that they agree to recognize all the proposed changes and additions to the DPP and wish the Commission to review the amended version in its consideration of consistency.
>
> In response to Paragraph 11, Chevron is sending you this letter along with the letter dated July 26 which, when taken together, outline all of the additional information that Chevron believes will need to be recognized and included in the DPP at the time it is approved. With regard to Paragraph 13 above, Chevron requests that the MMS prepare an appropriate response to the Coastal Commission staff. We note your letter of June 25, 1986 to Mr. Peter Douglas and believe that a similar letter may be appropriate at this time, referencing all of the additional information which will be considered by the Coastal Commission on July 8 prior to your formal approval of the DPP.

On July 2, 1986, the Minerals Management Service transmitted a letter from Thomas Dunaway to Peter Douglas. The letter stated that:

> "MMS has received additional information from Chevron, summarized in letters dated June 26, and June 30, 1986 (copies enclosed). We are providing this information for your use in the consistency review of the Platform Gail project."

In a letter dated June 25, 1986, Mr. Dunaway also recognized the provision of information by Chevron to the Coastal Commission for "the express purpose of its consistency review."

Having been recognized and provided for the Commission's consistency review, the commitments became part of the proposal before the Commission. The Commission observes that it has, in the past, concurred with consistency certifications on the basis that revisions to a DPP agreed to after its submission to the Commission enabled it to find consistency with the state management program. Thus, the DPP before the

Commission has not been limited to that originally submitted, enabling the Commission to work with applicants to make necessary modifications during the review period.

The Commission was aware of Chevron's right to appeal its objection to the Secretary of Commerce. In view of the correspondence discussed above, and consistent with the previous handling of DPPs, the Commission understood the mitigation measures agreed to by Chevron in advance of the hearing to have been incoporated into the originally submitted DPP. Thus, on appeal, the DPP before the Secretary would include the commitments identified in Chevron's correspondence, addressed in MMS' letters of June 26 and July 2, 1986, and verbal statements made by Chevron at the hearing.

The incorporation by the DPP of Chevron's commitments also affects any subsequent consideration of whether a new DPP would have to be submitted for the Commission's review should any changes to the DPP be made. Under the federal regulations, a new DPP must be submitted for renewals and major amendments of activities which will cause coastal zone effects substantially different than those originally reviewed by the state agency, or for activities which have not previously been reviewed by the state agency. (15 C.F.R. Section 930.51, as referenced in Section 930.71.) If commitments are deleted from the DPP as a result of federal review, and the deletion results in effects substantially different than those which would have resulted from the project as reviewed by the Commission, i.e., with Chevron's commitments, a new consistency certification would have to be submitted.

Although Chevron's commitments were substantial, they were not sufficient to enable the Commission to render a finding of concurrence. The Commission's objection reflects the incorporation of these mitigation measures into the DPP. However, had they not been so incorporated, their absence would have provided a further basis for objection.

Specifically, the Commission finds below that additional mitigation beyond that already agreed to by Chevron is necessary to meet the requirement that impacts of the proposal be mitigated to the maximum extent feasible and to meet the public welfare criterion of the Coastal Act. As additional mitigation remains necessary, it is clear that Chevron's previous commitments would also be necessary components to a finding of maximum feasible mitigation and for the public welfare finding. The Commission has concluded that the commitments have already been incorporated into the DPP. However, in case of any challenge to this position, the Commission specifically includes in the basis for its objection any failure of the DPP to include the agreed upon measures. Thus, if not considered to be part of the DPP, these measures would, in any appeal, have to be considered as alternatives identified by the Commission to make the proposal consistent with the coastal management plan.

Chevron's previous agreement to these measures indicates that the project could go forward successfully, in a reasonable period of time, as so mitigated. The definition applied in the consideration of whether

a project's impacts have been mitigated to the maximum extent feasible is whether the project is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Section 30108). While the Commission was unable to find certain impacts of the project to have been mitigated to the maximum extent feasible by Chevron's commitments, it was able to determine that the measures committed to by Chevron were feasible.

Having concluded that these measures are feasible, the Commission finds that they would have to be included for the project to meet the requirement that impacts be mitigated to the maximum extent feasible. Thus, the Commission finds, in addition to the reasons specified below, that if these measures are not included in the DPP, it cannot find the project's impacts mitigated to the maximum extent feasible.

Also, because of the significant impacts which would remain if these measures are not applied, and because feasible mitigation measures would exist to further mitigate impacts, the absence of these measures would constitute a further basis for the finding that the public welfare criterion has not been met. The findings below identify the significant impacts which would result were the project to go forward without the mitigation measures committed to by the applicant. Additionally, the public welfare section below contains the Commission's finding that its failure to approve the project would not adversely affect the public welfare.

B. Commission Review of Development Plans

A Development and Production Plan (DPP), which is prepared by an applicant for a federal permit must, by law, include an Environmental Report describing potential environmental impacts and a technical development 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). All DPPs must be approved by the Minerals Management Service of the Department of Interior pursuant to OCSLA. The application to MMS must include a consistency certification for review by the Commission.

The Commission has the authority to review DPPs for consistency with the California Coastal Act pursuant to the federal government's approval of 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. Otherwise, the Commission is deemed to have concurred.

Chevron U.S.A. Inc. (Chevron) has applied for the federal licenses and permits listed below. Chevron certifies that the proposed activities described in the Development and Production Plan for Platform Gail are consistent with the CCMP. The Commission has reviewed the materials submitted by Chevron to determine the project's consistency with California's Coastal Management Program for the federal permits and licenses listed below.

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

The Minerals Management Service (MMS) has prepared an Environmental Assessment (EA) for Development. An Assessment for exploration on this parcel was issued in 1981. The updated EA was released June 19, 1986.

MMS prepared several environmental statements and reports in 1975, 1979, 1981, and 1982, to cover the entire OCS between the state waters of the Channel Islands and state waters along the mainland. State waters extend seaward three nautical miles from every shore. These environmental documents were intended to meet the requirements of NEPA in evaluating the environmental impacts associated with oil development generally. There is no EIS or ER specific to oil development of Platforms Grace or Gail.

This consistency process began when the MMS determined that the development plan for Platform Gail was complete and forwarded it to the Commission on January 30, 1986 thereby starting the six-month schedule for consistency review. The Commission had 90 days to take action on the proposal (up until April 30, 1986) unless it notified MMS of the reasons why a longer period of review was required. The Commission staff notified MMS on March 31, 1986, that additional information was necessary to evaluate the project, and that Commission action could not take place within the three month time period.

The six-month period for the Commission's review of the Chevron's consistency certification concludes on July 29, 1986. The Commission acted at the meeting of July 8-11 and reached a decision regarding consistency.

C. Overview of Findings

The Commission reviews each DPP pursuant to the provisions of the California Coastal Management Program. These provisions include the

policies set forth in Chapter 3 of the Coastal Act to address oil spills, effects on marine resources and commercial fishing, protection of significant species, biological productivity of coastal waters, vessel traffic safety, geologic hazards, air quality impacts, and visual, scenic and recreation resources. In addition, Chapter 3 includes Section 30260, which provides in part that:

> "Where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible."

Section 30262(b) in turn provides that oil and gas development shall be permitted in accordance with Section 30260 only if consolidated to the maximum extent feasible, and if other specific criteria are met.

Because its language is permissive, the Commission must determine, in light of a project's inconsistency with Coastal Act policies, whether to invoke its authority to permit a project under the "override" provisions of Section 30260. Where it decides to do so, it must make affirmative findings with respect to the three criteria contained in that section in order to approve oil and gas development. In addition, by virtue of the reference in Section 30260 to Section 30262, all oil and gas development, whether or not determined to be coastal dependent, must comply with the three conditions set forth in Section 30260, even if consistent with the other policies of the Coastal Act.

In determining the applicability of the override conditions of Section 30262, the Commission applies the definition set forth in Section 30101 of the Coastal Act. That section defines a "coastal-dependent development or use" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all." Section 30001.2 specifies that coastal-dependent developments include ports, commercial fishing facilities, offshore oil and gas development, and liquefied natural gas development. In Section 30001.3, the Act distinguishes "coastal-related development" as "any use that is dependent on coastal-dependent development or use." Under these definitions, only those aspects of oil and gas development which cannot function unless located in or near the ocean may be permitted pursuant to the "override" provisions of Section 30260. Associated facilities which need not be located on or near the water to function are not coastal-dependent and must be consistent with all of the policies of the Act. In addition, these facilities must comply with the conditions of Section 30260, quoted above.

Under regulations implementing the CZMA, the Commission must object to a consistency certification if it finds it to be inconsistent with its approved coastal management plan. A second basis for objection is the applicant's failure to provide data determined to be necessary for the Commission's review that is requested in writing. If the state agency objects on the grounds of inconsistency, it must identify

alternative measures (if any exist) which would permit the project to be conducted in a manner consistent with the management program. If an objection is based on lack of information it must describe the information requested and the necessity of having such information to determine consistency.

The Commission finds that the information provided is not sufficient to support a determination that the project as modified and proposed is mitigated to the maximum extent feasible or in the least environmentally damaging location, or that to object would be adverse to the public welfare. The Commission finds the proposal inconsistent with Coastal Act Section 30260 with regard to: marine resources, commercial fishing, crude oil transportation, oil spill risks and response, vessel traffic safety, air quality, visual and recreation resources, and public welfare.

D. Project Description and History

Lease OCS P-0205 and the 6 additional leases (P-0204, 0209, 0210, 0215, 0216, 0217) composing the Santa Clara Unit were part of OCS Lease Sale P4 (1968). Chevron obtained lease P-0205 in April of 1968. Exxon has a 50 percent interest only in the south half of the lease and has no ownership interest in Platform Gail. The area to be developed is called the Sockeye Field.

Chevron proposes to install a 36-slot drilling and production platform to be named Gail on Lease OCS P0205 in 739 feet of water. The platform would be located 9 nautical miles west/southwest of Port Hueneme and approximately 6.5 nautical miles from the east end of Anacapa Island. The Channel Islands National Park and Marine Sanctuary Boundary abuts the southern lease boundary. The proposed platform would be located approximately 0.67 nautical miles from the approved relocated Vessel Traffic Separation Scheme (VTSS) leading from the Santa Barbara Channel. The modification of lanes has received approval by the Coast Guard and the International Maritime Organization (IMO) and was implemented on February 1, 1985.

Three federal platforms are operating in the project area. The closest federal OCS developments to Platform Gail are Platform Gilda (Union) located approximately 3.6 nautical miles to the north and Platform Grace (Chevron), approximately 4.7 nautical miles to the northwest. Platform Gina is located 6 nautical miles easterly of proposed Platform Gail. The nearest platform in state waters is Heidi, which is located 14.2 nautical miles north/northwest of Gail.

Platform Gail is proposed as a conventional eight-leg steel jacket structure supported on the seafloor by pilings driven through the legs of the jacket and then welded and grouted on the jacket. There would also be 12 skirt piles which would be grouted to the skirt pile sleeves. The jacket would support a three-level deck including well conductors. The proposed platform would contain drilling/production and utility facilities, crew quarters, a heliport, and provisions for docking of crew and supply boats. The deck structure would provide space and load carrying capacity for one drilling rig.

Fabrication on the principal components of the platform is nearly

complete. Chevron issued contracts and ordered fabrication prior to receiving all the necessary permits, thereby making engineering and locational decisions on speculation that permits and consistency would be obtained.

Electrical power would be generated by three turbine generators, one of which would be a standby unit. Gas would be the primary fuel for the turbines with diesel as an alternate fuel. Gas would be sent from Platform Grace to fuel the turbines until Platform Gail produces sufficient gas on its own. Although not required by Department of Interior regulations, Chevron would use demineralized water injection on Platform Gail to reduce NO_x air emissions from the combustion gas turbines by 70% (MMS, ARB, Ventura County APCD and Chevron).

Two 1200 gallon per hour capacity desalination units (one standby) would produce fresh water from sea water for the potable and demineralized water systems. Fresh water would be brought from onshore during construction and drilling.

Products from Platform Gail

The first oil production is planned for mid 1987. Oil production from Platform Gail is projected to peak in 1990 at 13,300 barrels of oil per day (compared to a range of 40,000 bbl/day at Cities Services and 10,500 bbl/day at Platform Eureka). Gas production is projected to peak in 1998 at 20.2 million standard cubic feet per day (mscf/d) (compared to a range of 45 mscf/d at Platform Shamrock and 0 at Cities Services). Separation of gas, oil, and free water would occur at the platform utilizing three-phase separators and electrostatic coalescers. All discharges must comply with permit requirements set by the Environmental Protection Agency's National Pollutant Discharge and Elimination System (NPDES). Permits issued under the system are also subject to the Coastal Commission consistency requirements.

Dehydrated oil and natural gas would be transported by separate new subsea pipelines to Platform Grace. In addition, there would also be a spare pipeline. Any H_2S in the produced gas would be removed on Grace with the existing Stretford unit. (The Stretford process allows natural gas to be "sweetened" by removing hydrogen sulfide (H_2S) to elemental sulfur.) The oil and processed gas would then be commingled with Grace production and sent through existing pipelines to shore via Platform Hope.

Platform Gail would produce crude oil and gas. Both would be transported via pipeline to processing facilities at Carpinteria. The crude oil would not require any additional processing at Carpinteria prior to transport to El Segundo. The existing facilities at Carpinteria would be used for the final processing of the produced gas. The existing plant processes gas from several fields in state and federal waters.

Gas production from both state leases is sweet (low sulphur content) and Platform Grace currently removes H_2S prior to shipping its gas ashore. At the gas plant, wet gas is compressed, commingled, dehydrated

and cooled to remove hydrocarbon liquids in a low temperature separator (LTS) plant. The dry gas leaving the LTS plant is used for plant fuel or sold to Southern California Gas (SCG). Recovered liquids are fractionated into propane, mixed butanes, and natural gasoline. The natural gasoline is blended and sold with the crude oil. Propane is sold to Van Gas Distributors and butane to Chevron Liquids and Gas group for distribution.

Platform Gail's production forecasts and economics are based on developing the sweet gas reserves first. A moderate amount of sour gas reserves can be produced on Platform Gail and sweetened on Platform Grace with the Stretford process. The unit is designed to produce up to 3.2 tons of sulfur per day by removing H_2S from the produced gas.

Onshore Gas Treatment

The current throughput of the Carpinteria plant is 5 to 10 million standard cubic feet per day (mscf/d) from Platforms Heidi, Hope, Hilda, Hazel, and Grace. With the Platform Gail peak gas production, the facility's throughput would be 20 - 23 mscf/d. The facility's gross design capacity is 25 mscf/d and the permitted (by the Santa Barbara County APCD and the City of Carpinteria) maximum net design capacity is 23 mscf/d. Based on Chevron's figures, the plant would be at or within permitted capacity with Gail's peak gas production of 20.2 mscf/d in 1998, assuming the phasing out of some existing throughput.

Fresh Water Demand

Potable water needs during the platform and offshore pipeline construction phases would be provided primarily by desalination units onboard the work barges. Bottled water may also be purchased from a local distributor.

Pipelines would be hydrostatically tested with seawater. Therefore, no demands would be placed on municipal water systems for this purpose.

During the platform drilling phase, water requirements for drilling activities would be partly supplied by seawater, onshore outside sources, and with potable water obtained from desalination units on the platform. The outside source is Port Hueneme via the City of Port Hueneme. The platform desalination system would only supply the drinking water. The City of Port Hueneme and the United Water Conservation District would provide water varying from 8,400 - 21,000 gallons/day for the drilling activities.

E. Coastal Act Issues

1. Marine and Coastal Resources

Coastal Act Sections 30230 and 30231 are applicable to oil and gas

development along the California coast. They provide for the protection of marine and coastal waters as follows:

> Section 30230. Marine resources shall be maintained, enhanced, and where possible 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, recreational, scientific, and educational purposes.
>
> Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Background

The proposed location for Platform Gail is approximately 6.5 nautical miles north of Anacapa Island (part of the Channel Islands National Park) at the eastern end of the Channel Islands Marine Sanctuary and approximately 9 nautical miles west/southwest of Port Hueneme. The water depth at the planned site is about 740 feet. The proposed pipeline would connect with Platform Grace approximately 4.7 nautical miles to the northwest.

Areas and species of special biological significance within range of contact by an oil spill

The proposed platform is in close proximity to a number of important areas of special biological significance. The 70 hour trajectory simulation predicts that spilled oil is most likely to come ashore July through November on the mainland between Point Mugu and Carpinteria in 45 to 65 hours. The areas of special biological significance along this region of the coast include three large estuarine wetlands (El Estero/Carpinteria Slough, Santa Clara River Estuary, and Mugu Lagoon), a small marsh at the Ventura River mouth, Carpinteria Intertidal Reef, least tern nesting sites at the Santa Clara River mouth, Mugu Point, Ormond Beach, and grunion spawning and pismo clam sites along the numerous sandy beaches of this part of the coast.

Because of the likelihood that oil will become trapped in the sediment and vegetation, marshes are the most likely habitat to be significantly impacted if oil reaches them. Protection of the productivity and quality of these remaining coastal marshes is

imperative after the loss of so many of California's coastal wetlands. Of particular concern is the endangered light footed clapper rail, which feeds on invertebrates in the channels and on the mudflats of estuarine marshes, and nests in marsh vegetation. Species abundance has plummeted since the early 1900's, in response to loss of habitat. Carpinteria Marsh supported 18 breeding pairs in 1983, while one pair was sighted at Mugu Lagoon in the same year.

Light footed clapper rails, like other species feeding on the mudflat surface, could ingest oil when feeding, with possible toxic effects. In addition, small amounts of fresh oil transferred from feet or feathers to eggs can be highly lethal, and species nesting in an area of platform development could be subject to this form of mortality. Of most concern are the endangered species which nest close enough to the project to be in danger of contact with an oil spill. Besides the light footed clapper rail, the endangered brown pelican and endangered least tern are also at risk from this source of mortality.

Many coastal bird species are especially subject to oil spill contact through diving for food or resting on the water surface. Oiling of feathers can result in loss of the insulating effect of plumage, loss of feather buoyancy, loss of flight, and ingestion of oil when the bird preens. Oil can also enter the body through the skin, causing toxic effects. Both least terns and pelicans forage by aerial plunging, and pelicans rest on the water surface. Large numbers of adult pelicans forage in the Santa Barbara Channel during late summer and fall; approximately 25% of the subspecies population pass through the area at this time. Because they plunge dive they are thought to be less susceptible to oiling than diving seabirds. However, studies in natural slicks off Santa Barbara have found them to be among the most likely seabirds to be oiled, with a larger proportion of juveniles contacting oil than adults. Other local species of birds which dive from a floating position on the sea surface, such as grebes, cormorants and loons, have suffered particularly high mortality rates from oil spills in the past, and would be expected to experience high mortality in any future oil spill.

Other resources of concern are rocky intertidal areas, such as the Carpinteria reef, pismo clam beds, and grunion spawning beaches. Tanker spills have killed large numbers of both intertidal and near-shore subtidal invertebrates through both smothering and toxicity. Beach fauna is also subject to damage by cleanup procedures. Grunion eggs would be particularly susceptible to crushing and burial during beach cleanup, as well as mortality from oiling.

Two of the Channel Islands (part of Channel Islands National Park) are the closest points of land to the proposed platform, with Anacapa approximately 6.5 and Santa Cruz approximately 7.8 nautical miles distant. The National Marine Sanctuary includes the shelf areas extending to 6 nautical miles from Anacapa, Santa Cruz, Santa Rosa, San Miguel and Santa Barbara islands. Therefore the proposed

platform is approximately one-half nautical mile beyond this boundary. While 75 hour trajectories only show oil contacting Santa Cruz Island during December through February with Santa Ana winds, there appear to be trajectories which will contact the islands in somewhat more than 70 hours. There are also trajectories which form spirals which could expand at a greater rate, and contact the islands, given slightly different conditions. Simulation models are not always accurate in a real time situation. Wind and sea conditions can change rapidly especially in the late fall and winter. Therefore, the Commission disagrees with the following statements:

> ..."The probability of oil contact at any of the pelican breeding locations during the nesting season is zero, so no effects would be expected." (Environmental Report, page 4-68)
>
> "The trajectory analysis does not show a spill contacting the Channel Islands, therefore, the cumulative risk of impact to these sensitive resource areas does not increase above existing levels." (ER, page 4-85)

Given these uncertainties, more concern for the resources of the marine sanctuary is warranted than is expressed in the Environmental Report for this platform. The islands and waters comprising the national park and marine sanctuary contain large breeding colonies of marine mammals and seabirds, as well as valuable intertidal and subtidal habitats.

Of particular importance in relationship to proposed Platform Gail are the brown pelican nesting sites at Anacapa Island and Scorpion Rock off Santa Cruz Island, two of only three such sites in California. Anacapa has the only stable breeding colony of the California brown pelican in the United States, with pelicans coming back to nest year after year. Adults from this colony feed in the areas near proposed Platform Gail and its pipeline, and they are likely, in the event of an oil spill, to become oiled and bring oil back to the nest, or suffer mortality themselves. Depending on the amount of oiling, oiled birds could find swimming or flying difficult, and could experience thermal stress with its attendant increased metabolic demand and food requirements. Birds in this situation usually die from starvation, exhaustion or drowning.

Reproductive potential of California brown pelicans is low, since typically only one clutch of 3 eggs is laid per year, and fledging rates in Southern California are lower than elsewhere. Oiling of the nest and eggs could therefore have a significant impact on numbers fledged. Newly fledged young spend their first days foraging for themselves in the near-shore waters on the north side of West Anacapa Island near the breeding colony. In recognition of the importance of this area, a brown pelican protection zone has been established. An oil spill reaching this area during breeding season could have regionally significant effects. Juveniles are particularly susceptible to oiling, since they spend more time on the water, and do not appear to actively

avoid oil at natural seeps. In addition, pelicans are almost entirely dependent on northern anchovy during this time, and any oil spill affecting localized abundances of anchovy could potentially affect juvenile pelicans.

The USFWS, in their Section 7 consultation with MMS, states that "the greatest project-related impact to all listed species is oil spills," and does not concur with Chevron's analysis of oil spill impacts to California brown pelicans. They state that:

> "with the present high level of mortality associated with nesting birds at Anacapa Island and the recent nesting failure of the Los Coronados Islands colony in Mexico, recruitment has been very low. These nesting mortalities are in addition to that caused by other natural or man-induced conditions. With these existing impacts, any new measurable mortality is significant."

It is their opinion, however, that:

> "implementation of the subject project as proposed is not likely to jeopardize the continued existence of the California brown pelican, California least tern, light-footed clapper rail, American peregrine falcon or salt marsh bird's beak."

While oil spill containment is one method of keeping pelican mortality to a minimum, it is very likely that oil will still contact pelicans in the event of an oil spill, even under the best conditions for containment. Oiled pelicans have been successfully cleaned after contact and released, however, bird cleaning facilities in the Santa Barbara Channel area are not adequate. Experience in northern California with recent spills has shown that existing facilities can quickly become overloaded, and clean-up is hard to coordinate.

The provision of local improved bird and wildlife rehabilitation facilities complete with sufficient supplies, personnel, facilities, and complete readiness is an important and needed mitigation measure for oil and gas development in the Santa Barbara Channel. Chevron committed to provide seed money of $50,000 for improvements in existing rehabilitation facilities or to help set up a new facility. Within 30 days of the determination of consistency, Chevron would deposit the funds in an interest bearing account. The Executive Director would consult with the Department of Fish and Game, the U.S. Fish and Wildlife Service, and the Marine Sanctuary Program regarding actual expenditure of funds.

These funds would provide needed new facilities and supplies for bird and wildlife clean-up in the event of an oil spill. Actual costs of previously funded bird clean-up facilities and estimates for new facilities to serve the Santa Barbara Channel show that $50,000 may be a reasonable figure and could provide useful

mitigation, with existing facilities and contributions from other companies for future facilities. This contribution would significantly enhance effective bird clean-up programs.

Impact of construction on marine biology

The construction of the platform and pipelines would disturb the soft bottom infaunal community at the site. The most abundant inhabitants of the substrate, based on the very limited information (three consecutive days of sampling) provided by the Site Specific Biological Survey prepared by Chevron, are sea urchins, polychaetes, bivalves, and amphipods. These are probably the major food items for many of the bottom-living (demersal) fish, shrimp and crabs. Trawl samples from the Biological Survey, as well as fishing information, indicate that the site is a productive area for demersal species. English sole, petrale sole and spot prawns have traditionally been the commercial trawl catch in this area. In addition Pacific sanddab, dover sole, slender sole, stripetail rockfish, urchins and pink shrimp were among the most commonly caught fauna in the Biological Survey trawls. The abundance of spot prawns has been low since the early 1980's, but the regional fishery is beginning to recover. It is likely that the area will again become a productive shrimp ground within the life of this project if the infauna remain at high levels of abundance.

The loss of small areas of this soft-bottom habitat through disturbance should not seriously affect the biological productivity of the area, since this is a common habitat type of the regional coastal shelf at this depth. However, burial or contamination of a wider area of surface sediment by any toxic substances from the platform or pipeline may affect the productivity of the local biological community, especially bottom feeders such as sole and shrimp (see Commercial Fishing Section of this report).

The main migration route of gray whales in the Santa Barbara Channel region is close inshore going northward, and split between inshore and just outside the Channel Islands going southward. Although these primary routes are not in the immediate project area, gray whales were sighted in mid-March 1985 during the Biological Survey. Platform construction, and possibly pipeline installation, is planned for times coinciding with the gray whale migration. Care should be taken to be sure disturbance to any whales migrating past the installation area is minimized. Chevron has instructed support helicopters and boats to stay at least 2 km away, since this is the distance at which mild reactions such as decreases in swimming speed, change in direction and change in respiratory behavior were noted in a 1984 MMS study on migrating gray whales off the California coast.

Conclusions

Section 30230 of the Coastal Act requires that special

protection be given to areas and species of special biological significance. The endangered California brown pelican is clearly such a species, and must be afforded all reasonable protection. The eastern end of the Channel Islands are within 6.5 nautical miles of the proposed platform. These islands are of special biological significance not only for their pelican nesting sites, but also for their intertidal and subtidal habitats and breeding colonies of marine mammals and other species of seabirds. Mainland shore areas, including marshes, beaches with pismo clams and grunion spawning, endangered least tern nesting sites, and endangered light-footed clapper rail nesting sites, are all within reach of oil spills.

Sections 30230 and 30231 of the Coastal Act provide that marine resources and biological productivity shall be maintained, enhanced, and where feasible, restored. Construction activities, as well as oil spills, may impact a productive area for demersal species of fish, shrimp and crabs at the platform site, as well as marine resources at the Channel Islands and the mainland.

The Commission notes that leasing occurred prior to the existence of the Commission (1968) and that it would have serious concerns with leasing in this area if it were to be proposed today. Although an exploratory operation was approved by the Commission in 1983, the Commission finds that development and operations pose much more significant, long-standing risks and impacts to this extremely sensitive area.

The Commission finds that Chevron's proposed construction and operation of the platform and pipeline would have an adverse effect upon marine and coastal resources because of the discharge of drilling wastes, disturbance of the water column, disturbance to the benthic communities and the potential risks of oil spills. The area surrounding Anacapa Island is unique and the endangered California brown pelicans could be severely threatened in the event of an oil spill during the breeding or fledging seasons. The proposed project would impact the marine resources of the Channel Islands Marine Sanctuary and National Park.

Because of the possibility of significant impact to marine resources and coastal productivity from the proposed project, the Commission cannot find the project to be consistent with marine resource protection policies of the CCMP (Coastal Act Sections 30230, and 30231). However, the Commission may, in its discretion, nevertheless permit the project to go forward if it finds it consistent with the override criteria of Section 30260.

The first test of Section 30260 is alternative locations that are less environmentally damaging. The Commission's analysis of the project under Section 30260(1) finds that there may be alternative locations that are less environmentally damaging. As a specific alternative, the Commission advises Chevron that it could present for the Commission's consideration additional information regarding

the feasibility of other alternative locations in a subsequent consistency certification resubmission.

Under Section 30260(3), in order to concur with a consistency certification, the Commission must find that the project's impacts are mitigated to the maximum extent feasible. The Commission finds that Chevron has not proposed adequate mitigation to protect these sensitive marine and coastal resources.

The USFWS Section 7 determination on the endangered California brown pelican found that the project may significantly impact the population, but that a "jeopardy determination" under the Endangered Species Act is not warranted at this time. Because of the significance of any new pelican mortality, the Commission finds that additional feasible mitigation measures beyond those identified by the USFWS are necessary in order for the project to be mitigated to the maximum extent feasible. Chevron has agreed to provide seed money of $50,000 for wildlife rehabilitation facilities, as well as additional oil spill drills aimed specifically at protecting pelicans from oiling. However, even with the addition of these mitigation measures, the Commission finds that the project is inconsistent with Section 30260(3) of the CCMP.

The Commission has weighed the extent of the contribution of the project to the national interest by increasing oil and gas production and the extent to which impacts have been mitigated. The Commission finds a significant potential loss in preservation of coastal zone resources and the national interest, if the project were to receive concurrence. Therefore, the Commission finds the proposed project, as it would affect marine resources, inconsistent with the public welfare provisions of the California Coastal Act Section 30260(2). The public welfare issue is discussed more fully in finding 12.

2. Ocean Disposal of Oil Development Wastes

There are many water pollutants associated with oil production activities on the outer continental shelf. These pollutants are controlled primarily through the National Pollutant Discharge and Elimination System (NPDES) permit process administered by the Environmental Protection Agency. NPDES permits are subject to Commission consistency review. Since the Commission's objection to EPA's proposed new general permit, Chevron has applied for an individual permit from EPA. A consent for the NPDES permit has not been submitted to the Commission and the permit is not covered by this consistency action. The Commission is expecting to review the consistency of Chevron's permit with the CCMP in the near future. Policies pertinent to this aspect of Chevron's proposal address: effects on marine resources and commercial fishing; protection of significant species; and biological productivity of coastal waters.

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Prior Commission Action

The Environmental Protection Agency (EPA) submitted a consistency certification for two general permits governing waste discharges, including drilling muds, resulting from oil exploration (CC-38-85) and development (CC-39-85) drilling activities on the outer continental shelf of southern California, as described in detail in the Federal Register, Volume 50, No, 163, August 22, 1985. The EPA has certified that these activities will be conducted in a manner consistent with the CCMP.

The Commission objected to the proposed permits because: site-specific, sensitive marine resources were not sufficiently protected; there were inconsistencies with state standards of protection for ocean waters; monitoring and testing procedures were inadequate to assure control of toxic discharges; and better enforcement activities were necessary to assure compliance with permit requirement's. In 1983, the Commission concurred with a 6-month extension to the last general permit, and then it expired in 1983. Since then, EPA has been issuing individual permits for proposed discharges.

Chevron's Proposal

Chevron's DPP proposes to abide by the old, expired general NPDES rules with the addition of a commitment not to use chromium lignosulfonates. Since the issuance of the DPP and submittal of the consistency certification to the Commission, Chevron has applied to EPA for an individual permit noting that they cannot be covered by an expired or inconsistent general permit. Chevron has agreed to submit a consistency certification for the individual permit in the near future and has been advised that no development wastes may be discharged until the Commission has acted on the consistency certification for the permit. After submittal, the Commission has up to six months to reach a decision on consistency.

Proposed Discharges

Chevron proposes to drill 25 wells during the first development phase, then an additional 9 more wells would be drilled in the second phase. Both phases of drilling would span a total of approximately 6 years and require approximately 2 months of drilling per well. Platform Gail is proposed to have slots for a maximum of 36 wells. Separation of gas, oil and free water would occur on the platform utilizing three-phase separators and electrostatic coalescers for dehydration. A well cleanup separator would be used for the initial unloading of well production to remove mud, water and drilling fluid. Produced water resulting from the oil separation process on the platform would be treated to meet EPA

NPDES permit requirements and discharged to the ocean through a disposal caisson. Volumes of produced water could reach a daily maximum of 11,200 barrels per day.

Chevron proposes to discharge an average of 900 barrels of drilling muds, 2,852 barrels of drill cuttings and 600 barrels of completion fluids per well. This equates to 32,400 barrels of muds, 102,672 barrels of cuttings and 21,600 barrels of completion fluids for 36 wells.

Chevron proposes that all discharges be carried out in accordance with the expired NPDES general permit. The anticipated oil content of the discharge would be less than the average value of 72 parts per million (ppm) allowed by the expired Environmental Protection Agency (EPA) NPDES permits. The Commission adopted findings February 4, 1986 stating that an average value of 54 ppm was feasible mitigation. Mitigation measures will be evaluated by the Commission when it considers the individual NPDES permit consistency certification.

Effects on the Marine Environment from Drilling Muds Discharge

In past actions, the Commission has found that the scientific studies and information available on the fate and effects of drilling muds and cuttings have not addressed essential questions about the marine environment and the effects of drilling muds (Tagatz et al., 1978; Kaplow and Lewis, 1978, 1984 and 1979; Brannon and Rao, 1979; Dames and Moore, 1981; Cal. DFG, 1983; Petrazzuolo, 1983 and 1981; Duke and Parrish, 1984; and Jenkins and Sanders, 1984).

The evidence shows that drilling muds may cause adverse effects on the environment on a cumulative basis. The Commission is compelled to take a conservative approach to avoid impacts inconsistent with Coastal Act policies because land and water uses in the coastal zone will be degraded or destroyed if these effects occur.

Conclusions

The Commission has found that the standards contained in Coastal Act Sections 30230 and 30231 regarding marine resource protection and water quality, as applied to the discharge of drilling muds and cuttings cannot be satisfied by reliance on the current state of knowledge. In addition, discharges resulting from Chevron's Platform Gail may cause adverse impacts upon the marine environment individually and when considered on a cumulative basis with other development (30250(a)). The Commission finds that the commitment to use chrome-free lignosulfonates, by itself, is not maximum feasible mitigation nor will it protect the biological productivity of marine resources. If the Commission were to have this issue before it now, the Commission would find that the project is inconsistent with Coastal Act Sections 30250(a), 30230 and 30231. Because this project is a coastal-dependent development, it would also be

analyzed under the provisions of Coastal Act Section 30260. This Section states that the Commission may approve a project even if inconsistent with certain policies contained in the Coastal Act.

However, Chevron has yet to obtain a valid NPDES permit. They cannot be covered under the expired general NPDES permit, in part because EPA cannot issue them due to their expiration, and because the Commission's consistency certification is no longer in effect. Chevron has applied to EPA for an individual NPDES permit, and has committed to submit a separate consistency certification to the Commission at a later date.

The Commission finds it cannot act on consistency with respect to waste discharges at this time because an NPDES permit has not been issued by EPA, and the Commission is expecting to review it later. The Commission will examine drilling wastes and proposed mitigations in light of Coastal Act policies when Chevron provides its consistency certification to the Commission. If the Commission had to act on consistency with respect to waste discharges now, it would object to Chevron's proposal.

Cumulative Impacts

Chevron proposes to discharge 2958 barrels of combined drilling muds and cuttings per well and large quantities of produced water, completion fluids, etc. (See Exhibit 4). The Commission adopted findings on February 4, 1986 on the consistency certification proposed by EPA for its proposed general NPDES permits and found that one of the weaknesses of permits was the lack of information on cumulative impacts resulting from continuous discharges on the OCS. In the Commission's letter of March 31, 1986, to the MMS regarding Platform Gail, additional information was requested on the cumulative quantities and effects of discharged materials from existing, permitted and proposed offshore oil related development. MMS responded:

> "MMS does not believe that normal operations from Platform Gail will contribute a significant incremental addition to the cumulative impacts on water quality." (Letter of April 15, 1986, page 21)

MMS did not quantify the discharged materials as requested, but stated that:

> "The amounts (volumes) of discharges into the OCS are not necessarily the determining factor in this cumulative analysis. The key consideration is whether or not these discharges combine to significantly affect the water quality and the biota on a regional basis." (id., page 22)

MMS notes that:

> "...subtle long-term effects are still being assessed. Unfortunately, the natural variability inherent in natural systems makes this a painstaking process with much more research needed in the future." (id., page 22)

If the NPDES permit were before it, because of the lack of the requested information, the Commission finds that marine resources may not be maintained, enhanced or restored in a manner that will sustain the biological productivity of coastal waters (Section 30230), as a result of the proposed project and when considered in combination with other development discharging wastes in the Santa Barbara Channel (Section 30250). Also, the Commission finds that it cannot determine whether cumulative effects are mitigated to the maximum extent feasible because of the lack of information. The Commission finds it not necessary to act on consistency at this meeting. When the Commission considers the NPDES general permits, and/or an individual permit for this proposed project, it will evaluate cumulative effects and determine whether the project will protect marine resources in accordance with Coastal Act Sections 30230, 30250 and 30260. If the Commission had to act on consistency with respect to the cumulative effects of waste discharges at this Commission meeting, for the reasons stated above, it would find the project inconsistent with Coastal Act resources policies and object to Chevron's proposal. Chevron has agreed to submit a separate consistency certification for this issue area, therefore the Commission will take up this matter at a later date.

3. Commercial Fishing

Applicability of CCMP Policies

The CCMP policies which protect commercial fisheries and associated commercial fishing industries are contained in Sections 30230, 30231, 30234, 30255, and 30703. In Sections 30001(d) and 30001.5, the CCMP also reflects the Legislature's intent that consideration be given to social and economic impacts of proposed development. In addition, Section 30260 requires the Commission to consider the public welfare when making decisions on coastal dependent industrial development. Applicability of these sections is summarized in previous Commission actions including CC-16-85, Cities Service Oil and Gas Corporation, CC-36-85, Union, and CC-7-85, Exxon. Findings from these decisions are hereby incorporated by reference.

The effects of this project upon the state's commercial fishing industry would affect associated land and water uses of the coastal zone. The economic and employment contributions the commercial fishing industry makes to California's economy are described in detail in "An Interindustry Analysis of California Fisheries," King and Shellhammer, (1982) and "The Economic Structure of California's Commercial Fisheries," King and Flagg (1985), both prepared for Sea Grant. The 1982 report concludes that portions of the fishing industry are major contributors to statewide sales, household income, and employment when compared to other non-fisheries economic sectors. Thus, a decline in the level of fishing or the value of landings can cause a corresponding decline in sales by local ship chandleries, boatyards, fuel docks, etc.

The report, "Commercial Fishing Facilities in California" (August 1984), by the California Coastal Conservancy asserts that businesses that cater to commercial fishermen did not survive the combined effects of the recent recession and slump of the commercial fishing industry. The report also claims that many fishing related jobs, and thus businesses, are threatened by the decline in commercial fishing and that a portion of this decline can be attributed to increased oil and gas operations. Consequently, businesses such as marine supply and hardware stores are no longer available or are inadequate in many harbors.

In turn, the lack of onshore fishing related businesses and competition for space can affect the fishermen's abilities to sell their product and service their boats and businesses. The need for dock space and other areas within harbors and ports for equipment, gear repair, processing facilities, and other dockside support businesses is pronounced in harbors where multiple uses such as cargo handling, oil and gas development related businesses, and tourist facilities compete with the fishing industry for limited land space. As an example, the Conservancy report cites the fishermen's co-op in San Pedro Harbor, where up to 100 boats are tied up and the fishermen have only a crowded dock for repairing their nets. Consideration of these competing uses falls directly within the Commission's jurisdiction. The Commission's responsibility under the Coastal Act and the CZMA is to ensure that coastal-dependent industries have priority over other development (Sections 30230, 30001.5 and 30255). Section 30230 requires that uses of the marine environment be carried out in a manner protecting organisms for commercial and other purposes. Setion 30234 requires the protection of facilities serving the commercial and recreational fishing industry. The Commission is also required to resolve conflicts between the impacts and benefits of the proposed developments in favor of coastal resources (Section 30007.5).

Fish and invertebrate resources and commercial fishing operations are affected not only by the presence of oil and gas related facilities, but also by oil spills. According to the EIS for Lease Sale 73, economic losses to the fishing industry can occur by: (1) tainting marine organisms by direct coating or ingestions 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. The "California Commercial/Sport Fish and Shellfish Oil Toxicity Study," by MBC Applied Environmental Sciences and Science Applications, Inc. for MMS (1983), supports the first two points. The study concludes "[T]he present experiments have demonstrated adverse sublethal effects that may limit the reproductive success of exposed individuals and populations." The researchers suggested that the effects be studied further.

Commercially Caught Species As a Marine Resource

The policies of Coastal Act Sections 30230 and 30231 afford

stringent protection for marine resources including fish and invertebrates collected commercially. These sections are quoted in the marine resources section of this report.

The Platform Gail project would conflict with the marine resource policies in that it would disturb productive soft-bottom fish and invertebrate habitat as a result of the installation of the platform and pipelines and the discharge of drilling muds, cuttings and waste water. The installation of the pipeline and platform would destroy or displace the fish and the bottom organisms (food supply for many of the commercial fish) that are located within or near the construction zone.

The disposal of drilling muds and cuttings and waste water discharges (to be considered by the Commission under a separate consistency certification) must meet EPA NPDES standards. The effects of these discharges on marine resources and the effectiveness of the EPA standards is a controversy being discussed by well respected scientists.

Although it is presently unclear how much impact the installation of the pipeline and platform or the disposal of drill muds, cuttings, and wastewater would have on the species of marine resources adequate for long-term commercial purposes, it is clear that there will be significant localized impact and that the project is inconsistent with the marine resource policies of the Coastal Act (Sections 30230 and 30231). As well, the residual unmitigated impacts from pipeline and platform construction and drill muds and wastewater disposal contribute to the cumulative impact to marine resources (including commercially important species) from existing and future platforms. (For further discussion see the marine resources section of this report.)

Platform Gail would be located in DFG fish block 684 and the pipeline to Platform Grace would be located in blocks 684 and 665. According to the summary of DFG fish landings in the Chevron Platform Gail Environmental Report, the principal fisheries in the two fish blocks are mackeral, anchovies, bonito, sole, rockfish, halibut, shark, lobster, shrimp, and sea urchins. This information is from port landings data for 1977 and 1981.

The Department of Fish and Game (DFG) comments on the Platform Gail project state that the principal fisheries in the vicinity of proposed Platform Gail and the pipelines are purse seine (anchovies) and trawl (English and petrale sole). DFG also notes that gill net fishing for shark may occur in the area. Construction activities would preclude these fishing activities from the immediate project site. DFG comments state that under certain weather and current conditions, fishing can be precluded as far as two (trawl and gill net) to four (purse seine) miles from the platform site. Pipeline laying operations can have short-term effects on all three fisheries. Long term effects on the trawl fleet can also occur if existing trawl routes are degraded or lost as a result of anchor

scars and/or pipeline projections. To reduce or eliminate the long-term effects, DFG suggests that a detailed post-construction survey be done to locate and remove the artifical obstructions.

Maps prepared for MMS by Centaur Associates (June 1984) show that trawling for petrale and English sole, spot prawns, and ridgeback shrimp occurs in the vicinity of the platform and pipeline.

General notification procedures to the fishermen have been summarized in the above-referenced Commission decisions. Chevron's proposal was noticed in the March through June issues of the Oil and Gas Project Newsletter for Fishermen and Offshore Operators. Chevron also notified the Liaison Office in Santa Barbara. The Liaison Office serves both industries by facilitating communication and being a clearinghouse for oil/fisheries information.

The trawlers have expressed serious concern about this project. Chevron and staff were apprised of the fishermen's concerns through a letter from the Liaison office (3/17/86) and a petition from the trawlers (3/28/86). The fishermen expressed reservations regarding the proposed routing of the pipelines, possible snags associated with the lines, dropped equipment and materials, and location of mooring buoys during operation and construction. The trawlers suggested that the pipeline be laid in shallower water depths to avoid the fishing grounds. Signatures representing fourteen local trawl vessels, a seafood buyer, and a seafood processor appear on the petition. A total of sixteen trawl vessels are currently operating from Santa Barbara, Ventura, Oxnard harbors, and Port Hueneme, according to the EIS for the Point Pedernales area development. Therefore, the trawlers concerned with this proposal represent nearly the entire fleet that trawls in the Santa Barbara Channel.

Staff met with Chevron, MMS, and the trawlers on April 4 and 15, 1986 in an attempt to resolve the concerns raised. The possibility of rerouting the pipelines was discussed and ten alternatives were evaluated before concluding that the present route is the safest from an engineering and geologic hazard standpoint. Changing the route would require crossing less stable ground and thus could jeopardize the structural safety of the pipelines.

At the April 15, 1986 meeting, the trawlers agreed that the area is prime for English sole, petrale sole, and rockfish. The area is also trawled for spot prawns and ridgeback shrimp. Currently, it appears that the spot prawn fishery is in a lull and that the area in question has not been fished for prawns in the last four years. The area is consistently trawled for the sole, rockfish, and shrimp.

The fishermen at the meeting also specified the impacts they anticipated from the proposed project. They feel that the pipeline would obstruct their trawl activity, and alter the seafloor environment thereby adversely affecting the fish resource. They believed that the presence of the platform, (exclusive of problems

with debris and other obstructions) should be viewed as an obstruction that will preclude them from an area they have historically fished.

In addition to receiving comments from the trawl fleet, the Commission received comments regarding the project's impact on gill net operations. Tony West, Vice-President of the California Gillnetters Association, verified that a drift gill net fishery for shark exists in the area, but that it is only marginally significant to the fleet. Mr. West claims that the entire project is located in a marginal gillnet area, and concluded the project would have a minimal impact on their operations.

Construction and operation of the platform would impact fishing activities by blocking access to traditional fishing grounds, and by potentially causing snags which can damage or destroy trawl gear. Installation of the pipelines would also displace these two fisheries during the construction period. Some existing pipelines have precluded trawling or reduced the level of catch. Preclusion of trawling or loss in catch is anticipated in the Gail situation.

Chevron's mitigation measures attempt to reduce these impacts on the fleet. Chevron has committed to the following actions and mitigation measures:

1) Use of the support vessel corridors established by the Joint Committee in the Santa Barbara Channel Oil Service Vessel Corridor Program, and avoidance of mooring support vessels within the 10 fathom contour in the Hueneme flats;

2) Conduct of pre and post-construction surveys of the pipeline and platform construction areas as specified in correspondence dated April 15, 1986 (from D.E. Uchikura to Devon Bates), May 2, 1986 (letter from Douglas Uchikura to Devon Bates), May 19, 1986 (letter from Cynthia Norris to Eugenia Laychak), and May 22, 1986 (letter from D.E. Uchikura to Devon Bates);

3) Notification of fishermen and offshore operators of construction schedules, locations, and potential hazards;

4) Conduct of post-construction test-trawls to determine if the affected area can be trawled;

5) Provision of Loran C coordinates for the platform and along the pipeline route to be published in the ppreviously mentioned Newsletter for three months;

6) Installation of a smooth pipeline;

7) Minimized anchor scarring (by special instructions to construction vessels);

8) Identification, by providing Loran C coordinates, of existing wellheads and snags in the vicinity of Platform Grace and Gail, to be published in the previously mentioned Newsletter for three months;

9) Removal of snags, identified in the surveys, if feasible;

10) Publication of the locations of the snags that cannot be removed in the previously mentioned newsletter;

11) Contribution of $250,000 to a local fishermen's contingency fund to compensate for lost and damaged gear due to the Platform Gail project; and

12) Contribution of $250,000 to capitalize an insurance trust fund for the local trawl fleet.

The amounts proposed for the contingency and trust funds were negotiated by the trawl fleet and Chevron, in consultation with the Liaison Office. For the contingency fund, the three parties agreed that the $250,000 should be sufficient to cover the expected costs of replacing or repairing trawl gear that would be lost on or damaged by artifical obstructions caused by the project. In regard to the trust fund, the $250,000 would help underwrite a portion of the liability insurance premiums paid by the trawlers, who are most affected by this proposal. According to the fishermen, to prove eligibility, the fishermen would have to be engaged in commercial fishing full-time and the boats would have to meet a safety standard. The number of trawl vessels affected by the Platform Gail project, 14 to 16 boats, represents the entire local trawl fleet.

The insurance trust fund would benefit the trawl fleet that fishes the Santa Barbara Channel by offsetting the potential area preclusion impacts or displacement of fishermen who have previously depended on the project location to fish. If trawling is more difficult or infeasible because of the presence of the pipeline and/or the platform, the fishermen will most likely look for other areas to fish. If the project forces the fishermen to return to the exploration or hunting phase of their operations their costs of operation may increase due to increased fishing costs and time, loss or damage of gear on natural or unnatural obstructions, and different, unknown weather and sea conditions. The fishermen's income would be reduced by losing access to their prime fishing grounds and by looking for other locations to fish.

Chevron's contribution to the fund would benefit the trawl fleet, who is substantially affected by this proposal, and would encourage the boats that are significantly impacted by the project to continue fishing and contributing to the industry. Robert Brewer, a commercial trawler from Santa Barbara, stated at the April 15, 1986, meeting that establishment of an insurance trust fund is the one known offsetting measure that would best benefit the industry.

The Department of Fish and Game (DFG) has previously expressed concern regarding oil industry compensation programs for commercial fishermen which focus on fish resources. The Commission understands the DFG policy to be that marine resources are a public resource and that compensation should not be based upon the economic value of a

public property resources nor should it be limited to a few individuals. The DFG policy considers use of offshore resources as a privilege, not a right.

Chevron's project is expected to displace trawling activity along the pipeline route and around the platform and may pose hazards to trawling gear. Chevron developed the insurance trust fund and gear contingency fund to offset additional operation costs of the trawlers. Chevron's proposals would compensate for the displacement costs and gear loss costs of the commercial fishermen who primarily utilize the pipeline and platform locations. Chevron's proposals would not compensate for the value of the fish resources. Chevron's proposed mitigation strategy is geared toward addressing the specific locational impacts of the project. Since the trawlers are the primary commercial fishermen at this location, mitigation is directed to offset the anticipated impacts to this segment of the entire commercial fishing fleet. Because compensation is based upon the loss of area and potential hazards to trawling gear used in the vicinity, the anticipated impacts to the commercial fishermen most affected by displacement, the insurance trust fund and gear loss fund are linked together to address the locational displacement of the fishermen. The Commission finds that the compensation is not based upon value of the fish, a public resource.

The Commission received testimony from the San Pedro Fishermen's Cooperative expressing their displeasure with Chevron's proposed mitigation package. They claimed that the value of their catch was much greater then the affected trawlers and that they would be displaced by the proposed project. These fishermen are purse seiners and catch schooling fish such as anchovies, mackeral and bonito. They felt they would be the most heavily impacted fishery and that Chevron should respond to their concerns with mitigation.

Cumulative Impacts

In addition to the consideration of individual impacts of proposed development, the Commission also analyzes the effects of past, present, and future development in accordance with Section 30250(a) of the Act. As explained in CC-7-85 (Exxon Platform Shamrock), past and future lease sale activities, coupled with proposed development in the Channel and the Basin, could cause a significant cumulative effect on the fisheries.

EIS/R's for development of the Santa Ynez Unit, Point Arguello and Point Pedernales, include discussions of the cumulative effects of oil and gas activities on the fishing industry. The Point Pedernales EIS/R concluded that oil and gas development would pose a significant cumulative impact on the commercial fishing industry. However, the document did not quantify the level of impacts. One approach to identifying the impacts is to conduct a regional economic analysis that would assess the effects of the offshore facilities, including associated snags, support vessel traffic, and debris, on the fishing operations in the Santa Barbara Channel, and on the related businesses.

Chevron has agreed to contribute $100,000 for such a cumulative impact study. A draft work program is attached as Exhibit 7. The study would be completed within eighteen months from the date it is initiated, and would be funded by contributions from the oil and gas industry. Preparation of the study would be overseen by Commission staff, who would ensure that DFG, MMS, State Lands Commission, National Marine Fisheries Service and other interested parties, such as the fishing and oil and gas industries, would be given the opportunity to participate in the selection of the contractor and to review the report during its development.

At the present time, the level of cumulative impacts of the Platform Gail project, specifically, and of offshore oil and gas development, in general, on the commercial fishing industry is not fully understood. The Commission is concerned about these impacts in part because the Point Pedernales EIS/R identified them as being significant. The economic analysis would determine what the impacts are and would suggest measures to mitigate them. The mitigation measures already agreed to by Chevron would reduce the individual and any cumulative impacts of the proposed Platform Gail project on the fishing fleet, the trawlers in particular.

Conclusion

Evidence supplied by the fishermen and Department of Fish and Game data show that there would be impacts to commerical fishing resources and operations. For example, the vessel corridors have displaced a portion of the near-shore trapping, gillnetting, and hook and lining grounds; and trawling, purse seining, and drift gillnetting activities would be displaced during construction and operation of the pipelines and platform. For these reasons, the Commission finds that the proposed project, including the mitigation measures, would adversely impact commercial fishing activities and thus is inconsistent with Sections 30230, 30231, 30234, 30250(a) and 30255 of the CCMP.

The Commission has found that the platform and pipelines are coastal dependent industrial facilities. These types of developments, if found to be inconsistent with the resource policies of the Coastal Act, may nevertheless be permitted if found consistent with the requirements of Section 30260, quoted previously.

Section 30260(1) requires that such developments be placed in the least environmentally damaging location. The Commission finds that relocation of the platform and the pipelines, to reduce impacts on fishing activities, may be feasible. While the Commission is concerned that relocating the pipelines further into the landslide area may present a greater hazard to public safety and/or prohibit proper operation of the pipelines (See Geologic Hazards section of this report.), the Commission finds there may be other potential sites leased by Chevron and within the Sockeye Field on which the platform may be located that may be less environmentally damaging. The Commission finds there is inadequate information on this point. The project is therefore inconsistent with Section 30260(1).

Section 30260(3) requires that the project be mitigated to the maximum extent feasible. Mitigation measures (1) - (10), above, constitute mitigation that is technically feasible for reducing the physical impacts. It is difficult to establish a "price-tag" for the value of displacement or location where the remaining potential impacts could occur after mitigation measures 1-10 are applied. Chevron has offered to offset the residual impacts of the project with mitigation measures 11 and 12. According to Mr. Brewer, the trawler who represented the fleet in the negotiations with Chevron, the mitigation measures, including the contributions to the contingency and trust funds, adequately mitigate the financial impacts from locational displacement of commercial fishing from the project.

Chevron has committed to partially funding an cumulative economic analysis that should determine the value of the preclusion impacts caused by existing and proposed oil and gas development in the Santa Barbara Channel. The analysis would cost approximately $300,000 to $500,000 to complete. In correspondence between staff and MMS and Chevron, regarding the adequacy of the DPP and ER, Chevron was asked to provide cumulative impact information. Chevron has committed to share the responsibility of preparation of the analysis with other companies who are expected to submit development proposals to the Commission.

The Commission decided to object to the project in part beccause of the need for information to quantify the cumulative impacts. Chevron has the option to fully fund the mitigation measures and the economic analysis in order to fulfill Chevron's responsibilities under the Coastal Act and CZMA. The affected trawlers believe the mitigation adequately offsets the impacts on their operations however, the purse seiners disagree.

The Commission finds that there would be significant adverse impacts to commercial fisheries as a result of construction and operation of the proposed platform and pipelines. Mitigation measures offered by Chevron are extensive and substantial. However, the Commission finds that the proposed mitigation does not address the concerns of those who fish for pelagic fish by the purse seine method. These fishermen would be displaced from both the pipeline and platform areas during construction and from the platform area during operation. The Santa Barbara Channel attacts fishermen from all over the state because of its abundant fish resources. To some extent, they would be adversely affected by displacement by the proposed platform and pipeline.

The Commission finds that there is inadequate information on cumulative impacts. To enable the Commission to find consistency, Chevron must provide this information or other mitigation to address this issue.

The Commission finds that Chevron has not offered mitigation to the maximum extent feasible in accordance with Section 30260(3). To

enable the Commission to find consistency in this policy area, Chevron must provide a mitigation package addressing the displacement impacts on the pelagic fisheries. Gear loss for both trawling and pelagic fisheries is addressed in Chevron's previous amendments to the DPP.

The Commission finds the proposed project would not offset the residual adverse impacts and make contributions that would benefit the entire fishing industry. The Commission finds that even with the twelve mitigation measures included in the project by Chevron that the project is not mitigated to the maximum extent feasible with regard to commercial fishing impacts and is inconsistent with Section 30260(3).

The Commission finds that because Chevron has not mitigated the project to the maximum extent feasible (Section 30260(3)), because of the impacts that would remain, and, for the reasons discussed in finding 12, it is also not consistent with the public welfare provisions of the Act (Section 30260(2)). Therefore, the Commission objects to the proposal.

4. Crude Oil Transportation

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. These Coastal Act provisions mandate the use of the most environmentally protective feasible method of oil transportation.

In past federal consistency actions, the Commission has made detailed findings documenting the superiority of pipeline transportation of crude over transportation by tanker because of the reduced risk of oil spills and reduced air pollutant emissions. These findings are supported by data from the Commission, the Council on 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 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), Chevron's Platform Hidalgo (CC-24-84), which are incorporated by reference as part of this staff report). These findings demonstrate the environmental and economic advantages of pipeline transportation over the use of tankers.

Chevron has committed for the proposed Platform Gail project, to transport the oil produced from Platform Gail by a new pipeline laid between Platforms Gail and Grace (approximately 6 miles in length), and to use existing pipelines from Platform Grace to Platform Hope, continuing onshore to the Carpinteria facility in Santa Barbara County. In addition Chevron has committed to the following statement:

> "Chevron will transport crude oil from Platform Gail to refineries or market outlets by pipeline if pipelines are available with accessible capacity to producer's market destinations.
>
> As an interim measure, until pipelines to producer's market destinations are available with accessible capacity, or if there is a temporary disruption of pipeline or refinery operations, or during emergencies, crude oil produced from Platform Gail will be transported by other available methods. Any use of alternative methods of transportation, although not anticipated, would be consistent with the transportation policies of the applicable Local Coastal Program.
>
> The following definitions shall be applicable to the above-mentioned statement.
>
> Available - means the pipeline exists and that the producer has access to it.
>
> Accessible Capacity - means 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 - means the location where a producer will sell the crude oil to obtain a reasonable rate of return for the product.
>
> Emergency - means the inability to operate the pipeline due to acts of God, natural disasters, labor disputes or acts of government."

Because there is always the possibility of tankering under this agreement, if pipelines are not available to future destinations and because a leak from a pipeline can never be ruled out, the oil transportation agreement cannot meet the absolute requirements of Coastal Act Section 30232. However, Chevron's commitment provides a feasible mitigation measure to provide more maximum protection from oil spills.

The Commission received testimony from Chevron that the proposed new pipeline would be equipped with shut off valves at either end (on Platforms Grace and Gail) that could be closed in the event of emergency. However, the Commission finds there is inadequate information regarding the feasibility of placing shut off valves within the pipeline itself to reduce the amount of oil that might potentially be released in the event of pipeline rupture or failure. Chevron testifed that there may be up to 2134 barrels of oil in the pipeline at any one time. Therefore, the Commission finds that the proposed transportation of crude oil from Platform Gail does not represent mitigation to the maximum extent feasible and is therefore inconsistent with Section 30260(3) of the CCMP.

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 the provision of "effective containment and clean-up facilities and procedures" 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, the equipment currently available does not have the capability to recover all of the oil from 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; the 1984 Alvenus tanker spill offshore Galveston, Texas; or the 1984 Puerto Rican tanker 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 clean-up 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."

While oil spill clean-up equipment can function with about 50 percent recovery efficiencies in calm water tank tests, recovery efficiencies are drastically reduced in moderate or rough seas, thus limiting or eliminating the ability of the equipment to recover oil. Oil spreading into thin layers on the water's surface, collected debris, and equipment malfunction all contribute to additional reduction in recovery efficiencies during actual oil spills. Offshore clean-up operations are limited to conditions when seas are less than six feet in height. Data on sea states in the area of the proposed Platform Gail indicate that waves are greater

than 6 feet from 4 to 15 percent of the time using best/worst month data produced by the National Climatic Center. This problem is exacerbated by the fact that the oil to be produced from this facility has an API gravity of ranging from 16 to 35 degrees. The 16 degree oil represents a "heavy" or viscous crude which can be difficult to recover mechanically or to disperse with chemicals.

The Commission has the following observations regarding the effectiveness of oil spill equipment and Chevron's statements at the Commission meeting regarding equipment efficiencies.

The data referenced by Chevron in its presentation to the Commission was test data for one skimmer (Walosep) located on each of the Clean Seas major offshore response vessels. The data was produced at the Environmental Protection Agency Oil and Hazardous Materials Simulated Environmental Test Tank (OHMSETT) and all of the referenced tests were conducted in calm water (now acknowledged in Chevron's letter). Although the testing program included tests in mild sea states generated in the test tank, little of these data were included in any of Chevron's written submittals, including the World Catalog of Oil Spill Response Products. The tests for this skimmer were conducted under a private user agreement, and the Commission did not review the actual test data. Even for the calm water tests, the Commission cannot confirm the distribution of test results which make up Chevron's 60% to 90% effectiveness figure. In other words, it is not clear how many of the numerous tests conducted in calm water resulted in 60% versus 90% effectiveness.

The percentage of time the seas exceed two feet in the Eastern Channel area is approximately 56% to 88% according to the National Climate Center figures. The Commission finds, based on extensive tank test data, experience gained during actual oil spills, and during practice oil spill development drills or exercises, that equipment performance is reduced in seas as small as two feet. The Commission finds that performance is further degraded as seas increase. The practical limit for deployment and use of this equipment is 6 foot seas. It is not realistic to expect absolute calm sea conditions to occur on even the most mild days in the open ocean. The calm water tank tests are used for comparisons between skimmers and to provide efficiency ratings under the most favorable conditions. Therefore, the chances of this equipment ever operating with the stated calm water efficiencies in the open ocean are unrealistic.

The majority of the open ocean skimming that would occur from the Mr. Clean vessels would probably be with the Offshore Devices Incorporated advancing skimmer which has another set of efficiencies associated with it. Equipment used for response in the nearshore areas have yet different efficiencies. The Commission's findings of an average of 50% efficiencies in calm water tests is still valid, based on data available at this time.

These conditions limit the effectiveness of existing oil spill control techniques and render the proposed project inconsistent with Section 30232 of the Coastal Act.

As described elsewhere in this report, the platform and subsea pipeline components of the project are found to be coastal-dependent industrial facilities, and therefore may be given additional consideration under Section 30260 of the Act. Oil spill containment and clean-up equipment, associated with Platform Gail and the pipelines to shore (including response time and contingency planning) must provide maximum feasible mitigation of significant adverse environmental effects for the project to be consistent with Section 30260 of the CCMP.

Increased Risks of Oil Spills

The construction and operation of the proposed platform and associated pipelines increase the risk of an oil spill in the eastern Santa Barbara Channel. Chevron would use a pipeline instead of marine tankers for transporting crude oil to refineries. This would significantly reduce the risk of a large marine oil spill resulting from this operation.

An oil spill could seriously affect marine resources. According to the Chevron Oil Spill Contingency Plan, oil spilled from Platform Gail would move toward coastal areas shoreward or down coast from the facility or offshore toward the Channel Islands. The oil spill trajectory analysis predicts a minimum time for onshore impact of 45 to 65 hours. It shows little chance that oil would move toward Anacapa Island, which is only 6.5 miles from the proposed facility. However, the oil spill trajectories used during the tanker vessel Puerto Rican spill off northern California predicted southwesterly oil movement, which was correct for a few days, but the oil unexpectedly traveled in the opposite direction moving through the environmentally sensitive Farallon Islands off San Francisco. Thus, although trajectory analysis provides a good planning tool, caution must be exercised in depending on the information. The Commission must assure that Chevron has the maximum feasible equipment and procedures to protect resources, such as Anacapa Island or Mugu Lagoon, should oil move toward those areas. (See the marine resources section of this report for discussion of the resources of Anacapa Island and Mugu Lagoon.)

Adequate weather information is rarely available for use in developing oil spill trajectory analysis either prior to, or during an oil spill. Often times this information must be derived from data sources far from the location of potential or actual spills. As this information enables maximization of clean-up efforts, the Commission has in the past required applicants to install wind, wave, and current data collection devices on their platforms to assist in this data collection effort. Chevron points out that weather data collection equipment is located nearby on Platform Grace.

The feathers of birds and the fur of marine mammals can be fouled during oil spills. 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. Should oil move into the Channel Islands or other sensitive areas onshore such as Mugu Lagoon, highly sensitive resources could be impacted. The only stable breeding population of the California brown pelican in the Western United States nests on Anacapa Island. The waters within the Mugu Lagoon could be contaminated, particularly in shallow areas where little water flushing occurs. Spilled oil reaching these areas could cause serious long term impacts.

Oil Spill Containment Equipment and Response

In examining whether maximum feasible mitigation is provided, the Commission has determined in past permit and federal consistency certification decisions that the following oil spill containment and clean-up 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 to 60 minutes of the site equipped with a second boat capable of assisting in boom deployment; and

* Oil sorbent material capable of absorbing 15 barrels of crude oil.

To provide the earliest feasible response time, Chevron is planning to use equipment stored at Platform Gail. An oil recovery device (skimmer) is to be located on the Platform Grace workboat. The workboat can be onsite within 60 minutes under any circumstances. Fifteen hundred (1500) feet of containment boom would be located at Platform Gail. Chevron is providing 15 barrels of oil storage onsite because this is the maximum that they believe their skimming equipment can recover prior to the arrival of the Mr. Clean oil spill response vessel. The Mr. Clean I vessel would take approximately 3 hours to arrive onsite.

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. Chevron is a member of Clean Seas Cooperative. The cooperative's inventory of tools for oil spill

clean-up includes 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. In addition, Clean Seas has acquired and will soon operate another large vessel for response to spills in the Point Pedernales/Arguello area (Mr. Clean III).

The cooperative's role is to provide assistance for spills exceeding Chevron's onsite capability and for initial response to large spills. It would take the response vessel Mr. Clean I approximately 3 hours to reach Platform Gail to respond to a spill. Mr. Clean III from the Point Conception area and Mr. Clean II from Port San Luis could be called for response to the site if these vessels are required. However, it would require a significant amount of time for these vessels to arrive at the Platform Gail location. Clean-up operations for large spills would 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 Coast Guard Oil Pollution Response Planning Guide for extreme weather limits the performance of these systems to Sea State 3 or 4. (Sea State 3 includes waves 3.1 to 5.4 feet and Sea State 4 includes waves 5.4 to 7.5.) Testing data produced at the Environmental Protection Agency Oil and Hazardous Material Simulated Environmental Test Tank (OHMSETT) suggests that equipment performance would begin to deteriorate in seas exceeding 2 feet. The practical limit for equipment use appears to be 6 foot seas.

Oil Storage Capability

A primary aspect of oil spill response is the ability to store the recovered oil before it is sent to shore for re-use or disposal. The Clean Seas organization previously did not have Coast Guard approval to store oil in the tanks located below the decks of their offshore response vessels. However, the manager of Clean Seas recently informed the Commission that approval has been granted for Mr. Clean I, II, and III. The vessels will have the following storage capability:

Mr. Clean I	1390 barrels
Mr. Clean II	1590 barrels
Mr. Clean III	1305 barrels
	4285 barrels total

Once oil is collected within these vessels it must be transferred to oil storage barges which have significantly more capacity. According to the Clean Seas manager the offloading time will be approximately 1 to 4 hours for these vessels depending on the vessel, oil type, and unloading conditions. If heavy oil is put into the tanks, there may be some difficulty getting it out. Clean Seas states that they can pump diesel oil from the fuel tanks into the storage tanks to "cut" or dilute the heavy oil to allow it to be

pumped out if difficulties are encountered. If the oil is particularly heavy, Clean Seas may choose to use their Swedtrawl net boom system which is not dependent on oil pumping.

Currently Clean Seas maintains the TideMar VII oil storage barge in Santa Barbara. This barge has a capacity of 7,840 barrels. The existance of the barge has provided the assurance that oil storage for large oil spills has been readily available. During the Alvenus oil spill in the Gulf coast and the Puerto Rican oil spill in the north coast of California, some difficulties have been encountered by trying to use contractor equipment. Problems include hook-up difficulties and refusal of some contractors to allow recovered products to be put in their barges. Finally, response times to spill locations must be a primary consideration.

Commission staff requested that Chevron provide letters from at least three contractors stating that recovered oils could be put in contractor barges, that contractors have readily available barge and tug equipment, and stating their estimated response times to locations in the Santa Barbara Channel region. These questions were asked to determine if selling the TideMar VII barge would reduce response capability to large oil spills or if contractor equipment from Los Angeles would be sufficient. Chevron provided the Commission with three letters from PacTow, Phoenix Marine Services Inc., and Crowley Towing and Transportation Company. The letters indicate that the contractors will allow recovered oil to be put in their barges and that they do have equipment available for response.

Therefore, the primary question is the determination of a reasonable response time for delivering the barge to offshore oil and gas facilities within Clean Seas area of responsibility (Point Dume in Los Angeles County to Cape San Martin in Monterey County). The decision to sell the barge will certainly affect response times to other areas and is not an issue that is exclusive to the Platform Gail proposal. The letters and subsequent discussions with the Clean Seas manager suggest the following response times by the TideMar VII and the contractor equipment available from Los Angeles. Clean Seas depends on a contractor to tow the TideMar VII and time estimates have been added, as appropriate.

TIDEMAR VII BARGE RESPONSE TIME ESTIMATES

Response to Platform Gail

Mobilization of Tug Service.	4 to 8 hours
Transit To Site (if necessary)	0 to 3 hours

The total time for this response is difficult to determine, because the barge would have to be in a harbor or near-shore waters for most transfer operations. Therefore, it may make sense to leave the barge in Santa Barbara for the first transfer. This could be achieved by bringing the response vessel back to port at the end of

the first day of skimming. According to the Clean Seas manager the response vessel would have to be brought in to port for offloading operations regardless.

Northern Santa Maria Basin (Port San Luis)

Mobilization	4 to 8 hours
Transit	7.5 to 10 hours

LOS ANGELES CONTRACTOR BARGES TIME ESTIMATES

Response to Platform Gail

Mobilization	2 to 8 hours
Transit	6.5 to 9 hours

Response to Northern Santa Maria Basin (Port San Luis).

Mobilization	2 to 8 hour
Transit	17 to 20 hours

The times presented above can be summarized as follows:

	With TideMar	Without
Response to Platform Gail	0 to 11	8.5 to 17 hrs.
Response to Northern SMB	11.5 to 18	18 to 28 hrs.

Because of the lengthened response time, without the TideMar VII barge, Clean Seas has promised the Commission to keep this piece of equipment in the Clean Seas inventory. This will assure that Chevron and the Clean Seas Cooperative are providing the maximum feasible oil storage capability for spills that could occur as a result of their offshore production activities.

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.

The oil spill dispersant currently planned for use by Chevron is Exxon's Corexit 9527. This dispersant does not work well on many heavy oils. In addition, the dispersant and oil mixtures may be

more toxic to fish and wildlife than the oil alone, according to a recent Environment Canada report, Acute Lethal Toxicity of Prudhoe Bay Crude Oil and Corexit 9527 to Arctic Marine Fish and Invertebrates, 1982. Exxon's Corexit 9550 has proven to be more effective on heavy oil. Chevron has submitted data regarding the effectiveness of Corexit 9527 and 9550 with their crude. The data demonstrates that 9550 is more effective on heavy crude oils, but performance may be limited with the most viscous samples of the oil. Dispersant 9550 has recently been licensed for use by the federal government, but the State of California has yet to license the product for use. When it is licensed, the Clean Seas cooperative will stockpile it.

Oil Spill Containment Drill

There is always the possibility that oil could reach sensitive coastal resources such as Anacapa Island or Mugu Lagoon. The Commission believes that it is essential to determine the ability to protect these areas in the event they are threatened. One way to determine the adequacy of oil spill containment plans and equipment is to call surprise oil spill drills or exercises. The Minerals Management Service will call such drills at the platform site in the Outer Continental Shelf. However, Chevron has agreed to allow the Commission, in cooperation with the State Agency Coordinator for oil spill response, the State Lands Commission, and the Coast Guard, to call an unannounced oil spill response drill at the Mugu Lagoon. The exercise shall take place within 60 days of the installation of the platform jacket. It would require the deployment of equipment consistent with the recommendations in the Clean Seas oil spill cleanup manual and Chevron's oil spill contingency plan.

The Commission believes that it is necessary for Chevron to conduct and oil spill drill/exercise at Anacapa Island to help assure that protection is being provided to the California brown pelican and the National Marine Sanctuary in the event an oil spill threatened this area. The Clean Seas oil spill cooperative has agreed to conduct a fall training exercise, in coordination with Chevron, off East Anacapa Island. The exercise would be conducted after consultation with the Coastal Commission, the Marine Sanctuary officials, and the MMS. These agencies would be given the opportunity to observe the exercise. The exercise would help assure that all oil spill cleanup programs are field tested and carried out as effectively as possible.

Cumulative Impacts

Chevron has provided cumulative oil spill figures using an A.D. Little 1985 report, which provides data for Santa Barbara Channel production and for tankship activity associated with that production. The data provides risk figures for spills of 1,000 barrels and for 10,000 barrels. The document table shows that the probability of a 1,000 barrel oil spill is 99.1 percent without Platform Gail, and increases only marginally to 99.2 percent with the platform for the years of 1986 through 1995. The probability of

a 10,000 barrel oil spill is 87.4 percent without Platform Gail, and 87.9 percent with the platform. Although the platform does not appear to add significantly to the overall probabilities, it is clear that these events are likely for the period studied. This is why the Commission must assure that oil spill containment and cleanup equipment is provided to reduce the impacts of oil spills, if they occur.

The complete table of cumulative probability of oil spill occurrence is included as Exhibit 8.

Conclusions

The Commission finds that the effectiveness of offshore oil spill containment and clean-up equipment to recover spilled oil at sea, as demonstrated during numerous oil spills in United States waters and world wide, including the recent Puerto Rican tanker spill, causes serious doubts regarding their ability to protect the sensitive resources of Anacapa Island from an oil spill at or near Platform Gail. Furthermore, the Commission finds that the location of the lease tract, so near to Anacapa Island, the National Park and Marine Sanctuary, raises special considerations because of the inherent potential hazards of oil spills with resultant damage to sensitive marine and coastal resources. Therefore, the Commission finds Chevron's proposal inconsistent with Section 30232 of the CCMP.

Chevron is providing oil spill contingency plans, oil spill containment, clean-up and storage equipment, oil dispersant data, and participation in near-shore oil spill exercise/drills.

The Commission finds that there is inadequate information regarding alternative locations to determine the feasibility of recovering oil from the Sockeye Field. The Commission finds there may be other potential sites leased by Chevron on which the platform could have been located that may be less environmentally damaging. As a specific alternative, the Commission advises Chevron that it could present for the Commission's consideration information regarding the feasibility of other alternative locations in a subsequent consistency certification resubmittal. Therefore, the proposal is inconsistent with Section 30260(1).

The Commission finds below that disapproval of this project would not adversely affect the public welfare. The Commission further finds that the risks to wildlife in the event of an oil spill that could occur if the proposed project were implemented, outweigh any effects upon the public which would result from objection to the project. The Commission finds that the project poses too many risks and potential impacts to coastal resources such that concurrence would substantially adversely affect public welfare as discussed in detail below.

6. Vessel Traffic Safety

Section 30262(d) of the Coastal 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.

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

Chevron proposes to site Platform Gail 2,053 feet north of the northern buffer zone of the north-bound traffic lane of the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS) (Exhibit 2). There are existing platforms in the area, but all are farther from the VTSS than the proposed Platform Gail. Union's Gilda is 3.6 nautical miles to the north and Chevron's Grace is 4.7 nautical miles northwest of the proposed site of Platform Gail.

The Vessel Traffic Separation Scheme (VTSS) was established in the Santa Barbara Channel by the Eleventh Coast Guard District in 1969. The two one-mile-wide vessel traffic lanes and two-mile-wide Separation Zones separate northbound and southbound vessel traffic through the Channel. The Coast Guard has established a 500-meter-wide (1,640 feet) buffer zone along each side of the lanes. There are other VTSS in the United States, but only the Santa Barbara Channel VTSS possesses the added protection of buffer zones.

The United States Coast Guard, working with the oil and shipping companies, agreed to move lanes as a "one-time-only" modification of the Santa Barbara Channel VTSS. Such a move was to meet the concerns of all leasees in the Channel and be done only if Chevron, after exploratory drilling decided to develop the Sockeye Field. The VTSS was moved one-half mile south on February 1, 1985. (See Exhibit 2.) This move allowed Chevron to locate Platform Gail near the center of the Sockeye Field without being in either the traffic lanes or the buffer zones.

The Exxon DPP for Platform Independence states that tanker loadings in the western Santa Barbara Channel area have increased from about five per year in the 1974 to 1976 period to more than 60 per year in 1979. Since April 1981, additional tanker loadings have taken place at Exxon's offshore storage and treatment facility at the average rate of approximately one per week. Crew boat traffic from Ellwood Pier is currently about 30 vessel trips per day. An increase in offshore crew and supply vessel traffic will take place as a result of platforms in the Point Arguello and Point Pedernales Fields, as well as in the Channel. The Chevron Platform 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 that Exxon's Santa Ynez production will result in 132 tanker trips per year, if pipelines to refinery centers are not available. At present, large ocean-going vessel traffic in the Santa Barbara Channel averages about 13 ships per day each way, for a total of approximately 26 ships. The Pactex Marine terminal project, recently approved by the Commission, will not increase this number by more than a ship or two per day. This is particularly true of the northbound lane, for tankers using that lane would, as a rule, have stopped in Los Angeles/Long Beach Harbor to bunker on their return from the Panama Canal. Although use of the VTSS is voluntary, approximately 95 percent of the ships passing through the Channel use it, according to a 1979 Port Access Route Study (PARS) conducted by the Coast Guard.

The monthly frequencies in the area of restricted visibility (two miles or less) due to fog or haze, occurs over 10% during more than half the year, and occurs more than 20% from July through October. October has restricted visibility of two miles or less 27.1% of the time.

A study by Det Norske Veritas found that, in the years 1970 to 1982 inclusive, 560 accidents involving offshore structures engaged in oil and gas activities were reported. An accident is defined as an event or condition occurring by chance which caused damage to an offshore structure, its equipment, the environment (spills), or injury to individuals. However, events causing only injury to, or the death of, individuals are not included in this figure. Of these 560 accidents, 93 were collisions between offshore structures engaged in oil and gas activities and vessels and helicopters. (No breakdown is available between vessels and helicopters or vessel sizes.) Of the 93 collisions, four resulted in total loss of the structure, eight in severe damage that could not be repaired on location but could possibly be repaired in a dock, 24 in damage (not further defined), 29 in small damage which could be repaired at the drilling location, 25 in no structural damage, and three unknown. Only two of the collisons resulted in spills. Of the 93 collisions, 24 occurred in the United States, 17 in the North Sea, 44 in other locations, and eight unknown. Of the 24 collisions in the United States, 13 involved permanent units. Of these 13 collisions, one resulted in total loss, two in severe damage, two in damage, one in minimal damage, and six in no structural damage.

The Platform Gail DPP states:

"According to the 11th U.S. Coast Guard District, there have been no reported incidents involving the ramming of Santa Barbara Channel OCS platforms by ships. However, there have been a number of platform ramming incidents in the Gulf of Mexico. For the 15-year period beginning July 1, 1962 and ending June 30, 1977, the U.S. Coast Guard recorded 10-fixed structure rammings by vessels greater than 500 gross tons while in the Gulf of Mexico outside Zone 1 (Texaco, 1983). As has

been pointed out in several recent studies (e.g., Reese-Chambers Consultants, 1981; National Maritime Research Center, 1981), Gulf of Mexico historical platform ramming rates are probably not applicable to the situation in the Santa Barbara Channel because of differences between the two regions....For example, the possibility of a platform/vessel collision in the Gulf of Mexico would be expected to be greater than that for the Santa Barbara Channel because of the greater density of platforms in the Gulf. Thus, the Gulf of Mexico rate is, without question, conservative (i.e., too high) for the Santa Barbara Channel (Texaco, 1983)."

In a previous action (CC-9-81, the delineation well for the Sockeye Field on OCS-P-0205), the Commission found that a minimum of three miles from the "dog-leg," or bend, in the VTSS is necessary as a margin of safety to allow vessels to make late turns in the bend and still return to the sealane before reaching a temporary structure in the northern buffer of the northern lane. The proposed platform is about 7.84 nautical miles northwest of the dog-leg and, as stated above, is approximately 2,053 feet north of the northern buffer of the northern lane. The Coast Guard believes there is ample room for a prudent mariner to navigate.

Chevron has proposed several measures that respond to Commission concerns with vessel traffic safety. One measure involves installing a Racon, short for radar beacon, on the platform. A Racon is a transponder which, when triggered by a ship's radar pulse, will respond with a signal on the same frequency. Accordingly, it can be picked up by the radar on the passing vessel and identified as a specific target, in this case Platform Gail.

Additional navigation aids include four flashing five-mile lights and two-mile fog horns. The platform would be painted white, to aid in visibility. The drilling rig derrick would be illuminated for aviation safety with a combination of steady and flashing red lights. Chevron has agreed to daytime lighting when visibility is less than three miles. The heliport perimeter is outlined with lights plus one flashing amber beacon; these lights are illuminated only during flight operations.

In its DPP for Platform Gail, Chevron proposed installing an Automatic Radar Plotting Aird (ARPA). The proposed ARPA could track up to 20 ships, tell the radar operator what the closest point of approach between a ship and the platform would be, and how much time there would be to the closest approach point. It would also display the speed and course of the ships. An inner and outer guard zone can be selected by the radar operator, and if a ship penetrates the guard zones, both visual and audible alarms are automatically activated. Since that original submittal, Chevron has changed its decision to use an ARPA. Chevron and the Commission have dicussed the usefulness of an ARPA in such close proximity to the shipping lanes. Unlike the situation at the Point Arguello Field platforms, there would not be adequate time to dispatch a boat or helicopter to

warn closely approaching vessels. Because of the closeness to the "dog-leg" or turn in the vessel traffic lanes (7.84 nautical miles), vessels adjusting their course after making the turn might appear at a point to be on a collision course with the platform. In addition, if the inner guard zone were set for as close as one-half mile, vessels passing in the northern buffer of the northern lane would set off the alarm.

Radar is required on vessels 1,600 gross tons or over, and back-up radar is required on vessels 10,000 gross tons or over. Vessels carrying oil or hazardous cargo must have ARPA capability. Vessels 1,600 gross tons and over must have current charts. The Coast Guard Marine Safety Office in Long Beach states that they check every vessel at least once a year, and approximatley 65 percent of the vessels transiting north just prior to sailing, to see if they have current charts. Before and during the early part of platform installation, the Coast Guard broadcasts daily regarding the platform location. Broadcasts are then made weekly and then monthly.

The Commission has received several letters from the Coast Guard which state they are not concerned about the platform posing a significant hazard to vessels transiting the Santa Barbara Channel and they do not recommend the use of any further mitigation measures to lessen any hazard.

Nonetheless, because of the closeness to the vessel traffic lanes, Chevron has prepared, in addition to the mitigation measures described above, a Vessel Collision Contingency Plan. All crew members would be informed as to the proximity of the VTSS to Platform Gail, and would be instructed to be alert to vessels appearing to be out of the lane. A minimum of four crew members would be on deck at any one time. Anyone suspecting a collision would notify the Platform Foreman, the Head Operator, or three other operators via one of the 36 phones connected to a public address system. One of the supervisors would then sound the Collision Alarm notifying crew to go to their stations, override the foghorn to allow changes in the duration of blasts in an attempt to warn the approaching vessel, attempt to make contact with the vessel via Channel 16, and contact the Coast Guard by phone. In the event that a collision is imminent and no contact can be made with the oncoming vessel, the Emergency Shut Down System (ESD) would be activiated and the platform would be evacuated. The platform would have three survival capsules accommodating 36 persons each. The maximum crew aboard at one time during the development and production phases is 70 persons.

There are 20 Emergency Shut Down buttons on the platform, including stair landings, the boat landing, the heliport, and the production office. When the ESD button is pushed, the surface safety valve shuts down the platform within a maximum of 15 seconds. The gas is automatically vented to flare and the pipeline shuts down when the pressure drops, within a matter of seconds. By

OCS orders, the sub-surface safety valve must close down 200 feet below mudline within two minutes after the ESD button is pushed. California platforms, as a rule, have electrical (versus pneumatic) controls and can generally shut down in less than one minute instead of the two minutes allowed under the OCS regulations.

A significant increase in the number of production platforms and exploratory vessels in the Santa Barbara Channel could create an unacceptably high level of risk to navigation. The Minerals Management Service has stated that with the exception of Union OCS P-0203, Gail is most likely the last platform to be proposed in the eastern Channel area.

The Commission finds that even with the mitigation measures described above, the proposed project is inconsistent with Coastal Act Section 30262(d). In addition, applying the requirements of Section 30260 as incorporated by Section 30262, the Commission finds the platform may not be sited in the only feasible location to develop the Sockeye Field. The Commission finds there may be other potential sites leased by Chevron and within the Sockeye Field on which the platform could have been located that may be less environmentally damaging (Section 30260(1)). As a specific alternative, the Commission advises Chevron that it could present for the Commission's consideration information regarding the feasibility of other alternative locations in a subsequent consistency certification resubmittal.

In summary, the Commission finds the proposal inconsistent with Section 30262(d) and inconsistent with Sections 30260(1) and (3). The Commission finds that the platform's location in close proximity to the vessel traffic lanes poses undue risks to vessels in transit and might result in a collision involving an oil spill with damage to marine and coastal resources.

The remaining potential impacts of the project after full mitigation is in place, preclude the Commission from concurring with the proposal on the grounds of public welfare, Section 30260(2). The Commission finds this risk to be so great that it is not in the public or national interest to concur with the project. Therefore, the Commission finds the proposal inconsistent with Section 30260(2) as enumerated in finding 12 below.

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, 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) 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...."

Chevron's Platform Gail would be located 11 miles west of Port Hueneme and is part of the Santa Clara Unit Plan of Development. The platform would be situated on a 1.5 degree southwesterly sloping seafloor in 739 feet of water and would be an eight-leg, template-type structure with a 197 by 296 foot seafloor footprint. Eight 60-inch diameter main piles driven through the jacket legs, and twelve 72-inch diameter skirt piles driven through the sleeves around the jacket periphery would comprise the platform's foundation. Platform Gail would produce hydrocarbons from the Sockeye Field. Development plans call for 16 Sespe/Lower Topanga wells followed by 9 Monterey/Upper Topanga wells. Productive zones would range in depth from 5400 to 4400 feet subsea.

Three 8.6 inch subsea pipelines would connect Platform Gail to Platform Grace (six miles). One line would transport oil production, a second, gas. The third line would operate as a spare for either gas or oil transportation or could serve as a utility line. The proposed pipeline route would be situated on a seafloor that slopes to the southwest at 1.9 degrees. Detailed geohazard investigations were conducted within a surveyed corridor approximately 7,000 by 37,000 feet.

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. On June 29, 1925, almost the entire business section of Santa Barbara was destroyed or rendered unsafe by a 6.3 magnitude earthquake. 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. This earthquake had a magnitude of 5.1 was located 4 km south of Santa Barbara at a depth of 12.5 km. A maximum acceleration of 0.44g at ground level was measured at UCSB for this event. Widespread minor damage was reported.

Chevron maintains that Platform Gail and associated pipeline facilities 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."

To meet this requirement, Chevron has submitted detailed site and foundation seismic analysis (Dames and Moore, 1981; Woodward-Clyde, 1981) for Platform Gail. Two levels of earthquake ground motion have been considered in the analysis. The first is the design level earthquake or that event that has a reasonable likelihood of not occurring during the platforms operational lifetime. Peak ground acceleration for the design level earthquake is 0.22g at the Platform Gail mudline. This earthquake has a return period of 270 years. The second level earthquake is the extreme level event with expected ground motions as high as 0.55g in rock or stiff sand and 0.35g at the mudline. A return period of 4,000 years was selected for this rare, intense earthquake. For the above analysis, faults which have been active since the late Pleistocene were considered to be potential seismogenic sources. No known faults pass beneath the platform site and fault rupture is not a known hazard for this project.

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.

Comparing the peak horizontal accelerations and associated duration of shaking, produced by the design and extreme level earthquakes, with the properties of the soils at the site and along the pipeline route reveal a low potential for liquefaction.

Faulting

No active faults were identified within the pipeline corridor or near the platform site (Woodward Clyde, 1981b).

Shallow Gas

No shallow gas was identified within the sediments beneath proposed Platform Gail. Shallow gas has been identified in sediments within the central and western sections of the pipeline corridor. This gas represents leakage from the underlying hydrocarbon reservoir (Woodward-Clyde, 1981).

Subsidence

Subsidence of the land or seafloor can pose potential problems for oil development and 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 has addressed the subsidence issue as follows:

> "Surface subsidence is not expected to be a problem in the Platform Gail project area for the following reasons: 1) the region has been under compression since early Pleistocene time; 2) the geologic structure beneath the site is in the form of an anticline, or supporting arch; and 3) the oil producing strata are at depths of more that 3500 feet beneath the seafloor, such that the folded overburden will provide additional support." (ER, 1986, p. 3-16)

Submarine Slumping

Approximately 2,500 feet north of the proposed platform site, an area of unstable slope has been identified and represents a potential geological hazard to the platform and pipeline. (See Exhibit 5.) A steeply dipping sequence of shelf sediments overlie an ancient erosional surface. Within this area (approximately 26,000 by 5,000 feet), the slope has become steep enough to make the seafloor unstable. These deposits have separated into individual

blocks and have moved and are continuing to move downslope. The depth of the slide plane in this area ranges between 20 and 50 feet below mudline. These pull-apart blocks have created a hummocky seafloor topography located in water depths ranging from 410 to 520 feet. Slopes defined by individual hummocks range in steepness up to 14 degrees. The rate of downslope movement has not been rapid, rather, movement appears to have been gradual as is expressed by the internal coherency of the individual blocks. This movement can be caused by seismic shaking or loads induced by storm waves, however, gravity is the driving force. In addition, Chevron (Woodward-Clyde, 1981, p. E-22) has submitted an analysis that has considered the maximum movement expected for this area:

> "Using reasonable assumptions on the factors involved, the amount of earthquake-induced permanent displacement of slopes in the northern slope area is estimated to be as high as about 40 inches for the extreme level event and as high as about 15 inches for the strength level event. Using extremely conservative assumptions on the mode of failure, remolded strength of soils, and topography near the toe of the northern slope area, the maximum amount of slope displacement in the northern slope area is estimated to be less than about 280 feet. This latter estimate of 280 feet is very conservative. However, since the northern proposed platform location is more than 700 feet from the "toe" of the northern slope area (2,500 feet from the central or proposed platform location), the effects of soil displacement in the northern slope even on the order of few hundred feet on the response of the platform is considered to be negligible."

The proposed platform site is situated on a buried ancient slide deposit. The depth of the slide plane varies between 45 to 65 feet below the mudline. This slide plane appears to extend beneath the northern slope area and control the block failures described above. The buried slide mass is composed of chaotic beds with a rubble toe. The seafloor slopes 1.5 degrees and Chevron (Woodward-Clyde, 1981, p. E-22) has concluded that the amount of earthquake-induced permanent displacement in the platform area should be negligible (half an inch) and a transient displacement on the order of more than 1.5 feet. Eight 60 inch piles and twelve 72 inch piles driven to 250 feet and 290 feet below mudline, respectively, have been designed to mitigate any loads imposed by shallow failures within the ancient slide deposits.

Chevron has submitted a proposed pipeline corridor that extends from Platform Gail to Platform Grace. The corridor is approximately 37,000 feet long and 1,000 feet wide with an average seafloor slope of approximately 1.9 degrees. Three pipelines would be placed within the corridor. Distances between the three subsea pipelines would range between 50 and 200 feet.

Approximately 18,000 feet northwest of Gail, the corridor turns north and crosses the northern slope area to connect with Platform Grace. Crossing the northern slope area at this location was

necessary to avoid the numerous submarine slumps located on the eastern portion of the northern slope area. Approximately 3,000 feet of the corridor overlies a buried ancient slide deposit at the Platform Gail site vicinity. A pre-installation site specific geophysical survey of the pipeline routes within the 1,000 foot corridor will identify site specific areas of potential seafloor instability to be avoided, if any. Placing the pipelines directly on the seafloor reduces potential soil loading caused by slumps and enables the line to deform without rupturing. In addition, earthquake loads are less on exposed pipelines because forces are proportional to the amount of soil restraint around the pipeline. Surface sediments on the seafloor within the pipeline corridor consist of silty sand to sandy silt and should adequately support the pipelines.

Conclusions

The Commission has reviewed Chevron's offshore geotechnical studies and concludes that all potential geologic constraints at the platform site and within the pipeline corridor have been identified. Proper mitigation of these constraints includes: the measures outlined above; the jacket fabrication safety procedures listed under Responses to Commissioner's Questions above; avoidance (routing the subsea pipeline around active slump areas); and engineering design (deep founded piles for the platform). Therefore, the Commission finds that the proposed platform and subsea pipelines within the pipeline corridor meet the requirements of Section 30253 and 30262 of the Coastal Act as they relate to geologic hazards. The Commission, at its discretion may apply Coastal Act Section 30260 when projects are inconsistent with other Sections of the Act. In this instance, Chevron's proposal is consistent and therefore must be evaluated under Coastal Act Section 30260, pursuant to Coastal Act Section 30262. Under Coastal Act Section 30260(1) the Commission finds Chevron may have evaluated alternative locations for the pipelines and platform, however, the Commission does not have adequate information on the feasibility or degree of hazard resultig from alternative locations. Therefore, the Commission finds the proposed project may not be in the least environmentally damaging location, consistent with Coastal Act Section 30260(1). However, by avoidance and design of project components, the Commission finds Chevron has mitigated the proposal to the maximum extent feasible consistent with Coastal Act Section 30260(3) for geologic hazards at the proposed site. Public welfare, Coastal Act Section 30260(2), is addressed at the conclusion of this report.

8. Air Quality

Several provisions of the Coastal Act relate directly to the consideration of air quality. Additionally, Section 307(f) of the Coastal Zone Management Act directs that federal, state and local provisions adopted to implement the Clean Air Act (CAA) shall apply under state coastal management programs.

Section 30253 of the Coastal Act states in part, that:

> "New development shall...(3)[b]e consistent with the requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development." [*]

Section 30250 further requires that new development be located where it will not have "significant effects, either individually or cumulatively, on coastal resources." Cumulatively is defined in Section 30105.5 to mean:

> "...the incremental effects of an individual project shall be reviewed in connection with past projects, the effects of other current projects and the effects of probable future projects."

Additionally, under Section 30262 the Commission requires that coastal-dependent oil and gas projects meet the criteria of Section 30260. One of the three criteria of Section 30260 requires that environmental impacts be mitigated to the maximum extent feasible.

Project Description and Emissions

Emissions would be generated during two phases of this project: during platform installation and construction, and during the platform operations (development and production) phase. Platform construction would require approximately six months while the project development and production phase would extend for approximately 32 years.

Major emission pollutants are oxides of nitrogen (NO_x), reactive organic compounds (ROC), particulate matter (PM), carbon monoxide (CO), and oxides of sulfur (SO_x). The operation of the gas turbines and diesel engines results in: NO_x emissions, which

[*] Although neither the Air Resources Board (ARB) nor the affected air pollution control districts (APCDs), Ventura and Santa Barbara Counties, have established specific requirements for emissions from OCS sources, the emissions expected from Platform Gail have been evaluated by the staff of these agencies against the requirements of these agencies for onshore sources. The ARB staff have indicated that the project would be consistent. The Commission also interprets the statements of the Ventura County APCD staff and the Santa Barbara APCD staff as concluding that the project would be consistent with its requirements. It is not necessary at this time to consider the legal status or applicability of those requirements.

are formed by the high temperature reaction between nitrogen and oxygen in the combustion air; ROC, PM and CO emissions from incomplete fuel combustion; and SO_x and PM emissions from fuel contaminants and flaring of high sulfur content gas.

Emission sources include: construction equipment for the platform and pipelines, operation of platform flares, power generation equipment, crew and supply boats, helicopters, pipelines from the platform to the processing facility, pipelines from the processing facility to refinery destinations, and gas processing facilities on Platform Grace and onshore at Carpinteria. Emissions from the pipelines are expected to be minor unless an upset condition such as an oil spill or gas leak occurs. Chevron has stated that additional emissions from onshore sources would not be generated from the processing, storage and support facilities located at the Chevron Carpinteria site.

The power plant on the platform consists of three turbine generators, two operating at a total of six megawatts and one spare, each with dual fuel capacity. Platform turbines would operate on gas supplied by Platform Grace five miles to the north until Gail produces natural gas from drilled wells. Diesel emissions would be generated from diesel starting engines for the gas turbines, air compressors, an emergency generator, firewater pump, and two deck cranes. Peak operation emissions on the platform would occur during the fourth year when peak power demands would be generated from a central power plant.

The project as originally proposed by Chevron included some air pollution controls, however, project emissions would not be eliminated. Peak project emissions would occur during project construction. NO_x emissions during construction are estimated to be 190 tons during a six month time period, while 25-40 tons per year are expected to be generated during the project's 32 year development and production period. The construction emissions are significant, equating to about 13 times the average daily development operation and production emissions.

Air Quality in South Central Air Basin

Pursuant to the federal Clean Air Act, Ventura and Santa Barbara counties have been designated as being in non-attainment for ozone, meaning that these counties do not meet the federal ambient air quality standards for that pollutant. The ambient air quality standards are health based, that is, levels above the designated standard are considered a threat to health. Ventura County is attempting to reach attainment for ozone as quickly as possible, however their current plan shows they will not attain the clean air standard for ozone by the year 2000. Santa Barbara County is attempting to reach attainment by 1987-88. As authorized by the Clean Air Act, and in accordance with requirements of the State

Health and Safety Code, the state has adopted more stringent standards for these pollutants. California Health and Safety Code provisions require that air pollution control districts (APCDs) establish air quality programs and rules and regulations for the attainment and maintenance of the ozone and other standards.

The meteorological conditions of California's coastal areas are responsible for the transport of pollutants released offshore to inland areas. Pollutants released from Platform Gail in the Santa Barbara Channel are projected to come onshore in Ventura County (Exhibit 19), although some may impact Santa Barbara County and Anacapa Island. Anacapa Island is part of the Channel Islands National Park and Marine Sanctuary 6.5 miles south of the proposed project that is being considered for designation as a Class I Prevention of Significant Deterioration area.

According to recent EPA report, Ventura has county-wide ozone problems that are third worst in the state and the sixth worst in the nation. It has been demonstrated that winds flow onshore from the proposed Platform Gail location to areas of Ventura County (Exhibit 19). A platform located as far as 90 to 100 miles offshore from Ventura County is capable of adversely affecting ozone concentrations in Ventura County, as noted in the air modeling study conducted by Chevron for operations. Thus, these emissions may contribute to further degradation of air quality and to additional violations of applicable standards, either individually from the applicant's project, or in combination with other offshore and onshore development in the area.

There may be significant sanctions if the districts continue to be or are classified as being in non-attainment status under the Clean Air Act. These impacts could include: a prohibition on new development, the costs to local businesses of retrofitting facilities; the cost of EPA-imposed sanctions; and the cost to local governments to develop and enforce non-attainment plans. The emissions may also result in increased health care costs, losses in tourism due to decreased visibility, costs to automobile owners for vehicle inspection and maintenance in areas where it is not already required, and harm to natural resources and agriculture-based industries. As noted above, the federal standard is health-based. Levels above the standard (in Ventura and Santa Barbara counties) are considered damaging to public health.

Cumulative Air Impacts

One of the most pressing questions raised by this proposal is the determination of the effect of this proposed project on pollutant concentrations in the eastern Santa Barbara Channel and adjacent onshore areas. This question requires an analysis of the cumulative impacts both on and offshore of: project emission sources, existing and future oil and gas development sources, and non-oil and gas development sources.

The Chevron project, as discussed above, may result in air quality impacts on Ventura County and potential impacts in Santa

Barbara County. Both of these areas are in non-attainment for certain pollutants based on health based air quality standards. Additionally, these pollutants may cause or contribute to reductions in visibility.

To enable the Commission to fully address these impacts, staff requested that Chevron provide a cumulative impacts or worst case analysis. Whether cumulative impacts have been addressed consistent with the Coastal Act cannot be determined solely on the basis that individual impacts have been fully mitigated for several reasons. To begin with, coastal resources are limited and while the adverse impact on coastal resources of a single project's discharge may be negligible, the cumulative adverse impacts of several similar projects may be significant. Consideration of individual impacts only does not take this factor into account. The Coastal Act states expressly the Legislature's concern with the orderly and balanced use of limited coastal resources (Sections 30001, 30001.5 and 30004). Sections 30250 and 30260, particularly as applied through Section 30262, call for consideration reflecting these statements of legislative intent.

With respect to air quality, the orderly use of limited resources involves consideration of the extent to which a project will use up available air quality increments and/or offsets which would otherwise remain available for other projects. If these increments or offsets become unavailable, later projects, including projects in state waters could be precluded by air quality requirements applicable independently or through the Coastal Act, or by other Coastal Act considerations. Thus, the Commission must consider not only whether individual impacts have been mitigated, but also whether additional measures, such as phasing or staging, operation limitations during peak emission periods, or offsets at a greater than 1:1 ratio are available and feasible to address cumulative impacts under Sections 30250 and 30260. In regard to public welfare, the Commission must also consider whether the impacts remaining after mitigation are so great as to result in a detriment to the public welfare. This could result, for example, where the offsets necessary to reduce project emissions to acceptable levels are so great as to preclude other important coastal uses.

It is therefore desirable, for planning purposes, for the Commission to have information to determine the cumulative impacts of adding this project to existing and proposed projects now under consideration. Although this project is considered by the MMS as the third platform within the unitized Santa Clara Unit, it is the twenty-first (21) platform within one general air basin extending from Point Conception on the west to Ventura/Los Angeles County line. There are twenty (20) existing platforms in the Santa Barbara Channel. As proposed for planning purposes by the MMS and State Lands Commission, there may be nine (9) new platforms, including this one, in the same area. Therefore, the expected build out consists of twenty-nine (29) platforms.

SANTA BARBARA CHANNEL

20 EXISTING PLATFORMS		9 PROPOSED PLATFORMS
Gina	Hondo	Gail
Gilda	Heidi	Harmony
Grace	Hope	Heather
Hogan	Hazel	Heritage
Houchin	Hilda	Haven
Henry	Holly	Hawk
Habitat	Helen	Heron
Hillhouse	Herman	Hercules
A	Harry	Hayley
B	C	

These twenty-nine (29) platforms exclude the thirty-one (31) existing and proposed platforms considered to be the build-out for the area north of Point Conception in the Santa Maria Basin and in state waters. Consequently, approximately 60 platforms constitute the expected maximum build-out for the Santa Barbara Channel and the Santa Maria Basin.

The modeling analysis submitted by the applicant does not examine cumulative air emission impacts. Information to conduct this analysis is necessary for the Commission to determine, consistent with Sections 30250 and 30262, whether and to what extent potential effects could be minimized by further air mitigation measures and offsets or consolidation with other existing or projected projects.

Two extensive air modeling studies are currently underway which would include offshore emissions from the area of the Chevron project. New data is being generated in the Joint Interagency Modeling Study (JIMS) and the South Central Coast Cooperative Air Monitoring Program (SCCCAMP). The studies include the development of new modeling approaches which would more accurately assess impacts than currently available data. Additionally, new modeling is being devised in Ventura County APCD's 1987 Air Quality Management Plan Update.

Both Ventura County APCD and the ARB have expressed concerns with existing models. New models are currently being developed under the JIMS and SCCCAMP. In view of the ongoing studies, requiring Chevron to provide cumulative impacts information at this time would be duplicative and result in unnecessary costs and delays. This situation differs from the Cities Service proposal, where other studies were not expected to provide necessary cumulative impacts information. Additionally, in this instance Chevron's platform would be the last of a unitized development rather than initiating development in a lesser developed area where more planning options remain.

The need to consider cumulative impacts from OCS projects in the evaluation of onshore proposals was recently emphasized in the case of Citizens to Preserve the Ojai v. County of Ventura (1985) 176 Cal.App.3d 421. The court found it improper for the County to

utilize an EIR which relied wholly upon an Air Quality Attainment Plan which excluded OCS data from its evaluation. The Court determined that the County must use its best efforts to find out and disclose all that it reasonably can about the onshore cumulative impact of offshore projects. In this decision, the Court recognized that offshore projects may result in significant onshore impacts in Ventura County. Thus, the decision underscores the necessity for a cumulative impacts analysis for offshore projects.

Further, the Commission has expressed concern in the review of future federal lease sales about the need to identify potential cumulative impacts. The Commission's concern with cumulative impacts is also stated in its Record of Decision objecting to Gulf's POE for OCS P-0505, its Response to Appeal, and Request for Reconsideration. These documents are incorporated by reference in these findings.

Request for More Information

As submitted, the applicant's DPP and ER did not include a thorough discussion and analysis of the project emissions and their consistency with the Air Resources Board (ARB); Ventura County or Santa Barbara County APCD requirements. On March 31, 1986, Commission staff requested additional information from the applicant and the Minerals Management Service on the individual and cumulative impacts resulting from the proposed project, such as: what are the detailed project mitigation measures Chevron is proposing; does the air modeling study conducted by Chevron include worst case analyses; what are the ARB and county APCD comments on the proposal; and why were gas turbines chosen over electric grid power? A final question asked: what were the potential cumulative impacts of existing development, Platform Gail, and any reasonably foreseeable onshore and offshore oil-related development in Santa Barbara and Ventura counties, that might result in further impediments to the counties' ability to attain and maintain applicable ambient air quality standards and to avoid air quality degradation?

Section 30250 requires that development not be permitted where it would have significant adverse effects, either individually or cumulatively, on coastal resources. The Commission's sixty-day letter (Exhibit 9) to MMS and Chevron noted the applicability of this section, and specified that a necessary component of the Commission's analysis were the comments of the ARB and the APCDs. The letter indicated that the Commission would be seeking comments on the adequacy and completeness of the air model impact assessment. Santa Barbara and Ventura county APCDs requested specific additional information and Santa Barbara indicated the need for a new EIS. The Commission has previsouly allowed applicants to provide the analyses equivalent to an EIS in another form. (Cities Service, CC-16-85, September 24, 1985). The following sections outline the comments from various agencies in responding to the Commission's request for more information.

Response from Minerals Management Service

MMS responded on April 15, on April 30, and on May 12, 1986, to staff concerns outlined in the Commission's 60 day letter (Exhibit 9) and noted that construction emissions were not considered in the air quality assessment, in accordance with an ARB and Chevron agreement in 1984. In addition, according to Department of Interior (DOI) standards, they are below the federal emission exemption levels. Thus, according to the DOI regulations, (Title 30 CFR 250.57-1(d)), no significant onshore air quality impacts are expected.

MMS states that tie-ins of production from Platform Gail to facilities at Platform Grace would cause minimal emissions. These connections would not cause a significant increase in fugitive emissions, which are calculated based on the number of valves, flanges, etc., in a facility. In this project's case, the number of those connections are not expected to increase.

MMS addressed the issue of cumulative impacts by referring to the System Applications, Inc. (SAI) report prepared for Chevron to determine the impacts of the project. Neither this report nor any other documents submitted by Chevron contains any specific analysis of project cumulative impacts on air quality. The Ventura County APCD was not consulted during the preparation of this report and has questioned its usefulness. Chevron and MMS have both stated their reliance upon future information generated by the Joint Interagency Modeling Study (JIMS) to determine cumulative photochemical impacts from OCS development in the Santa Barbara Channel. Unfortunately, the results of this study are not available at this time.

The Commission findings specify that all measures identified as amendments to the DPP, must be incorporated into the project and accepted by MMS. The Minerals Management Service recently chose not to require some of the air quality mitigation measures from the recent Chevron Hermosa EIS/R. These omissions reduced the Commission's confidence in this approach and make the argument that the Commission must have all the information and potential mitigation measures identified and agreed upon, prior to the time the consistency concurrence is made. Chevron has made numerous committments specifying that these mitigation measures are to be included in the DPP. Unlike prior projects before the Commission, in this case, specific provisions have been made by Chevron to assure the Commission that the various mitigation measures will in fact be carried out. This would provide the basis for any Commission action of concurrence.

Response from Air Resources Board

The ARB has submitted a memo from James Boyd, ARB Executive Officer, to John Doyle, Deputy Secretary of Environmental Affairs dated February 27, 1986. The ARB initially commented that a "more thorough air quality analysis should be prepared for this project,

due to the magnitude of the emissions." ARB further requested that additional documentation be provided on the potential for emission changes through the use of an electric subsea cable as an alternative to the gas turbines, and other issues.

At a meeting April 25, 1986 with the ARB and other interested agencies including Chevron, ARB representatives stated that Chevron had answered the ARB's questions, and that the ARB was satisfied with the electric cable analysis. The only issue remaining in ARBs eyes was their eventual response to the results of the operation emissions air modeling study.

On May 15, 1986 ARB followed up on the meeting with a letter from Jananne Sharpless, Secretary of Environmental Affairs to Secretary of Interior Hodel, indicating that ARB had reviewed additional information received from Chevron in response to their comments and concluded that their concerns were resolved (Exhibit 10). ARB stated that "Chevron has provided sufficient information to make a decision on the feasibility of using a power cable," and notes that the Ventura County APCD has agreed to accept offsets as an alternative to a cable. However, ARB did not make any conclusion or determination regarding the feasibility of a cable. The letter reiterated Chevron's commitments and stated that when MMS incorporated Chevron's commitments, ARB concerns would be resolved.

Response from Ventura County APCD

According to the Ventura County APCD, this project would generate significant emissions upwind of their County such that, if the proposed activity were located onshore, it would be one of the largest sources of oxides of nitrogen (NO_x) and reactive organic compounds (ROC) in the County.

The Ventura County APCD has devoted substantial time and effort in its review of Platform Gail. In letters of February 28, 1986 and May 16, 1986 (Exhibit 11) the APCD staff concluded that Chevron's project had to be treated differently than normal District procedures and requirements.

The District requires that BACT be applied for sources emitting more than 25 tons per year of reactive ROC, or NO_x, and that remaining emissions be sufficiently offset to provide a net air quality benefit. The District also requested additional information on the electric cable alternative. The District further requested that Chevron provide a reimbursement plan for District expenses to compensate for the time required to review the proposal pursuant to the Commission's consistency determination. Chevron provided the additional information on the electric cable, agreed to change the DPP in an attempt to meet Ventura County APCD requirements, but declined to reimburse the Ventura County APCD for staff expenses.

Chevron committed to the following specific project amendments to reduce air quality impacts in an attempt to meet the requirements of Ventura County APCD (Exhibit 14).

1. During pipeline and platform construction, offset all ROC emissions and about fifty-three percent (53%) of the NO_x emissions. Forty-seven percent (47%) of the construction NO_x emission were not to be mitigated. (However, Chevron made additional commitments to meet other Coastal Act requirements later.)

2. Crew and supply boats with low emission levels would be given preference, if available.

3. During the development and production phase, Chevron commits, based on modeling, to fully mitigate ozone impacts caused by development emissions, including impacts from crew and supply boats by providing a certain number of tons of NO_x offsets based on modeling within the projects air basin impact area. (The results of the model indicate the need to offset 122 tons of NO_x.)

4. Gas turbines with water injection (reducing emissions by 70%) would be used. (The Ventura County APCD agreed that gas turbines represent BACT in this instance.)

5. Implement a fugitive emission inspection and maintenance program to meet BACT. Provide program logs, in addition to NO_x control compliance data, to MMS and directly the Ventura County APCD for District review.

6. Meet District requirements for low sulfur fuels and hydrogen sulfide and pay a $1000 per day penalty if non-emergency flaring takes place.

7. Provide the District with project compliance data to allow the District direct access to this information in the event MMS does not agree to provide data to the District.

8. A compliance enforcement agreement states that these commitments would be a condition of the MMS permit. (MMS has since agreed to accept proposed changes to the DPP, but will not enforce aspects of the proposal that go beyond MMS's federal requirements. Chevron and the Ventura County APCD have signed a separate agreement for enforcement of these commitments.)

The District concluded that:

"The proposal is consistent with the District's Rules, Regulations, and practices. Construction emissions in the OCS are unaccommodated in the Air Quality Management Plan. To be consistent, the emissions must be fully offset. The District believes Chevron has committed to mitigate the construction emissions to the extent feasible and that the Coastal Commission

could make a similar finding. This would be consistent with onshore land use decision practices. Rarely are land use permits denied because of construction emissions. Land use decision bodies typically look for mitigation to the extent feasible." (emphasis added)

According to the District, their Air Quality Management Plan includes a "growth allowance" for some construction emissions. For onshore projects whose operations emissions will be consistent with district requirements, construction emissions not included in the growth allowance, are found to be inconsistent. Construction emissions are then allowed only if mitigated to the extent feasible. No APCD permit is required for the construction phase. A determination as to whether construction emissions are mitigated to the extent feasible is made by the local land use planning body through CEQA, based on consultation with the APCD. The plan does not provide a growth allowance for project emissions on the OCS.

Under Ventura County APCD regulations, offsets are determined based on emissions anticipated at the source, rather than on the basis of modeling. Chevron's commitment specifies that offsets would be provided on a 1.1:1 ratio based on modeled results. Modeling is used to account for such factors as distance and trajectory.

Chevron's proposed model was accepted by ARB and the Ventura County APCD even though this modeling approach is inconsistent with Ventura County APCD requirements. Chevron agreed to provide emission offsets, on the basis of the model, at a rate (1.1:1) approximately equivalent to District standards. This offset ratio is slightly less than what is customarily used in the District (1.2:1 or 1.3:1 and up to 1.6:1). However, after the model was run the results yielded a larger number of required offsets than what would be expected using a simple point source analysis. The net effect is that Chevron would be providing offsets commensurate with the project's impacts onshore (122 tons of NO_x), not just the impact at the source (25 - 40 tons of NO_x). Use of the lower ratio (1.1:1) and the model approximates District standards.

In addition, Chevron has committed to retire 10 tons of NO_x emissions from their bank to provide a net air quality benefit for Ventura County. Chevron's provision of this benefit argues in part against the need for electric grid power to reduce platforms emissions (see further discussion below). Ventura County qualified their consistency determination (Exhibit 11) in two ways. First they state that in order to be consistent, construction emissions must be fully offset. At the time of their letter, Chevron was not proposing full offsets. Secondly, Ventura County states that mitigation is provided to the extent feasible, not to the maximum extent feasible. Nonetheless, the Commission interprets the District's May 16, 1986 letter to find that the proposal is consistent with the District's rules, regulations and practices. In view of the District's statement with respect to the handling of

onshore construction emissions, and its statement that the proposal is consistent with the District's rules, regulations and practices, the Commission finds that requirements imposed by the Ventura County APCD, to the extent they apply pursuant to Section 30253(3), have been met.

Response from Santa Barbara County APCD

Santa Barbara County APCD responded February 28, 1986 to the Commission's request that it review the project for consistency with its requirements in a letter to Secretary of Environmental Affairs, Jananne Sharpless. The district's letter includes the following specific comments: an EIS should be prepared addressing cumulative construction and operation impacts, impacts of onshore and offshore facility modifications including prolonging the operational life of existing related facilities (Carpinteria gas plant - see Onshore Facilities); all onshore air quality impacts should be examined; all feasible measures to reduce ozone precursers should be included in the project; and details of the Carpinteria facility modifications should be provided. The district further responded to the Commission's request on June 16, 1986, by noting District requirements as follows:

> "Prior to processing Platform Gail production through the Carpinteria Plant, Chevron must expand their existing APCD permits to provide for this source of production. Chevron will need to demonstrate to the APCD that this new source of production will not increase the emissions associated with this facility or Chevron will need to modify their permit to provide for any increase in emissions."

Further, Santa Barbara County APCD supports Chevron's proposed reduction of project emissions through the use of onshore emission offsets and project control measures to ensure protection of the air quality of the air basin.

Because the Carpinteria Plant is an onshore facility, and any increase in emissions would result in District permit review, compliance with District rules will be assured. Chevron has stated that no increase in emissions would occur and they would not exceed existing permitted levels at the plant as a result of production from Platform Gail.

Compliance with other Coastal Act requirements

As discussed above, Section 30262 sets forth specific requirements for oil and gas projects. That section specifies that such projects shall be approved in accordance with Section 30260, if certain requirements are met. Thus, the Chevron project must be found to meet the three conditions of Section 30260, even where consistent with Commission policies. (See Conoco, CC-29-85, November 21, 1985). Also, if the Commission finds the project cannot feasibly be accommodated consistent with the requirements of

Section 30250, at its discretion, it may apply the provisions of Section 30260 to "override" this inconsistency.

Conclusions

In addition to the mitigation measures Chevron has committed to, in order to resolve the concerns of the ARB and the APCDs, Chevron has made commitments attempting to address the cumulative impacts of the project. Cumulative air quality impacts result from the contribution of a project to emissions from other past, existing and anticipated projects, whether onshore or offshore. These impacts may result from the overlapping effects of coincidental projects, as well as from the effects of sequential, but not overlapping projects. As discussed in the Commission's Request for Reconsideration in the Gulf Appeal (May 6, 1986, incorporated by reference herein), impacts of short duration may be significant cumulatively in view of other ongoing projects, or where several short-term projects may result in a sustained level of impacts.

Chevron has agreed to an extensive mitigation package, going significantly beyond that which met ARB and APCD concerns. The package was an attempt to meet the requirements of Coastal Act Section 30260(3) as applied through Section 30262 (that impacts be mitigated to the maximum extent feasible). The mitigation package consists of the following:

1. Chevron will provide offsets for an additional 19% of ROC and NO_x emissions, and up to 100% of the remaining emissions by utilizing the entire amount of its applicable banked emissions (135 tons). Chevron will purchase an additional 50 tons of offsets (as per Chevron's verbal testimony on July 8, 1986). Chevron sought the additional offsets by contracting with an air emission offset brokerage firm who conducted a three week search for available offsets. Fifty-five tons of offsets meeting certain criteria were identified as available and Chevron committed to purchase of 50 tons to be applied for a one year term during construction. Per Ventura County requirements and Chevron's contract, available offsets must be located in the project's air basin impact area.

2. Chevron has committed to write specifications and contract with a company that will provide special crew and supply boats that generate lower pollutant emissions than standard marine engines.

The effect of Chevron's commitments must be evaluated against the provisions of Sections 30250 and Section 30260. In this instance, the evaluation is made difficult by the fact that Chevron and MMS has not provide the requested cumulative impacts analysis. The Commission concluded that the mitigation package agreed to by Chevron does not provide for the mitigation of cumulative impacts which may be determined to result from the project because not all emissions would be mitigated.

This mitigation package would for the most part eliminate individual impacts; however, in doing so they would use up a significant portion of the offset bank available for other onshore or offshore projects. Thus, the project would reduce coastal development opportunities. Although its additive impact in terms of air pollution would be minimal, the Commission finds that, in the absence of information enabling it to fully assess this impact, and to identify the extent of any displacement or preclusion of future facilities, it cannot find this project to be consistent with Section 30250 of the Coastal Act.

However, where a project cannot feasibly be accommodated consistent with Coastal Act policies, the Commission may nevertheless approve it based on the three criteria of Section 30260, which must also be considered because this is a coastal-dependent oil and gas project. As discussed above, the mitigation measures now committed to by Chevron were also provided to meet the requirements of Section 30260 as it applies through Section 30262. Other portions of this report cover findings for Section 30260(1) and (2). The project's consistency with Section 30260(3) is discussed immediately below.

Chevron has committed to offset annually all operation emission impacts, and to set aside additional offsets, thereby providing a net air quality benefit for Ventura County. Chevron has also agreed to offset 71% (135 tons) of construction emissions, thus committing for the period of construction, their entire offset bank in the affected air basin in Ventura. Up to an additional 26% (50 tons) of these emissions would be offset by Chevron, based upon results of the air brokerage contract. Chevron commits to purchase up to 50 tons of NO_x offsets, to further offset project emissions for a one year time period, because they are currently available, located in the impacted air basin, and competitively priced. Chevron has committed to surrender 5% (10 tons) of the construction emissions to Ventura County APCD as a net air quality benefit over the long term. The remaining construction offsets would be returned to their owner after the one year time period and Chevron's construction period has concluded.

Further, Chevron has committed to use low emission crew and supply boats that should reduce emissions by about 40% over standard marine engines. Chevron is participating with Santa Barbara County APCD, pursuant to permit conditions on their Gaviota/Point Arguello Field processing facility, in a study to further reduce emissions generated by crew and supply boats.

As noted in Chevron's May 13, 1986 letter to Mr. Richard Baldwin, Chevron considers their NO_x offsets during operations as an interim measure. This committment recognizes that new data is expected to be available to better assess project impacts upon completion of either the SCCCAMP study or the 1987 AQMP revision for

Ventura County. The Department of the Interior negotiated rule making may provide additional new information. Based upon the results of these studies, Chevron hopes to mitigate any additional incremental on-shore impacts, or to be allowed to rebank any excess offsets if the impacts are less than those committed for offsets. The Commission finds, and Chevron has agreed, that any desired revisions as a result of new information will require a subsequent consistency review. Prior to such subsequent review, the Commission finds that Chevron must complete an appropriate cumulative air impact analysis in consultation with ARB, Ventura and Santa Barbara County APCDs, and the Commission in the event of any subsequent consistency review for Platform Gail.

The Commission finds that Chevron has provided significant mitigation measures to compensate for the air pollution anticipated to be emitted from project construction and operation. At the hearing, Chevron made an additional commitment to offset nearly all of the remaining unmitigated impacts resulting from construction. Impacts resulting from operation have been fully mitigated by Chevron's offer to empty their bank of offset emissions and retire a certain number of air offsets in perpetuity which would result in a net air quality benefit for Ventura County.

However, the Commission finds that this is insufficient mitigation and that there are additional feasible mitigation measures. Although Chevron is providing 135 tons of NO_x offsets from their bank, and purchasing an additional 50 tons, the total construction emissions are estimated to be 190 tons. Chevron is proposing 185 tons of offsets. In order for the Commission to find the project mitigated to the maximum extent feasible, Chevron should fully offset the impacts of the project by providing an additional 5 tons of offsets for construction and/or address cumulative impact concerns. Therefore, the Commission finds the proposed project inconsistent with Section 30260(3).

As discussed in further detail below, the Commission finds the proposed project inconsistent with the public welfare Section 30260(2) because of the impacts which remain after proposed mitigation and the burden upon the public health. The Commission finds that concurrence with this proposal in regard to air quality would adversely affect the public welfare.

9. Onshore Facilities

Chevron proposes to obtain 8,400-21,000 gallons of fresh water per day from onshore sources at Port Hueneme. The water is potable, but it is supplied in non-potable water tanks because it is intended to be used for drill mud preparation, washdown and rig maintenance over the +/- 6 year drilling phase. Potable water would be supplied by desalination units on the platform (Exhibit 16c).

Current Water Situation in Ventura and Santa Barbara Counties

Municipal water and sanitary sewer systems at Port Hueneme in

Ventura County are provided by the United Water Conservation District. Water is a particularly critical resource in Ventura. In portions of the County current water usage exceeds the safe yield of present water supply in the developed underground water basins. The overdrafting of groundwater is causing an estimated 60,000 to 80,000 acre-feet per year deficit in Ventura County. Current population projections will continue to deplete available and projected water supplies by up to 73,000 to 93,000 acre-feet per year by the year 2000 (A.D. Little, 1984).

In Santa Barbara County, water supply is a critical factor in assessing any new growth or development. Current water usage exceeds the safe yield of present water supplies, a situation caused mainly by high demands for water for irrigated agriculture, which accounts for 70 percent of the total water demand (Texaco, 1983). Approximately 75 percent of the County's water supply is extracted from groundwater basins, the balance is stored in surface reservoirs located on the Santa Ynez River.

The County is currently experiencing a water supply deficit of 40,000 acre-feet per year. The deficit is caused by overdrafting the groundwater basins, i.e., extracting more water than is replenished by rainfall. Projecting water demands to the year 2000 (based on population projections), the Santa Barbara County Water Agency anticipates that this deficit will increase to 73,600 acre-feet per year unless water usage is reduced to eliminate overdrafts, new supplies are developed within the County, water is imported from outside the County, or some combination of these options is implemented (Texaco, 1983).

Water Conclusions

The platform would use desalinated salt water. Some bottled water would be purchased from local distributors. The supply base at Port Hueneme relies on the municipal water supply. This is the source of water to be used for both crew and supply boats originating at Port Hueneme. Desalination units would be operating on work barges during construction to minimize the need to purchase onshore water supplies. The Commission finds that the proposed water use would have a unknown individual adverse impact on onshore water supplies and an unknown cumulative impact because information has not been provided on the quantities to be purchased and water demand from other coastal dependent development. The proposal is therefore inconsistent with Section 30250(a). The Commission finds there is inadequate information to determine that the project is mitigated to the maximum extent feasible. The Commission finds the proposal inconsistent with Section 30260(3) as it relates to water.

Onshore Processing Facilities

The gas from Platform Gail is proposed to be processed (to include odorizing of pipeline quality gas) at the Carpinteria

facility in Santa Barbara County. The plant is currently operating at 5 to 10 million standard cubic feet per day (mscf/d). Chevron's proposed gas could increase the plant's through-put to 23 mscf/d in conformance with the air quality permit issued by the Santa Barbara County Air Pollution Control District (APCD). Chevron obtained these permits in anticipation of receiving gas for processing from Platform Gail. Santa Barbara County APCD has requested Chevron to either substantiate their assertion that emissions would not increase as a result of processing new gas from Platform Gail or apply for an amendment to the existing permit. Chevron has stated that there would be no increase beyond permitted levels and no equipment modifications are proposed at Carpinteria.

The level of hazard and compatibility of surrounding land uses was investigated because the Carpinteria facility is surrounded by residential, public safety facilities (fire and police stations), and commercial development. Recent development proposals east of Carpinteria, have raised the question whether increased gas processing at the facility as a result of Platform Gail would increase the size of the facility's hazard zone. Chevron has stated that a 200 foot safety buffer zone was established as a hazard footprint around the Carpinteria gas processing facility, based upon the maximum permitted operating capacity of the facility. Since no changes to the permit are proposed, except the source of gas to be processed, the buffer zone would stay the same.

Since the facility has a permit to operate at the gas processing level proposed as a result of this project, Chevron does not need any additional coastal permits to process gas from Platform Gail. In this case, the existing and proposed surrounding developments will have to take into consideration the safety zone and hazards created by the existing Chevron facility in the City and County coastal planning processes.

Offshore Processing

Chevron's proposed project is designed to conduct much of the oil and gas processing offshore. Gas processing would occur on Platform Grace, while oil dehydration would occur on proposed Platform Gail. Offshore processing precludes the need to expand Chevron's Carpinteria onshore gas processing facility.

This project is distinctly different from a project nearshore in state waters that may propose platform processing. Platform Gail is about 20 miles offshore of Carpinteria and 5 miles south of the existing Platform Grace which has additional gas processing capacity on the platform. Platform Gail is a step-out project, well beyond existing platforms and would utilize existing processing capacity.

Conclusions

Chevron proposes to partially process crude oil and gas on the platforms Gail and Grace prior to shipping products onshore via

pipelines. Once onshore, gas would be sent for further processing at the Carpinteria facility which is currently permited to process gas up to a limit of 23 mscf/d. No equipment modifications are proposed onshore and already permitted capacity would be used. There would be no new development as defined in Coastal Act Section 30106, however, the findings below address onshore impacts resulting from Platform Gail.

Since increased air emissions are dependent upon the number of connections (flanges, valves, etc.) and this number would stay the same with increased throughput from Platform Gail, the Commission finds that no additional adverse impacts are expected on air quality from the Carpinteria facility in Santa Barbara County.

The Commission finds that while existing onshore infrastructure able to accommodate the proposed activities is available, at some point in the future, there is likely to be more demand with a limited supply. Section 30001.5(b) directs the Commission to apply an orderly and balanced utilization and conservation of coastal zone resources. Concurrence with Chevron's proposal may cause a displacement effect and reduce the capacity available for future oil and gas projects. This is a case where the cumulative impacts of oil and gas development would constrain granting future development, therefore the Commission finds the proposed project inconsistent with Section 30250.

However, pursuant to Section 30260, the project may be approved if mitigated to the maximum extent feasible, and located in the least environmentally damaging location (Section 30260(1), and (3)). That Section also requires a public welfare finding, discussed below. To process the gas elsewhere could cause greater environmental damage in that a new location would have to be selected with resultant impacts from construction and/or renovation. The existing Carpinteria facility has the necessary permitted capacity and no additional equipment modifications are needed, therefore the Commission finds Chevron's proposed use of onshore facilities consistent with Section 30260(1). Because the Carpinteria permit was issued with a buffer zone to protect public safety, and it incorporates anticipated production from Platform Gail, mitigation measures are already in place for that aspect of the project. The Commission finds that modification of the Santa Barbara County APCD permit to accommodate production from Platform Gail appears unnecessary, except to reflect the <u>name</u> of the source of the gas, therefore, the Commission finds the proposed use of onshore facilities consistent with Section 30260(3). If a new APCD permit is found to be necessary, Chevron has agreed to submit to the Commission a consistency certification, thereby assuring consistency with the Coastal Act.

10. <u>Recreation and Scenic Resources</u>

The California Coastal Act contains stringent findings and policies to protect recreation and scenic resources. <u>Section 30001</u> states:

"The Legislature hereby finds and declares:

(a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.

(b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation. (emphasis added)

Section 30210 states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational 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. (emphasis added)

Section 30221 states:

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

Section 30251 specifically calls for the protection of scenic and visual qualities of coastal areas and the protection of views to and along the ocean. Section 30251 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. (emphasis added)

Section 30009 calls for the liberal construction of Coastal Act policies in order to accomplish its purposes and objectives.

The Channel Islands National Park consists of five of the Channel Islands (San Miguel, Santa Rosa, Santa Cruz, Anacapa and Santa Barbara Islands) and the waters from mean high tide to one nautical mile seaward. Major portions of Santa Rosa and Santa Cruz Islands are still in private ownership. Federal protection for the

Channel Islands began in 1938 when President Franklin D. Roosevelt established Anacapa and Santa Barbara Islands as the Channel Islands National Monument. In 1980, President James E. Carter signed legislation authorizing the Channel Islands National Park. Also in 1980, the waters within six nautical miles of the Channel Islands National Park were formally designated as a National Marine Sanctuary. The only other designated National Marine Sanctuary in California is the Pt. Reyes - Farallon Islands National Marine Sanctuary.

Because the Channel Islands are relatively remote from the heavily urbanized southern California mainland, the Park and Sanctuary provide a refuge for one of the largest and most diverse populations of marine mammals and seabirds in the world. Because of this rich natural resource diversity, the Channel Islands are often called the American Galapagos. As well as being designated a National Park and National Marine Sanctuary, the Channel Islands are internationally recognized as an International Biosphere Reserve - a part of UNESCO'S Man and the Biosphere Program.

The remoteness of the islands, which has protected the natural resources from human impacts, is also what lures sailors, backpackers, scuba divers, scientists, hikers, naturalists, artists, and other visitors of all ages to explore, enjoy and study the islands.

Anacapa Island (actually three small islets: East Island, Middle Island and West Island, connected by narrow reefs) is the island closest to the mainland (14 miles) and the most visited of the Northern Channel Islands. About 75,000 people per year visit Anacapa Island with an estimated additional 100,000 people who sail in the waters surrounding Anacapa. Visitor facilities on Anacapa are limited and designed to protect the wilderness experience on the island. Facilities include a landing dock, a stairway from the dock to the main island's trails, a small museum, a picnic area, a small group campground area, pit toilets, and a limited trail system with a self-guided tour.

The National Park limits useage to a maximum of 100 visitors at any one time on Anacapa Island. Once visitors climb the stairs from the dock to the island's plateau, they can take in beautiful and breathtaking vistas of the islands and the surrounding ocean. Anacapa is an open wind-swept and wild place and offers visitors a real "wilderness experience" - a sense of getting away from the urban mainland.

Actions are now being taken to expand public ownership through the acquisition of Santa Rosa Island and approximately 6,000 acres on the east end of Santa Cruz Island. Nearly 30,000 acres on Santa Cruz Island have already been acquired by the Nature Conservancy for permanent protection as wilderness and nature reserve. Once completed, the Channel Islands National Park will constitute perhaps the most "remote" national park in the Country outside Alaska. What makes the Channel Island National Park so unique is that although it

is "remote" in terms of the sense of wilderness it offers, it is actually located in relative close proximity to one of the most heavily populated areas in the nation. Its buffer from these urbanized areas is the ocean whose vastness necessarily forms an integral part of the adventure and beauty a trip to the park offers. This sense of distance both in terms of time and space constitutes an important element that is the essence of the quality of recreational experiences visitors come to the islands to enjoy.

Although admittedly impossible to quantify, there can be no doubt that the sense of place makes so much of California's coast the priceless natural resource it is. As the pressures of urban life increase in a growing land, more and more people are turning to their parks, recreation areas, and wilderness for both physical and spiritual relief and relaxation. One of the major challenges faced by modern and growing nations is to preserve the many qualities its remaining wild places offer while providing for economic growth and development. How well this challenge is met will be one of the most significant legacies by which future generations will judge those who went before them. Preserving the very qualities which led to the creation of the Channel Islands National Park and Marine Sanctuary is a vital part of that challenge. The Coastal Act embodies, in both letter and spirit, the policies to achieve this goal. At the same time, the Coastal Act recognizes the need to weigh carefully development and conservation demands. It is this weighing of the need to protect the tangible as well as intangible resources of the Channel Islands, while allowing industrial development in the Channel where the oil and gas resources this country needs are located, that constitutes one of the most difficult aspects of this project.

Chevron's proposed Platform Gail would be approximately 154 feet high above the ocean surface, 215 feet long and 135 feet wide. The platform would be painted a reflective white and marked with flashing lights. Because of its close proximity to the shipping lanes (within 2,053 feet from the buffer zone) the platform must be made extremely visible to ship operators to reduce the potential of ship collisions. The platform would be approximately six and a half (6.5) miles from Anacapa Island and a half (0.5) mile from the boundary of the National Marine Sanctuary.

On a fog-free day one can see most of the Santa Barbara Channel from Anacapa. Many of the existing platforms are visible, but are significantly more distant than Platform Gail would be (Platform Gail would be 6.5 miles from Anacapa, other platforms range from 7.5 to 40 miles distant). Platform Gail would be quite visible from all the major use areas on Anacapa Island, including the landing dock, the museum, picnic areas, and many of the trails and observation areas.

Platform Gail would be the closest platform to the Channel Islands National Park and Marine Sanctuary. The next closest platform is Union's Platform Gina (P-0202) approximately 7.5 miles northeast of Anacapa Island. (Approved by the Commission on

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November 7, 1979.) Gina is less visible from Anacapa than Gail would be because Gina is farther away from Anacapa and out of the main line of site of the major visitor use areas of Anacapa.

Of all the platforms in the Santa Barbara Channel, proposed Platform Gail would definitely be the most noticeable and have the most significant impacts on the recreation and scenic resources of the Channel Islands National Park and Marine Sanctuary.

The installation of Platform Gail and associated offshore construction activities would also be visible from Ormond Beach County Park, to beach users along the Ventura shoreline and passengers on the Amtrack rail line. Visual intrusion of Platform Gail on the horizon during drilling and production would not be unique to observers on the mainland shore due to the presence of other, closer platform structures. The platform's distance from the mainland shore (9 nautical miles [14km] at its closest point), the presence of other platforms, and frequent fog and haze would limit visibility.

Installation of the pipelines would have a temporary adverse effect on mainland coastal views. Visual intrusive effects of construction activities would be limited to a 6 month period.

The values of scenic resources and recreational experiences are subjective, intangible and very difficult to measure. The difficulty in quantification does not in any way lessen the extreme importance of protecting or mitigating the impacts of this project on the scenic resources and the wilderness character of the islands and surrounding ocean waters. Coastal Act Sections 30001(b) and 30251 require the protection of scenic resources and values. As described above, the visual impacts of this project are clearly significant, though possibly not quantifiable, and the project is clearly inconsistent with Sections 30001(b) and 30251.

Notwithstanding this inconsistency, the Commission may consider the project under Section 30260 and develop mitigation measures to address its recreational and visual impacts. Because of the required size and location of the structure and the need for high visibility as an aid to vessel traffic, it is impossible to reduce or directly mitigate the visual impacts of this project. Therefore, alternative mitigation measures were explored that would enhance visitor recreational experiences on Anacapa, and partially offset adverse visual impacts and the change in character of the island environs caused by this project.

The Superintendent of the Channel Islands National Park identified several projects that would enhance visitor recreation experiences on Anacapa and within the Marine Sanctuary. Chevron agreed to provide funding to complete several needed projects on Anacapa Island. These include: the restoration of upland and tidepool trails and vista points; the rehabilitation of the landing dock; enhancement of the marine interpretative facilities near the

dock; the construction of trailside exhibits interpreting the resources of the National Park and National Marine Sanctuary and the multiple uses of the Santa Barbara Channel; and any other projects (within the available funds of $150,000) deemed appropriate by the Executive Director and the Superintendent of the National Park and Marine Sanctuary. Within 30 days of Commission concurrence, Chevron committed to transmit the funding for these projects to The Friends of the Channel Islands National Park and Marine Sanctuary, a non-profit organization established to support, protect and enhance the Park. Any interest acrued by these funds would be used to implement the identified projects. Expenditure of the funds for specific projects on Anacapa will require written approval from the Executive Director and the Park Superintendent, in consultation with the Marine Sanctuary Manager and the Director of the National Marine Sanctuary Program.

Conclusion

As discussed above, because of its size and location the Commission finds that Platform Gail would have adverse effects on views to and along the ocean and scenic coastal areas from the mainland shore and Anacapa Island. Therefore, the proposed project is inconsistent with Coastal Act Sections 30210, 30221 and 30251 which call for the protection of scenic resources and recreational opportunities.

The Commission may consider the project for approval under Section 30260 if inconsistent with other Coastal Act policies, in addition to consideration pursuant to Section 30262. The platform is located just outside the boundary of the Marine Sanctuary and outside of the important nearshore waters. The Commission finds that an alternative location farther away from the Channel Islands National Park and Marine Sanctuary would be less environmentally damaging, and because of the location of the subsea oil and gas reservoir, it may be feasible to re-site the platform. The Commission finds that there may be other potential sites leased by Chevron and within the Sockeye Field on which the platform may be located and that may be less environmentally damaging. As a specific alternative, the Commission advises Chevron that it could present for the Commission's consideration information regarding the feasibility of other alternative locations in a subsequent consistency resubmittal. The Commission thus finds that there may be feasible, less environmentally damaging locations available for Platform Gail, and therefore the project is inconsistent with Section 30260(1).

It is quite difficult to directly mitigate the visual impacts of an offshore oil platform. This is especially true in the Platform Gail situation where, because of vessel traffic safety considerations, the platform must be made highly visible by reflective paint and special lighting. A variety of mitigation measures were explored to reduce the visual impacts. The Commission concluded that other than moving the platform, the visual impacts of the platform could not be reduced and that the only other

available mitigation measures were "offsets" to the visual impacts. The Commission finds that the most applicable "offsets" in this case are Chevron's provision of new and/or enhanced visitor facilities on Anacapa Island. These facilities would not directly mitigate or reduce the visual impact of Platform Gail, but would partially "offset" the impact by otherwise improving the visitors' recreation and educational experience on Anacapa Island. The projects chosen were specifically selected because they would fulfill actual visitor needs for the Park and Sanctuary and can feasibly be provided as a part of the Chevron project. However, the Commission found that additional recreation improvements would provide a direct and significant benefit to visitors using the area. In assessing the acceptability of the proposed indirect mitigation, the Commission recognizes that the Chevron project is closest to Anacapa Island and is thereby of great concern. Platform Gail would be located in an area where other projects have already somewhat disrupted the scenic vistas, and not in a entirely pristine, undeveloped area. Nevertheless, the Commission finds that the Chevron proposal does not provide maximum feasible mitigation and is therefore inconsistent with Section 30260(3). Additional park and sanctuary improvement projects and/or relocating the platform farther away from Anacapa may be possible alternatives.

11. Archaeology

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."

A marine cultural resources survey was conducted along the pipeline route in water depths less than 394 feet (225 meters) to determine the location of potential archaeological sites and artifacts in accordance with (NTL 77-3, Woodward-Clyde Consultants, 1981). Side-scan sonar data provided a cultural resource survey of the pipeline route (Woodward-Clyde) which indicates no anomalies along the survey route that could be interpreted as possible shipwrecks. All other anomalies were assessed as linear features (cables or anchor drag marks), existing pipelines, or low relief targets (possible scattered outcrops).

Based on the results of the cultural resource assessment, no archaeological sites or artifacts are expected to be encountered or affected by the proposed activities. Therefore, the Commission finds the proposed activities are considered consistent with this section of the Coastal Act.

12. Public Welfare and Alternative Locations

The Commission has concluded above that it could not find Chevron's proposal consistent with many of the policies of the Coastal Act. Therefore, the Commission may evaluate the proposal with respect to the override criteria set forth in Section 30260. The conditions of Section 30260(1), (2), and (3) apply as additional

requirements to all oil and gas facilities by virtue of the reference to Section 30260 in Section 30262. The Commission's findings have thus far determined Platform Gail to be inconsistent with two of the three criteria set forth in Section 30260(1) and (3) in the following policy areas: Marine and Coastal Resources, Crude Oil Transportation, Containment and Clean-up of Crude Oil Spills, Vessel Traffic Safety, Commercial Fishing, Air Quality, Cumulative Impacts, and Recreation and Scenic Resources. (The Commission findings note that with respect to Air Quality, the provisions of Section 30253 have been met. However, the Commission applied Section 30260 because it found the consistency certification to be inconsistent with Section 30250, and pursuant to Section 30262.) The Commission bases its objection to Chevron's proposal on Sections 30260(1, 2 and 3).

With respect to Section 30260(1), the Commission notes that, upon questioning by the Commission at the hearing, Chevron identified the proposed location as "the optimum" or "the most effective location" for maximum recovery from the Sockeye Field (Transcript p. 32 and 33). Chevron did not identify it as the only feasible location. The Commission cannot approve a project if a feasible, less environmentally damaging location exists. Therefore, the Commission finds that Section 30260(1) has not been met.

Section 30260(2) specifies that, in order to approve a project, the Commission must find that "to do otherwise would adversely affect the public welfare." This condition requires more than a finding that, on balance, a project as proposed is in the interests of the public. It requires that the Commission find that there would be a detriment to the public welfare were the Commission to disapprove or object to a proposal. In addition, the Commission has interpreted this provision to raise the question of whether any effect on the public, which would result from its disapproval, is outweighed by its effects on the coastal environment. Finally, this section raises the question of whether environmental effects may feasibly be mitigated while preserving any national interest benefits of a project.

The potential adverse effects of this development activity which remain after application of the mitigation agreed to by Chevron include a variety of risks of impacts and several actual physical impacts. The risks involve the threat of oil spills which could occur in an upset condition during construction or normal operations of the platform, and the risks associated with collisions. Since the platform is so near a heavily trafficked area, and located only 2,050 feet from the buffer area adjacent to the northbound vessel traffic lane, the potential for incidents between large commercial vessels, and smaller recreational vessels not restricted to the traffic lanes, is significant. Despite the fact that Chevron has a collision contingency plan and could "shut-in" the platform and pipelines with adequate notice, the possibility of a collision and resulting major oil spill does exist.

Another risk is the potential for contamination of the marine

environment due to the disposal of wastes in the ocean. Research is not conclusive as to the possible long-term and cumulative effects on marine resources of toxic discharges.

Another risk is the possibility of ground failure of the seafloor. The pipeline and platform are situated on top of and in the vicinity of seafloor landslides and faulting of a greater magnitude than was anticipated in the design of the project could occur and result in rupture or damage to project components. An oil spill could result under this scenario.

Oil spills and or toxic discharges pose highly significant risks of mortality to endangered wildlife in the vicinity of the project. The consequences of a spill occurring during the breeding or fledging seasons of the endangered California brown pelican would threaten the California population.

Physical aspects of the project that would remain after mitigation is applied include displacement of commercial fishermen from a known "prime" fishing spot. English and petrale sole and spot prawn have been fished in this area by trawlers and the placement of the pipeline parallel to a productive trawl run may prevent or pose additional hazards to trawl equipment utilizing the pipeline corridor. After construction, both trawlers and pelagic fishermen would be precluded from the platform site and a surrounding buffer area. Disturbance of the water column and increased barge and boat traffic during construction would force fishermen to avoid the construction zones for approximately six months.

Air pollution resulting from NO_x emissions would slightly worsen during construction due to the lack of full offsets proposed by Chevron. Other unmeasured and unmitigated pollutants would adversely affect air quality and public health in and beyond Ventura County.

Finally, people who come to visit the Channel Islands National Park and Marine Sanctuary and appreciate the recreational and scenic pristine qualities of the Marine Sanctuary would encounter the impacts of a large, highly visible industrial structure adjacent to an undeveloped natural area. There would also be visual impacts from mainland coastal areas.

The Coastal Commission recognizes the importance of considering the national security and energy benefits which may result from oil and gas development. In this instance, the expected contribution from the Chevron project to existing reserves in production, is expected to peak at 13,000 barrels per day for oil and 20 million standard cubic feet per day for gas. Thus, Chevron's platform, compared to other platforms, would provide low to average production of oil and average gas production. The Commission does not consider this contribution to the nation's energy reserves to be unimportant, although its importance is diminished by the fact that other fields may be more productive, and that less sensitive areas remain

available for development. The Commission also recognizes that the proposed development would provide employment opportunities, particularly during the construction phase.

The Commission finds that there are alternative areas with known oil reserves that are less sensitive, pose fewer risks to marine resources, and that may be developed to contribute to the nation's energy needs. The Commission further finds that the reserves at this site would remain available. This particular project, if developed, would contribute low to average amounts of oil and gas as compared with other production facilities offshore. Therefore, the Commission finds that disapproval of this project would not adversely affect the public welfare.

The Commission is aware that it has allowed exploration at this site. In making the public welfare determination, the Commission considers the national interest contribution of the project. In the case of a plan of exploration, the chief benefit to the public is derived from the identification and assessment of domestic oil reserves. This knowledge has value to the public independently of whether known oil reserves are permitted to be developed. This knowledge is useful in determining the public benefit which would be derived from development at a specific site as compared to other sites. In addition, this knowledge provides a data base for use in planning for future production and development, and increases the nation's readiness for development and production of oil supplies. In 1983, the Commission acted to concur with Chevron's plan of exploration, finding that the knowledge which would be derived was in the public interest.

In applying Section 30260(2), the Commission finds that the public welfare contributions of exploration and development differ. The Commission finds that more extensive environmental impacts are associated with production and development and that the availability and effectiveness of mitigation measures differ significantly. Exploration projects generally take three to nine months; the life of a development and production facility is several decades. The Commission takes into consideration that it is production that makes oil and gas available to fulfill the nation's energy needs.

However, these needs do not necessitate that development on this parcel begin immediately, particularly in view of the sensitivity of the site of this project, the availability of other sites for development, and ongoing improvements in technology which, in the future, may enable development of this site to proceed with less environmental impacts. The Commission finds that Platform Gail's location--within 2,050 feet of the buffer zone for the vessel traffic lanes; within a half mile of the Marine Sanctuary and Channel Islands National Park; and within 6.5 miles of where the endangered California brown pelicans breed on Anacapa Island--poses a substantial and unique threat of environmental damage which will remain significant even if the mitigation committed to by Chevron is applied.

The Commission also finds that preservation of significant environmental resources is in the national interest. Both the Coastal Zone Management Act and the California Coastal Management Program, while providing for accommodation of coastal dependent industrial uses, including offshore oil production, recognize the importance of protecting natural and scenic resources. In view of the individual and cumulative impacts identified throughout the Commission findings, the Commission finds that the unmitigated risks to marine and coastal resources are so great as to outweigh the particular benefit oil and gas development of this parcel would provide. Because of the remaining unmitigated impacts on coastal resources, the Commission finds that concurrence with this proposal at this time would adversely affect the public welfare.

Therefore, by weighing the extent of the contribution the project would make to the national interest by marginally increasing oil and gas production, and the extent to which impacts have been and may be mitigated, the Commission finds that to concur with this proposal would adversely effect the public welfare and the national interest, and that disapproval of this project at this time would not adversely affect the public welfare. The Commission finds the proposed Development and Production Plan, as amended, inconsistent with the public welfare provisions of the California Coastal Act Section 30260(2).

SUBSTANTIVE FILE DOCUMENTS

CORRESPONDENCE RECEIVED FROM MINERALS MANAGEMENT SERVICE:

July 2, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission (with enclosures).

June 25, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission.

June 13, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission (with enclosure).

June 9, 1986: From Thomas Dunaway to Richard Baldwin, Ventura County Air Pollution Control District (with enclosure).

April 30, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission (with enclosures).

April 21, 1986: From Julia Van Auker to James Johnson, California Coastal Commission (with enclosures).

April 15, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission (with enclosures).

March 20, 1986: From Thomas Dunaway to Peter Douglas, California Coastal Commission; RE: Environmental Documentation, Santa Clara Unit, Santa Barbara Channel (with attachments).

March 14, 1986: From Thomas Dunaway to Susan Hansch, California Coastal Commission (with enclosures).

February 6, 1986: From Thomas Dunaway to Federal Register; RE: Receipt and Comment Period for DPP.

February 5, 1986: From Thomas Dunaway to Larry Rennacker, County of Ventura APCD (with enclosures).

February 3, 1986: From Thomas Dunaway to California State and County Agencies (with enclosures).

January 29, 1986: From Thomas Dunaway to Susan Hansch, California Coastal Commission (with enclosures).

January 28, 1986: From Thomas Dunaway to Jim Seymour, Chevron U.S.A., Inc.; RE: Flared Gas on Platforms or OCS Facilities (with enclosure).

CORRESPONDENCE FROM U.S. COAST GUARD:

July 3, 1986: From John D. Costello, Vice Admiral to Peter Douglas, California Coastal Commission.

July 1, 1986: From Captain Edward V. Grace to Peter Douglas, California Coastal Commission.

June 9, 1986: From Captain Edward V. Grace to Peter Douglas, California Coastal Commission.

CORRESPONDENCE FROM EPA:

March 17, 1986: From Judith E. Ayres to Jananne Sharpless, Chairwoman, Air Resources Board.

CORRESPONDENCE FROM CHEVRON U.S.A., INC.:

July 3, 1986: From Cynthia Norris to Devon Bates, California Coastal Commission.

July 3, 1986: From AER* to Devon Bates, California Coastal Commission, RE: Offset Acquisition Feasibility Study.

June 30, 1986: From Cynthia Norris to Devon Bates, California Coastal Commission (with attachments).

June 30, 1986: From Douglas E. Uchikura to Devon Bates, California Coastal Commission.

June 26, 1986: From Cynthia Norris to John English, Santa Barbara APCD, RE: Air Quality.

June 24, 1986: From Cynthia Norris to Susan Hansch, California Coastal Commission, RE: Supplemental Information.

June 17, 1986: From Cynthia Norris to Devon Bates, California Coastal Commission, RE: Air Quality.

June 16, 1986: From Cynthia Norris to Brian Baird, California Coastal Commission.

June 13, 1986: From Cynthia Norris to Richard Baldwin, Ventura County APCD.

June 9, 1986: From Systems Applications, Inc. via Dr. Stephen Ziman, Chevron, RE: Modeling Results.

May 23, 1986: From Roslyn Mueller to Billie Blanchard, California Coastal Commission; RE: Carpinteria Processing Facility.

May 23, 1986: From Roslyn Mueller to Billie Blanchard, California Coastal Commission; RE: Water Requirements.

May 22, 1986: From D.E. Uchikura to Devon Bates, California Coastal Commission; RE: Commercial Fishing.

May 21, 1986: From D. E. Uchikura to Devon Bates, California Coastal Commission; RE: Oil Spill Clean-up.

May 20, 1986: From Douglas Uchikura to Thomas Dunaway, Minerals Management Service.

May 19, 1986: From J.P. Lester to Devon Bates, California Coastal Commission; RE: Chevron's Commitment to Ventura County APCD.

May 19, 1986: From Cynthia Norris to Eugenia Laychak, California Coastal Commission; RE: Commercial Fishing.

May 16, 1986: From J.P. Lester to Richard H. Baldwin, Air Pollution Control District; RE: Chevron Commitment to Mitigate Air Quality Impacts.

May 13, 1986: From J.P. Lester to Richard H. Baldwin, Air Pollution Control Officer; RE: Air Quality (with attachment).

May 7, 1986: From J.P. Lester to Richard H. Baldwin, Air Pollution Control Officer.

May 6, 1986: From Cynthia Norris to Devon Bates, California Coastal Commission (with attachments).

May 2, 1986: From Doug Uchikura to Devon Bates, California Coastal Commission; RE: Commercial Fishing.

April 28, 1986: From J.P. Lester to Richard H. Baldwin, Ventura County APCD; RE: Air Quality.

April 24, 1986: From Doug Uchikura to Peter Venturini, California Air Resource Board; RE: Revised Helicopter Emissions (with attachments).

April 24, 1986: From R.W. Butler to Dick McCarthy, California Coastal Commission; RE: Pipelines from Gail to Grace.

April 23, 1986: From Douglas E. Uchikura to Richard Baldwin, Ventura County Air Pollution Control District; RE: Chevron Responses to Ventura County APCD Comments on Environmental Report and Supplement to Santa Clara Unit DPP Platform Gail and Associated Pipelines.

April 17, 1986: From R.W. Butler to Dick McCarthy, California Coastal Commission; RE: Maps.

April 11, 1986: From Doug Uchikura to Peter Venturini, California Air Resource Board (with attachments).

April 2, 1986: From Cynthia Norris to Devon Bates, California Coastal Commission; RE: Commercial Fishing Aspects.

March 19, 1986: From Doug Uchikura to Richard H. Baldwin, Ventura County Air Pollution Control Officer.

March 5, 1986: From Douglas Uchikura to Susan Hansch, California Coastal Commission (with attachments).

January 16, 1985: From F. Robin to Peter D. Venturini, California Air Resources Board; RE: Reply to Comments on Chevron's Proposed Emission Inventory and Modeling Protocol for Platform Gail.

CORRESPONDENCE FROM STATE AGENCIES:

June 16, 1986: From Jananne Sharpless, Secretary of Environmental Affairs to Donald Hodel, Secretary of the Interior (with attachment).

June 12, 1986: From D.J. Everitts, Assistant Chief Extractive Development Program, State Lands Commission to Brian Baird, California Coastal Commission.

May 13, 1986: From Jananne Sharpless, Secretary of Environmental Affairs to Donald P. Hodel, Secretary of the Interior (with attachment).

May 12, 1986: From James Boyd, Air Resources Board to John Doyle, Deputy Secretary of Environmental Affairs.

May 2, 1986: From Jananne Sharpless, Secretary of Environmental Affairs to Donald Hodel, Secretary of the Interior (with attachment).

March 31, 1986: From Jananne Sharpless, Secretary of Environmental Affairs to Donald P. Hodel, Secretary of the Interior.

March 28, 1986: From Department of Fish and Game to Devon Bates, California Coastal Commission.

February 28, 1986: From Carol A. Thomas, Acting Resources Agency OCS Coordinator to Jananne Sharpless, Secretary of Environmental Affairs.

CORRESPONDENCE FROM VENTURA COUNTY:

July 2, 1986: From Richard Baldwin to Devon Bates, California Coastal Commission, RE: Contract with Chevron.

July 2, 1986: From Richard Baldwin to Devon Bates, California Coastal Commission, RE: June 27, 1986 Memo from Peter Douglas to Commissioners.

June 26, 1986: From Richard Baldwin to Devon Bates, California Coastal Commission, RE: Modeling Offsets for Platform Gail.

June 26, 1986: From Richard Baldwin to Tom Dunaway, Minerals Management Service, RE: Enforcement Contract.

May 30, 1986: From Scott Johnson, Manager Planning and Evaluation to Tom Dunaway, Minerals Management Service, RE: Enforcement of APCD Requirements.

May 16, 1986: From Richard H. Baldwin, Air Pollution Control Officer to Devon Bates, California Coastal Commission RE: Consistency of Proposed Platform Gail with APCD Requirements (with attachments).

May 2, 1986: From Richard H. Baldwin, Air Pollution Control Officer to Devon Bates, California Coastal Commission.

March 28, 1986: From Richard H. Baldwin, Air Pollution Control Officer to Devon Bates, California Coastal Commission (with attachment).

March 27, 1986: From Gene C. Kjellberg, Coastal Energy Coordinator to Devon Bates, California Coastal Commission (with attachments).

March 25, 1986: From Victor R. Husbands, Agency Director, Resource Management to Thomas Dunaway, Region Supervisor, Minerals Management Service (with attachments).

March 25, 1986: From Thomas Berg, Manager, Planning Division to Thomas Dunaway, Regional Supervisor, Minerals Management Service.

February 28, 1986: From Dick Baldwin, APCD to Tom Berg, Director, Planning Division.

July 21, 1981: Board of Supervisors Air Pollution Control Policies for Offshore Oil Activities.

CORRESPONDENCE FROM COUNTY OF SANTA BARBARA:

June 16, 1986: From John B. English, Director, Air Pollution Control District to James Johnson, California Coastal Commission, RE: Air Quality Mitigation.

March 26, 1986: From Peter Cantle, Energy Specialist to Devon Bates, California Coastal Commission.

March 25, 1986: From Diane Guzman, Director, Resource Management Department to Thomas Dunaway, Regional Supervisor, Minerals Management Service (with attachments).

February 28, 1986: From John Patton, Deputy Director, Resource Management to Jananne Sharpless, Secretary of Environmental Affairs (with attachments).

July 26, 1985: Contract between Chevron and Santa Barbara Air Pollution Control District, RE: Conditions E-4, E-7 and E-9 of the Chevron Point Arguello Project.

CORRESPONDENCE FROM THE PUBLIC:

July 10, 1986: From Ellen Sidenberg, Executive Director of Get Oil Out to Susan Hansch, California Coastal Commission.

July 2, 1986: From Frank DePasquale, Executive Secretary, Environmental Coalition to Coastal Commissioners.

June 10, 1986: From Lowell N. Brittain, Camco Inc. to Coastal Commissioners.

June 9, 1986: From Ellen Sidenberg, Get Oil Out to Michael Wornum, Chairman, California Coastal Commission.

June 6, 1986: From Michael Feeney, Oil Program Coordinator, Citizens Planning Association to Coastal Commissioners.

June 6, 1986: From Roger Hoxmeier, Offshore Crane and Service Co. to Michael Wornum, Chairman, California Coastal Commission.

May 19, 1986: From Betty Taylor to Board of Supervisors of Ventura County.

May 12, 1986: From Betty Taylor to Board of Supervisors of Ventura County.

May 7, 1986: From Frank DePasquale, Executive Secretary, Environmental Coalition to Supervisor Susan Lacey.

May 5, 1986: From Robert Sollen, Sierra Club to Coastal Commissioners.

March 29, 1986: From Frank DePasquale, Executive Secretary, Environmental Coalition to California Coastal Commission; RE: Platform Gail within Limits of Channel Islands Marine Sanctuary.

June 27, 1983: From City Council of San Buenaventura regarding OCS Leasing and Development.

CORRESPONDENCE OUTGOING:

July 10, 1986: From Peter Douglas to Commissioners (Appendix A of Proposed Commission Findings).

July 3, 1986: From Peter Douglas to Vice Admiral Costello, U.S. Coast Guard.

June 27, 1986: From Peter Douglas, Susan Hansch and Devon Bates to Commissioners. RE: Item 4a, July 8, 1986 Commission Hearing: Chevron, Platform Gail.

June 6, 1986: From Suzanne Rogalin to Captain Edward Grace, U.S. Coast Guard.

May 13, 1986: From Susan Hansch, California Coastal Commission to Richard Baldwin, Ventura County Air Pollution Control District.

March 31, 1986: From Susan Hansch, California Coastal Commission to Thomas Dunaway, Minerals Management Service, RE: Sixty-day letter and Ninety-day Notice.

March 20, 1986: From Devon Bates, California Coastal Commission to Richard Baldwin, Ventura County Air Pollution Control District.

March 19, 1986: From Devon Bates, California Coastal Commission to Cynthia Norris, Chevron U.S.A., Inc., RE: Questions on Commercial Fishing.

March 13, 1986: From Peter Douglas and Susan Hansch, California Coastal Commission to Interested Parties.

DOCUMENTS

Transcripts of Commission Meetings on Tuesday, June 10, 1986, Tuesday, July 8, 1986, and Thursday, July 10, 1986.

Whole Mussel Tissue Metals Concentrations (Table 1), Received July 8, 1986.

Biological Opinion and Statement by National Marine Fisheries Service dated June 9, 1986.

Santa Barbara Channel Vessel Traffic Study by Department of Continuing Maritime Education, California Maritime Academy, dated April 25, 1986.

U.S. Fish and Wildlife Service (USFWS), 1983. California Brown Pelican Recovery Plan. Prepared by Franklin Gress and Daniel W. Anderson, dated February 3, 1983. 179 pp.

Larry Leeman, Associates, Inc., 1986. Endangered Species Analysis: Platform Gail. Prepared for Chevron U.S.A., Inc. January 1986. 98 pp.

McClelland Engineers, Inc. 1986. Life-Specific Marine Biological Survey, Chevron U.S.A., Inc., Platform Gail Project. Santa Barbara Channel. Prepared for Chevron U.S.A., Inc., January 1986. 21 pp.

National Research Council, Steering Committee for the Petroleum in the Marine Environment Update. 1985. Oil in the Sea: Inputs, Takes and Effects. National Academy Press, Washington D.C. 601 pp.

Chambers Group, Inc. 1986. Preliminary Biological Assessment for the Endangered Species Consultation on the Proposed Arco Coal Oil Point Project in Santa Barbara County, California. Vol. II: Plants, Birds, Fish and Mammals. Prepared for U.S. Army Corps of Engineers, California State Lands Commission and County of Santa Barbara. April 1986.

Johnston, Debby. 1985 Reactions of Endangered Whales to Acoustical Stimuli Related to Outer Continental Shelf Oil and Gas Activities: A Cumulative Assessment. Paper presented to Western Society of Naturalists Meeting December 1985. 7 pp.

Contract for Implementation of Conditions E-4, E-7, and E-9 of the Chevron/Point Arguello Project Preliminary Development Plant No. 83-DPP-2-CZ, dated July 26, 1985.

Minerals Management Service Record of Decision Following Joint Preparation of the EIS/EIR, entitled: Point Arguello Field and Gaviota Processing Facility Area Study and Chevron/Texaco Development Plans dated January 15, 1985.

Ventura County Board of Supervisors Air Pollution Control Policies for Offshore Oil Activities dated July 21, 1981.

Woodward Clyde, 1981, Geotechnical Investigations, Drilling and Production, Platform Gail, Santa Clara Unit, OCS Parcel Nos. 0205 and 0209, Santa Barbara Channel, California. (Proprietary)

Woodward Clyde, 1981, Geophysical Investigations, Drilling and Production, Platform Gail, Santa Clara Unit, OCS Parcel Nos, 0205 and 0209, Santa Barbara Channel, California. (Proprietary)

Dames and Moore, 1981, Seismic Design Parameters, Platform Gail Site, Santa Clara Unit, Santa Barbara Channel for Chevron, U.S.A. (Proprietary)

CC-31-84 (Gulf POE for OCS P-0505) Record of Decision and Request for Reconsideration.

CC-38-85 and CC-39-85 NPDES Commission Findings. (EPA)

CC-7-85 (Exxon).

CC-16-85 (Cities Service).

CC-36-85 (Union).

CC-24-84 (Chevron).

CC-12-82 (Union).

King and Shellhammer, "An Interindustry Analysis of California Fisheries" (1985).

King and Flagg, "The Economic Structure of California's Commercial Fisheries" (1985).

California Coastal Conservancy, "Commercial Fishing Facilities in California" (August 1984).

Department of Interior, EIS for OCS Lease Sale 73.

MBC Applied Environmental Sciences and Science Applications, Inc. for MMS, "California Commercial/Sport Fish and Shellfish Oil Toxicity Study" (1984).

Department of Fish and Game, Comments on the Platform ER and DPP, dated February 26, 1986.

Oil Spill and Emergency Contingency Plan, Platform Gail, Platform Grace, Chevron U.S.A.

Eschmeyer, William N., Earl S. Herald & Howard Hammann. 1983.

A Field Guide to Pacific Coast Fishes of North America, (in the Peterson Field Guide Series) Houghton Mifflin Co., Boston 336 pp.

Offset Acquisition Feasibility Study for Securing NO_X Offsets in Ventura County, CA. AER*X Division of RMT, Inc., July 3, 1986.

ADDITIONAL CORRESPONDENCE

May 7, 1986: From Frank DePasquale, Environmental Coalition to Supervisor Susan Lacey, Ventura County.

March 4, 1986: From Carl C. Hetrick to Allan R. Coates, Jr., City Manager, City of Carpinteria.

Letters from Craig Fusaro to Cynthia Norris, dated March 17, 1986 and April 2, 1986

Petition from R.W. Hazard, et al dated March 28, 1986.

Letter from Robert Brewer, et al to John Sunada, dated April 15, 1986.

Letter from Robert Brewer, et al to Cynthia Norris, dated April 16, 1986.

Photo from San Pedro Fishermen of recovered wellhead.

NEWSPAPER ARTICLES

June 27, 1986: Carpinteria Herald, RE: New development around the Chevron facility at Carpinteria.

May 20, 1986: From Betty C. Taylor to Star Free Press; RE: Air Quality Standard.

May 9, 1986: Article by Steve Berta, Staff Writer Carpinteria Herald; RE: Bluffs Project Sent Back to the Drawing Board.

February 23, 1986: News Editorial from Santa Barbara News Press; RE: PCBs Laden Soil.

February 19, 1986: From Santa Barbara News Press; Article on Toxic Spills.

February 13, 1986: From Santa Barbara News Press; Article on PCBs Cleanup.

February 12, 1986: From Santa Barbara News Press; Article on PCBs in Soil at Carpinteria.

CHEVRON - PLATFORM GAIL: CC - 2 - 86

EXHIBITS

1. Project Location
2. Vessel Traffic Saftey Lanes
2b. Vessel Traffic Safety Lanes and Buffer Zones
3. Environmentally Sensitive Areas
4. Platform Discharges
5. Geologic Hazards
6. Department of Fish and Game, Fish Blocks
7. Commercial Fishing - Cumulative Impact Study Work Program
8. Oil Spill Occurrence
9. CCC Sixty-Day Letter to MMS
10. Air Resources Board Response of May 12, 1986
10b. Air Resources Board Response of June 16, 1986
11a. Ventura County APCD Response of May 16, 1986.
11b. Ventura County APCD Response of March 28, 1986
12. Santa Barbara County APCD Response
13. Public Comments (Letters from Environmental Coalition (May 7, 1986) and Betty Taylor (May 12, 1986))
14. Chevron's Air Commitments: May 16, 1986.
15. Sportfishing and Marine Recreation Area
16. Submittals from Chevron
    a. Letter of June 16, RE: Mitigation Measures
    b. Vessel Collision Contingency Plan

c. Letter of June 16, RE: Oil Spill Equipment

d. Oil Transportation Statement

e. Letter of June 24, RE: Supplemental Information

f. Letter of June 17, RE: Air Quality Mitigation

17. Jacket Fabrication Information: June 18, 1986

18. Fishermen's Cooperative Association of San Pedro Letter of June 17, 1986.

19. Air Flow Patterns in the Santa Barbara Channel

20. Santa Barbara County APCD Letter of June 16, 1986

21. Minerals Management Service Letter of June 25, 1986

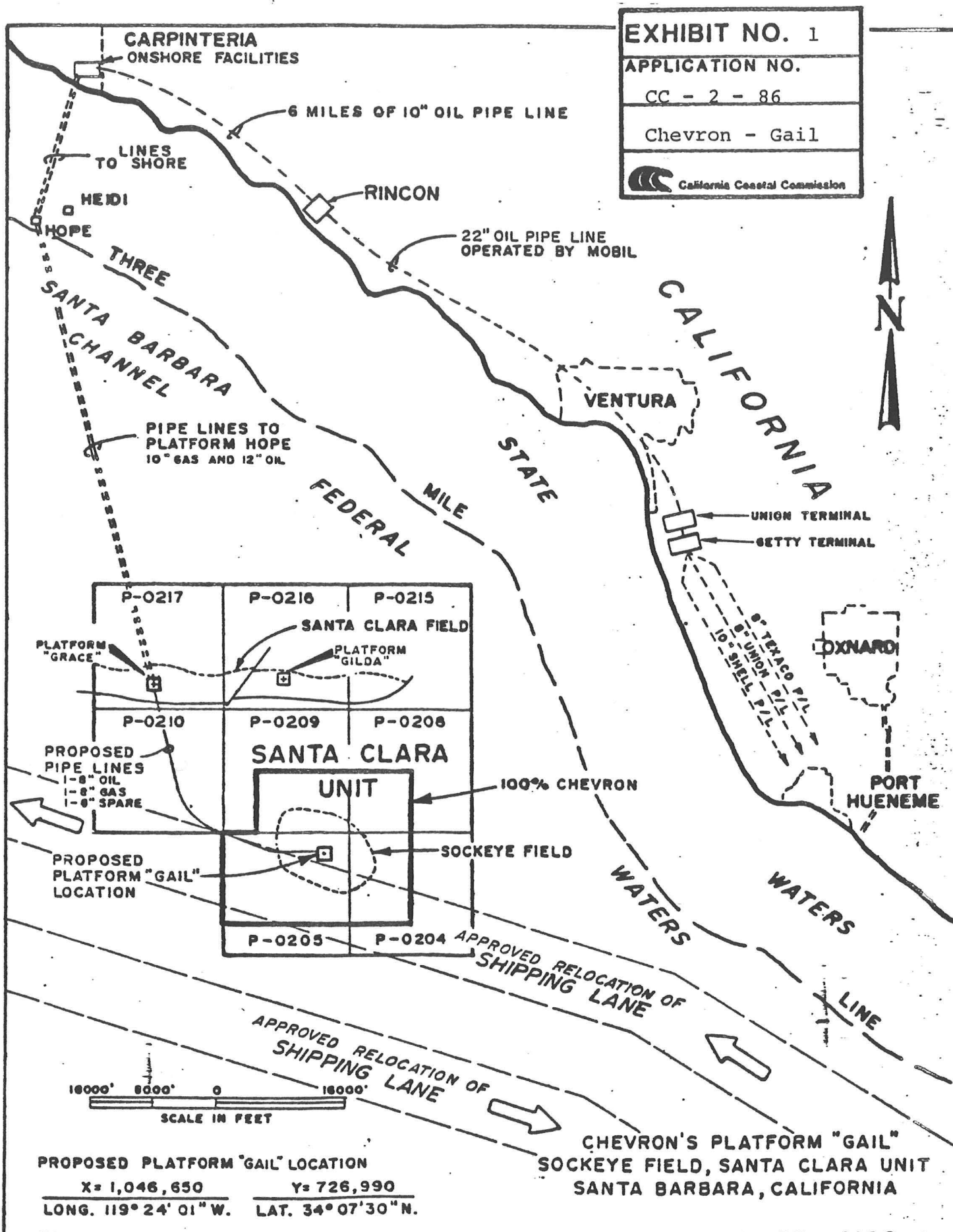
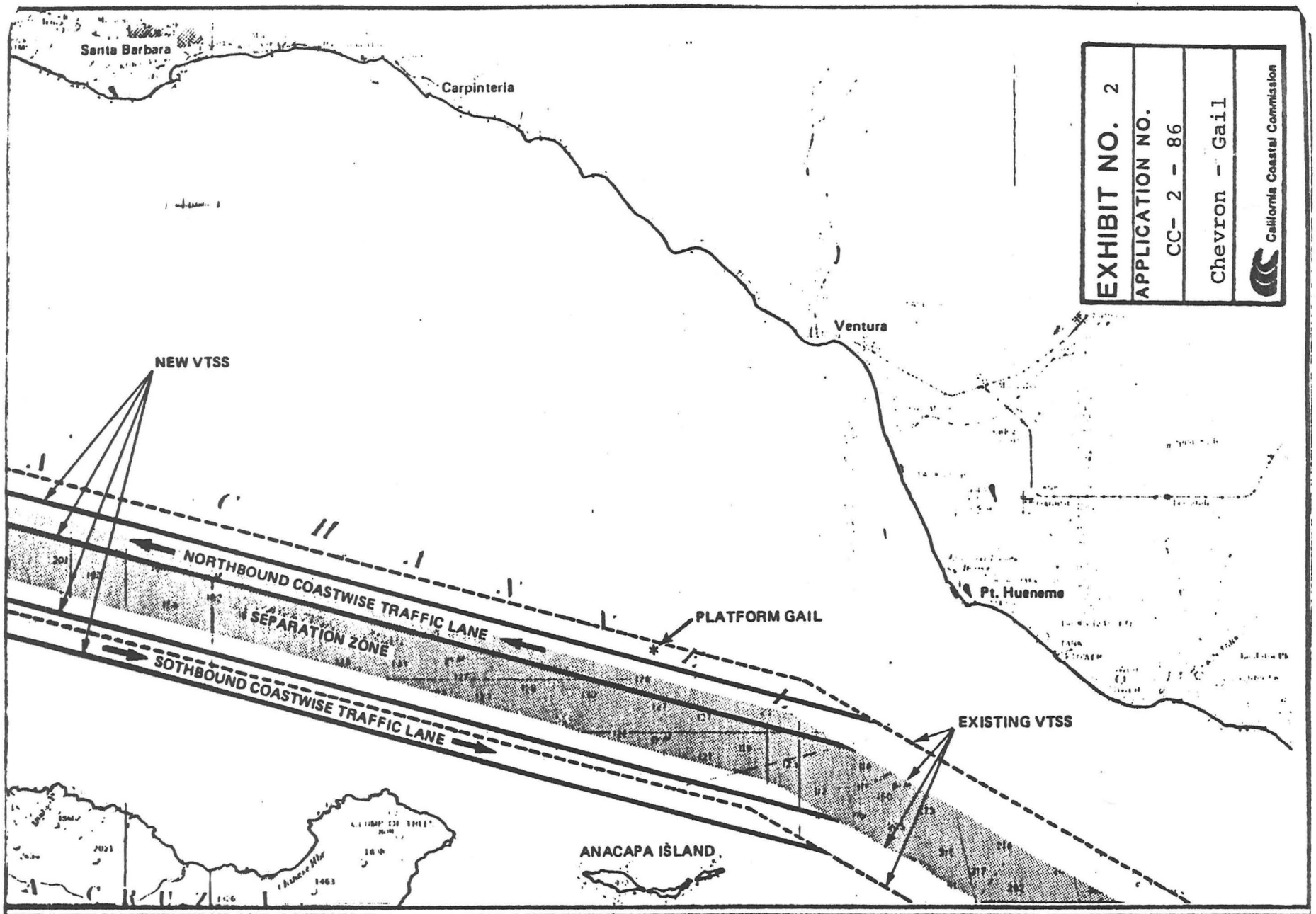
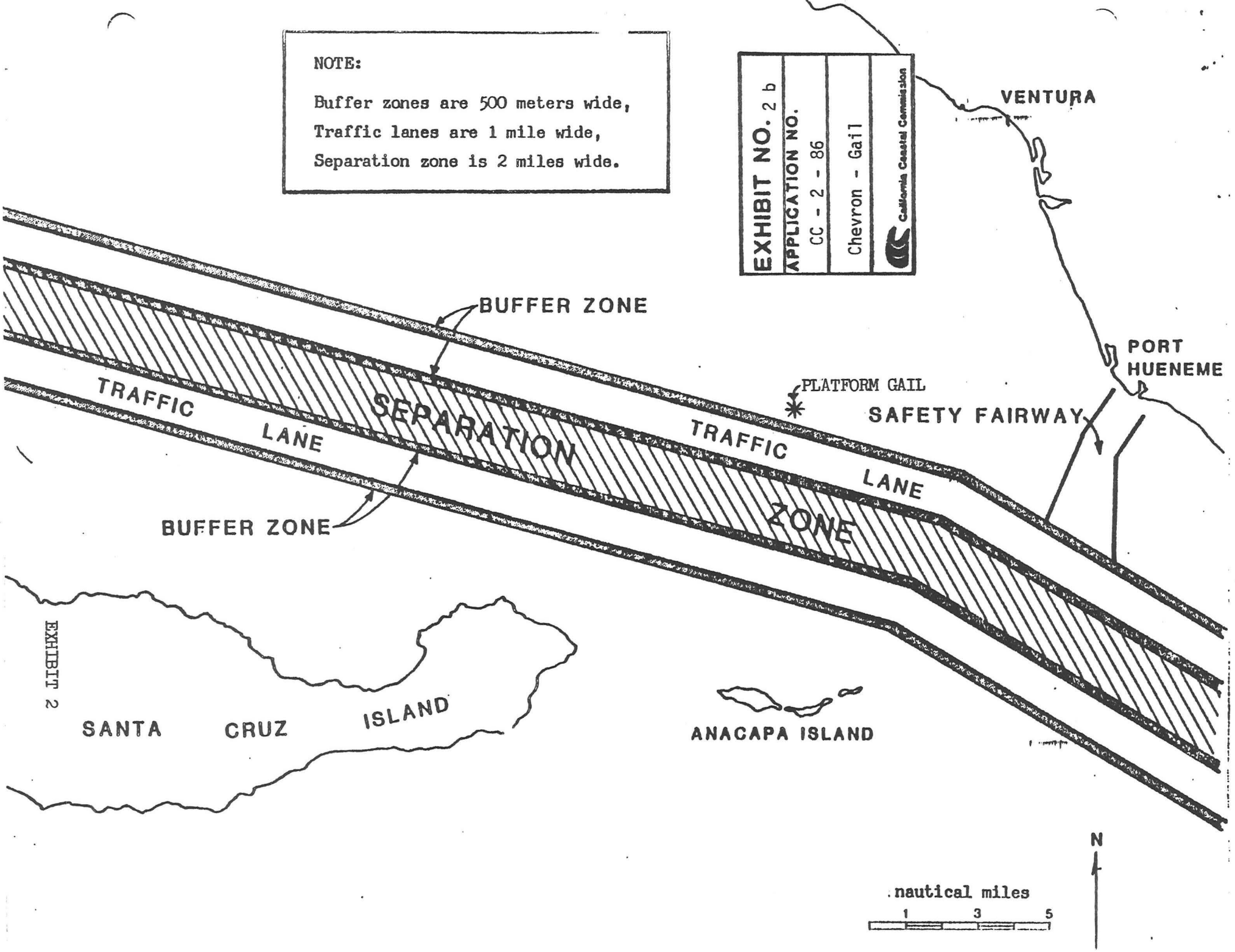


EXHIBIT NO. 1
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission
CARPINTERIA
ONSHORE FACILITIES
6 MILES OF 10" OIL PIPE LINE
LINES TO SHORE
HEIDI
HOPE
RINCON
22" OIL PIPE LINE OPERATED BY MOBIL
THREE
SANTA BARBARA CHANNEL
CALIFORNIA
VENTURA
PIPE LINES TO PLATFORM HOPE
10" GAS AND 12" OIL
STATE
FEDERAL
MILE
UNION TERMINAL
GETTY TERMINAL
P-0217
P-0216
P-0215
SANTA CLARA FIELD
PLATFORM "GRACE"
PLATFORM "GILDA"
8" TEXACO P/L
8" UNION P/L
10" SHELL P/L
OXNARD
P-0210
P-0209
P-0208
PROPOSED PIPE LINES
1-8" OIL
1-8" GAS
1-8" SPARE
SANTA CLARA UNIT
100% CHEVRON
PORT HUENEME
SOCKEYE FIELD
PROPOSED PLATFORM "GAIL" LOCATION
WATERS
WATERS
P-0205
P-0204
APPROVED RELOCATION OF SHIPPING LANE
LINE
APPROVED RELOCATION OF SHIPPING LANE
16000' 8000' 0 16000'
SCALE IN FEET
N
CHEVRON'S PLATFORM "GAIL"
SOCKEYE FIELD, SANTA CLARA UNIT
SANTA BARBARA, CALIFORNIA
PROPOSED PLATFORM "GAIL" LOCATION
X= 1,046,650
LONG. 119° 24' 01" W.
Y= 726,990
LAT. 34° 07' 30" N.
ZONE 6
FIGURE 1.1
A-SB-4128-3



Santa Barbara Vessel Traffic Separation Scheme

FIGURE 3.5-4


NOTE:
Buffer zones are 500 meters wide,
Traffic lanes are 1 mile wide,
Separation zone is 2 miles wide.
EXHIBIT NO. 2 b
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission
VENTURA
PORT HUENEME
BUFFER ZONE
PLATFORM GAIL
SAFETY FAIRWAY
TRAFFIC LANE
SEPARATION ZONE
TRAFFIC LANE
BUFFER ZONE
EXHIBIT 2
SANTA CRUZ ISLAND
ANACAPA ISLAND
N
nautical miles
1 3 5

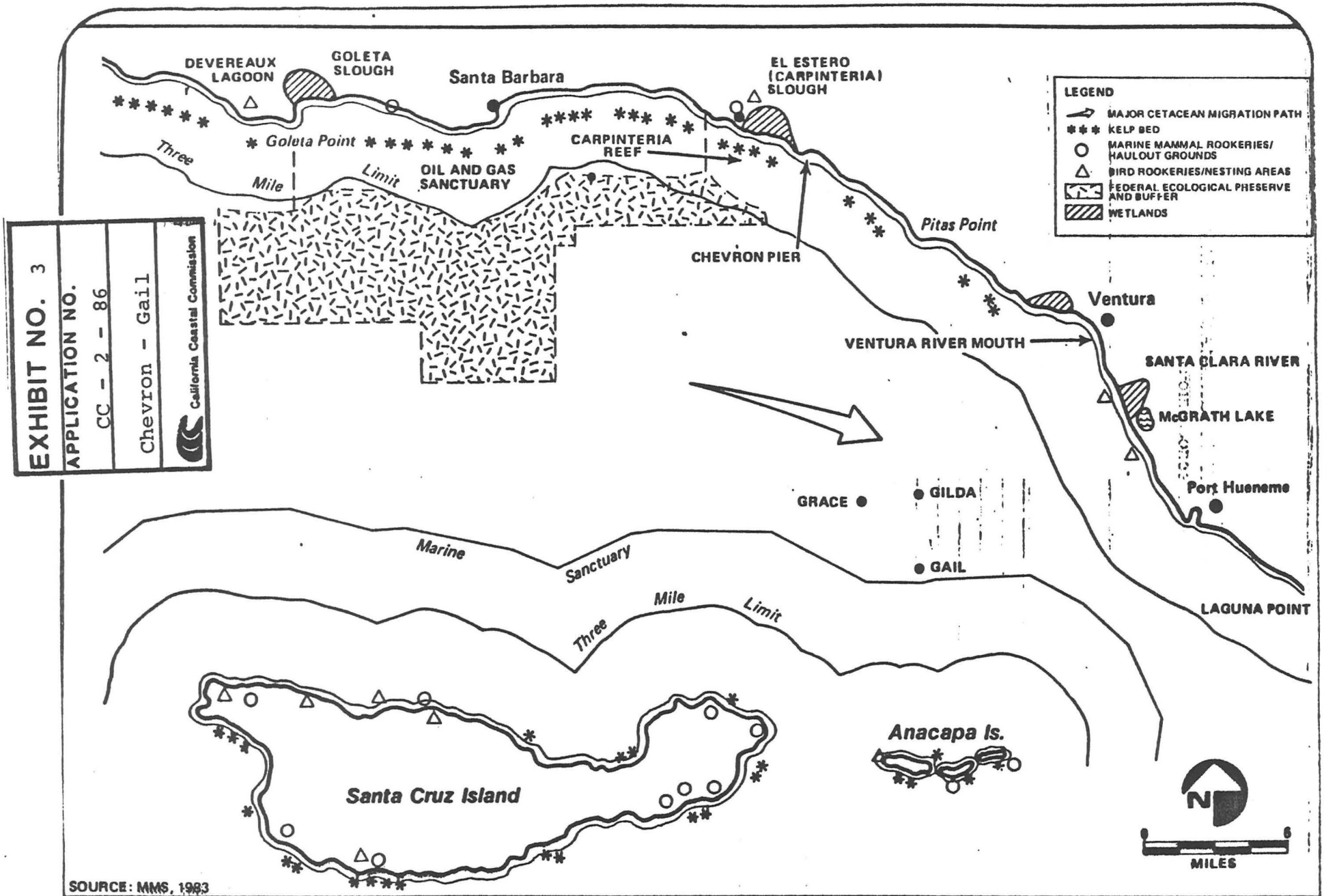


EXHIBIT NO. 3
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

SOURCE: MMS, 1983

Environmentally Sensitive Areas in the Santa Barbara Channel Region

FIGURE 3.6-4

ISTEC Services, Inc.

PLATFORM DISCHARGES

Construction Phase:

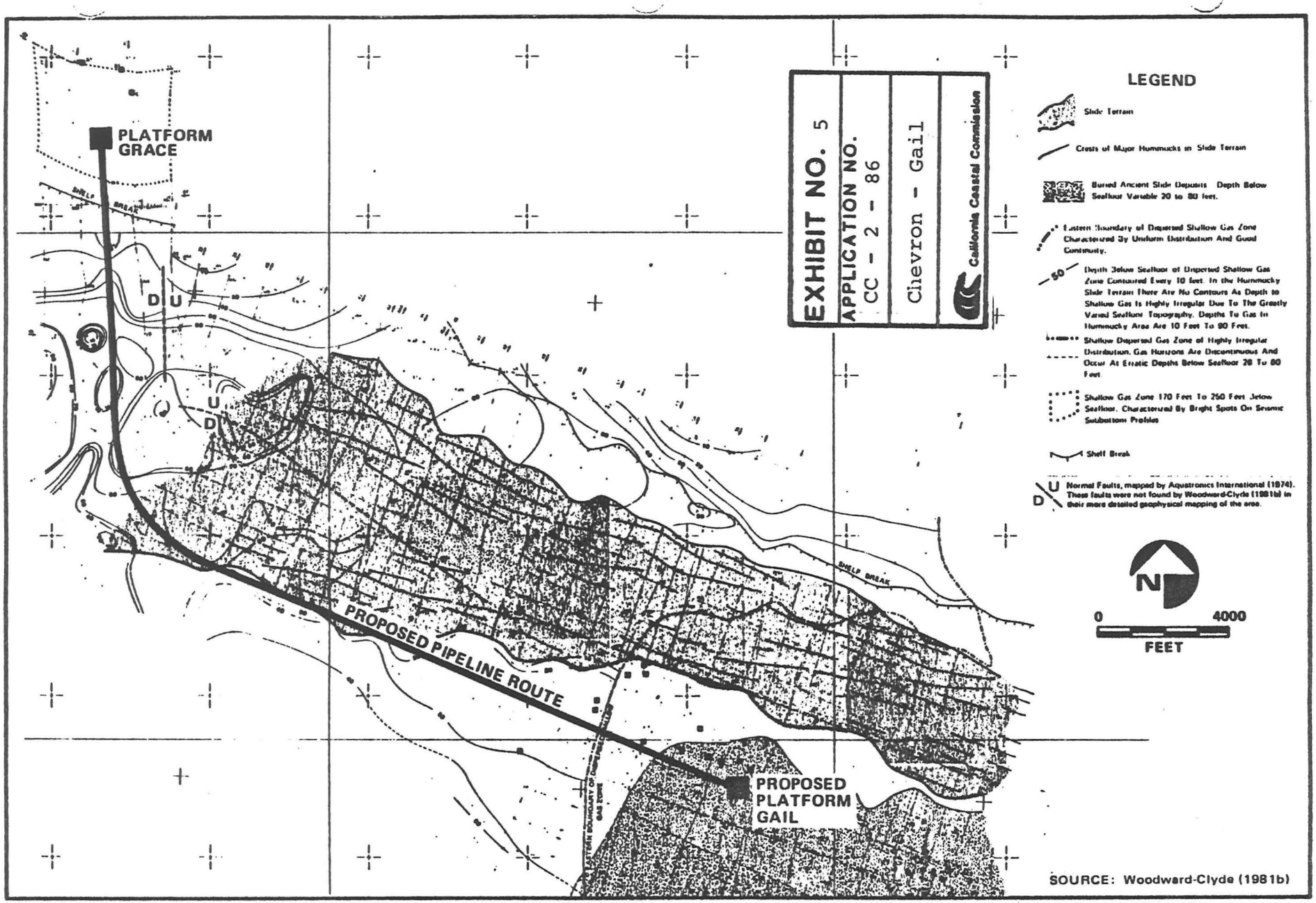
Effluent	Average Quantity
Sanitary effluent	2,000 gal/day
Seawater distillation brine	5,500-6,500 gal/day
Hydrostatic test water	200,000-250,000 gallons (total)

Operational Phase:

Effluent	Average Quantity
Drilling mud*	900 bbl/well-periodic discharge
Cuttings	2,852 bbl/well-periodic discharge
Completion fluid*	600 bbl/well-periodic discharge
Sanitary effluent	2,000 gal/day
Domestic effluent	10,000 gal/day
Produced water	2,800 bbl/day
Seawater distillation brine	72,000 gal/day
Engine and pump room drainage* and washwater (deck drainage)	2,000-3,000 gal/day
Cement slurry	50 gal/day

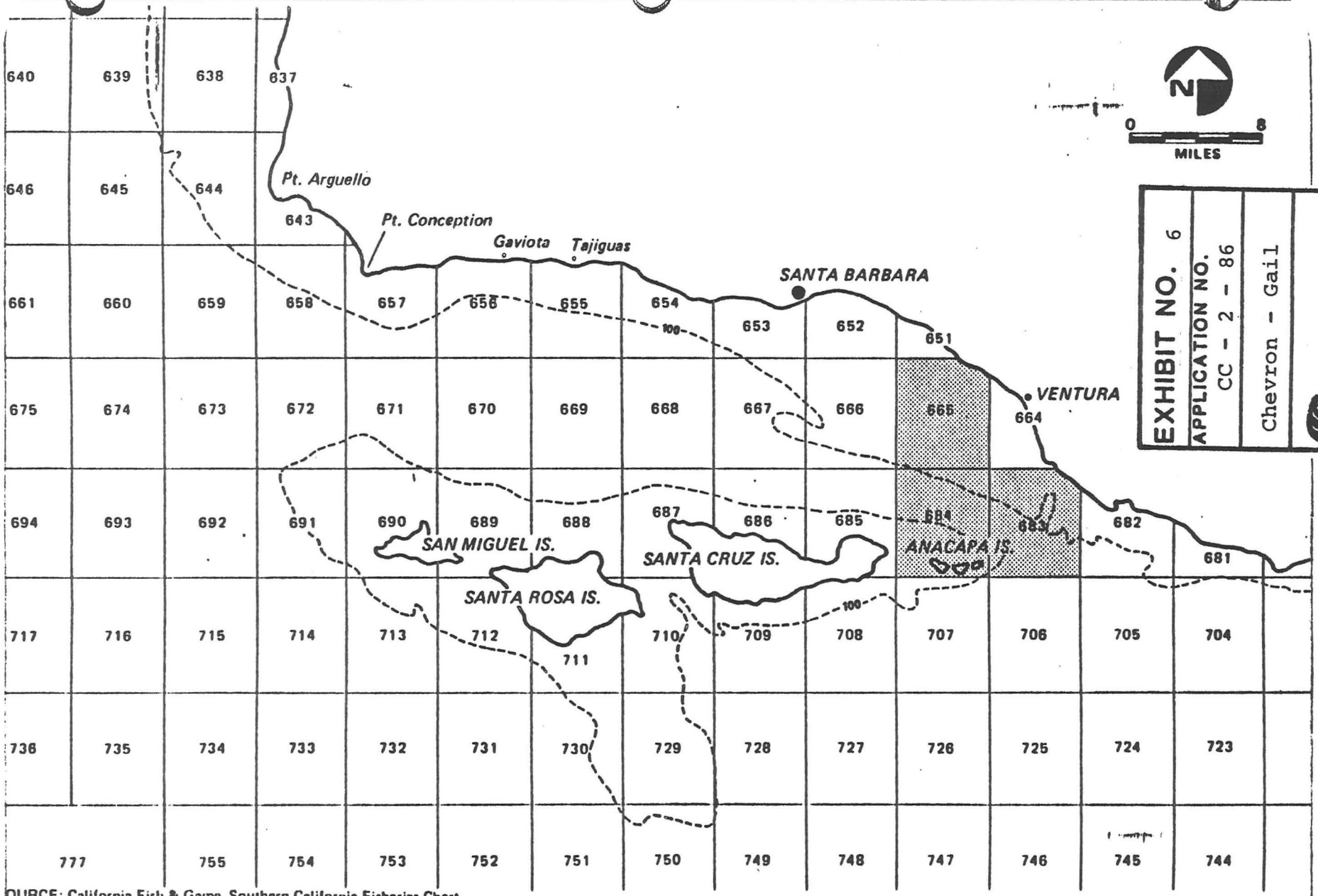
*Base on figures presented in the DPP.

**The quantities are an estimated average discharge. Daily quantities will vary primarily due to rainfall.



Geological Hazards in the Project Area

FIGURE 3.1-5



SOURCE: California Fish & Game, Southern California Fisheries Chart

Fish Blocks in the Project Area

FIGURE 3.5-1

EXHIBIT 7

SANTA BARBARA CHANNEL FISHERIES ECONOMIC ANALYSIS DRAFT
DRAFT WORK PROGRAM

1. Purpose: To determine the economic impact of existing, planned and future offshore oil and gas development on the commercial fishing fleet which operates in the Santa Barbara Channel, defined as the offshore areas from Point Conception to Point Dume, including the Santa Rosa Cortez Ridge. The analysis will also include impacts on the businesses which service or are served by the commercial fishing fleet.

2. Specifics: The study shall:

a) Determine the fisheries and gear types that would be impacted. For example:

gear types: trawling, set and drift gill netting, hook & line, trap, harpoon, divers, purse seine, etc.

fisheries: prawn, shrimp, groundfish, sole, halibut, shark, swordfish, lobster, crab, rockfish, urchin, abalone, albacore, seabass, anchovy, mackeral, squid, etc.,

b) Include a 10-20 year fish catch data base for the impacted fisheries using DFG ports landing, and log book data. The log book data shall be used for drift net, set net, trawl, trap, and other applicable fisheries to determine where the fish were caught. The ports landings data shall be used to determine how much fish was landed. The data base shall include the value of the fish, separated by species and gear type;

c) Include results of interviews from a statistically representative sample (by gear type and fishery) of commercial fishermen. The survey questions shall include vessel and operating costs, the annual number of trips and income per boat, and nautical charts illustrating the location of where the different fish species are caught and ranking the level of significance of the different areas. This information shall be used to verify the DFG data, and vice versa, and shall be considered to be confidential. Access to this data shall be limited to specific regulatory agencies, fishing industry representatives, and oil and gas industry representatives. The California Coastal Commission shall consider the information to be "trade secrets," pursuant to the California Public Records Act, unless this interpretation of the law is successfully challenged by another party. If a successful Coastal Commission or court challenge occurs, the CCC shall give 30 days notice to the affected parties prior to release of the data;

d) Include other pertinent data relating to fish catch information, vessel operating costs, value of the fisheries, etc. For example, fish catch information shall identify the number of boats in each fishery for each year and the annual catch per boat to determine how the catches are distributed throughout the fleet;

e) Use the results of the interviews and other information, if necessary, to refine the DFG fish block information so that the direct economic impacts of an individual offshore facility, including interferance from pipeline protrusions, subsea completions, other permanent snags, support vessel traffic, and dropped equipment and materials (debris) can be accurately calculated. This includes the capability to calculate catch levels, the values of the catch, and the size of the individual fisheries;

f) Determine the cumulative direct economic impacts of existing, planned and reasonably foreseeable offshore developments in state and federal waters. "Planned" development is defined as development that is permitted, but is not installed or operating, and that is currently undergoing regulatory review. "Reasonably foreseeable" development shall be determined by oil and gas industry, MMS, and SLC projections;

g) provide the area preclusions of existing, planned, and reasonably foreseeable development. The contractor shall develop a method or formula(s) to determine the area preclusion of future, unassessed offshore projects;

h) In determining the direct, indirect, and induced economic impacts, use an economic methodology, such as input-output, analysis, averaging of impacts, marginal analysis, etc. that most accurately assesses the impacts, and is generally accepted in studies, literature, etc., as the method to use in determining economic impacts of development on the fishing industry;

i) Include a user manual so that the data base and methodology can be used to determine the impacts of future, unassessed offshore projects;

j) Propose mitigation measures that shall offset or help in offsetting the impacts from preclusion by the facilities, support vessel traffic, snags, and debris. The proposals shall include use or creation of fisheries enhancement funds, regional debris/snag clean-up programs, or other programs that offset and mitigate the losses to the fishing fleet and related businesses.

3. Timing: The study shall be completed within eighteen months from the startup date of a contract, or the beginning date of the study.

4. Review: Review of two draft reports shall be factored into the work program to allow for close review by CCC, DFG, MMFS, MMS, SLC, and other specified interested parties such as oil and gas industry participants and local fishing industry representatives to ensure the document is acceptable to the interested agencies and parties.

5. Results of Study: The study shall:

a) Quantify the total annual costs of area preclusion of the offshore facilities, snags, support vessel traffic, and debris on the fishing fleet that utilizes the Santa Barbara Channel, separated by gear type;

b) Quantify the impacts on the fishing related businesses in the coastal zone and on the local coastal economies, in general;

c) Recommend the measures that shall be used to mitigate the impacts.

The Coastal Commission shall make the final determination on the measures that shall be used, and to which projects they will be applied.

d) In assessing future impacts on projects, use appropriate inflation factors and discount rates that have been used in previous studies assessing development impacts on fisheries.

6. Funding: The study shall be funded by contributions from the oil industry. Chevron's total contribution to the study shall be in the amount of $100,000;

7. Administration: Alternatives include, but are not limited to:

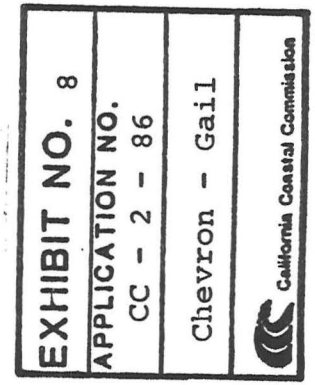
a) Administration by the CCC or the staff;

b) Administration by a panel representing interested regulatory agencies, the oil and gas and fishing industries.

0584N

CUMULATIVE PROBABILITY OF OIL SPILL OCCURRENCE
1986 THROUGH 1995
SANTA BARBARA CHANNEL AND SANTA MARIA BASIN
WITH AND WITHOUT PLATFORM GAIL
SPILLS ≥10,000 BARRELS

Scenario	Total Production (Billion barrels)	Platform Spills		Pipeline Spills		Tankship Spills			Total Spills	
		Probability (%)	Expected Value (λ)	Probability (%)	Expected Value (λ)	Volume Transported (billion barrels)	Probability (%)	Expected Value (λ)	Probability (%)	Expected Value (λ)
Platform Gail Included	1.497	48.3	0.659	63.3	1.003	0.692	36.2	0.450	87.9	2.112
Without Platform Gail	1.459	47.4	0.642	62.4	0.978	0.692	36.2	0.450	87.4	2.070
Incremental Increase Associated with Platform Gail		0.9		0.9			0.0		0.5	



CUMULATIVE PROBABILITY OF OIL SPILL OCCURRENCE
1986 THROUGH 1995
SANTA BARBARA CHANNEL AND SANTA MARIA BASIN
WITH AND WITHOUT PLATFORM GAIL
SPILLS ≥1000 BARRELS

Scenario	Total Production (Billion barrels)	Platform Spills		Pipeline Spills		Tankship Spills			Total Spills	
		Probability (%)	Expected Value (λ)	Probability (%)	Expected Value (λ)	Volume Transported (billion barrels)	Probability (%)	Expected Value (λ)	Probability (%)	Expected Value (λ)
Platform Gail Included	1.497	77.6	1.497	90.9	2.395	0.692	59.3	0.900	99.2	4.792
Without Platform Gail	1.459	76.8	1.459	90.3	2.334	0.692	59.3	0.900	99.1	4.693
Incremental Increase Associated with Platform Gail		0.8		0.6			0.0		0.1	

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA COASTAL COMMISSION
631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
(415) 543-8555

March 31, 1986

EXHIBIT NO. 9
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

Thomas Dunaway
Minerals Management Service
1340 W. Sixth Street
Los Angeles, CA 90017

RE: Chevron Platform Gail - P-0205

Dear Mr. Dunaway:

The staff of the California Coastal Commission has received the Development and Production Plan and the Environmental Report for the proposed Platform Gail and hereby submit for your review the following questions regarding the proposal. MMS and Chevron responses to these comments and questions will help the Coastal Commission review the plan for consistency with the California Coastal Management Plan. We must express our concern with procedures that result in our review prior to completion of the Environmental Assessment expected in June and geologic investigations expected in May.

This letter shall also serve as notice to MMS that the Commission cannot either concur or object to this consistency certification within 90 days of receipt of the proposal on January 30, 1986, or by April 30, 1986. The Commission staff hope to present a recommendation to the Commission in May, however, we may not have adequate information with which to recommend concurrence at that time. In order to meet internal and external deadlines leading up to the Commission hearing on the consistency certification presently scheduled for May 13-15, 1986 in San Diego, we need answers to these questions by April 15, 1986 at the latest.

The following concerns are organized by subject.

A. Marine Resources

1. The Environmental Report (ER) does not provide specific mitigation measures to protect seabirds, sea otters, or other marine mammals in the event of an oil spill. The document must provide a thorough explanation of the methods and facilities available to use to cleanup and rehabilitate these species in the event of an oil spill. Are existing facilities adequate to handle substantial numbers of seabirds and marine mammals? Have capture techniques

improved to the point where oiled wildlife can be safely recovered, cleaned and the returned to their natural habitat?

2. The endangered California gray whale migrates through this area twice each year over a period lasting from November through May. A pod of three gray whales were sited during the marine biological survey and several are known to winter in the area (ER page 3-131, Wellington and Anderson 1978, MMS 1984.). Only brief mention is made in the Environmental Report (pg. 4-86) of the conflicts between construction activities, noise and interferance with the seasonal cetacean migrations. On previous projects the CCC has adopted findings which disagree with the conclusions of insignificant impacts contained in the ER.

On page 2-36, the ER states: "The construction of the platform will occur during the seasonal cetacean migration period." Previous operators have agreed to limit construction to the times when whales are not migrating through the construction zones. The report should include an updated construction schedule in light of the delayed submittal, NPDES permits and Coastal Commission consistency requirements. The report should discuss the potential disturbance to the whales especially on mother calf pairs during the northward migration. The document should include mitigation measures such as construction timing, to preclude construction of the pipeline nor placement of the platform between December 1 and April 30, and crew and supply boat traffic lanes.

3. Provide a map and description of "possible outcrops" along the proposed pipeline corridor (pg 3-169 & 170, and 4-40 of the ER) as identified by Woodward Clyde Consultants 1981, Nekton, 1983 and more recent studies. Indicate if and when more studies are anticipated.

4. Although Chevron appears to have made a commitment not to discharge chrome or ferrochrome lignosulfonates (pages 4-19 and 4-41 of the ER, eg. "...Chevron does not anticipate using this type of mud.") it is not clear that Chevron <u>will not use</u> this mud. Please clarify.

5. Clarify on page 4-40 of the ER how the pipeline would be anchored. Are the proposed anchors to be used only for construction activities? When and how will hazards (rocky areas) be identified?

6. The Site Specific Marine Biological Survey identified a new potential species found during the field studies which had not previously been recorded in the eastern Pacific. What were the results of research on <u>Petalosarsia sp. A</u>?

B. <u>Oil Spills</u>

1. The Coastal Commission routinely requires 1500 feet of open ocean containment boom to be available for onsite operations. Chevron has one 750 foot section of boom proposed for the platform and one for workboats in the area. It is not clear whether 1500 feet of this boom will always be located at the site or within a

certain response time from the platform. For production facilities this equipment should be ready to be deployed within 15 to 60 minutes. The appropriate response time is dependent on the location of the platform, the proximity to environmentally sensitive habitats, oil spill trajectories, and the response time of the oil spill cooperatives. Please provide the plans for storage and deployment of 1500 feet of boom, along with estimates of the time for full deployment. Also provide the rationale for the response time, i.e. the nearest sensitive area is ___ miles away and the trajectories show that it will take ___ hours for the oil to get there.

2. Please explain the mechanical oil recovery rate that you anticipate during the onsite oil clean-up operation. Is there sufficient oil storage capacity to operate the onsite equipment until the cooperative arrives? Please specify the capacity of the oil storage equipment.

3. The Commission requires that the dispersant used be the most effective and the least toxic for the oil that will be produced. Chevron must provide data to prove that the dispersant proposed for use will meet the effectiveness and toxicity objectives. The oil from Platform Gail will range from relatively light varieties to some heavier crudes according to Chevron personnel (meeting between Chevron and CCC 3/18/86). Therefore, different types of dispersant will be necessary depending on the type of oil spilled. If the dispersant for the heavy oil happens to be one that has yet to be licensed in California, Chevron should indicate what steps are being taken to obtain those approvals so that the preferable chemical is available.

4. The Commission has expressed its concern with the ability of the Mr. Clean offshore oil spill response vessels to operate offshore for extended periods of time. This concern has been raised in part by the problems experienced by Mr. Clean II during the Puerto Rican tanker spill off northern California. Most of the offshore supply vessels (190 - 200 feet) currently operating off the California coastline are larger than the Mr. Clean vessels (130 - 165 feet). The Commission would like a thorough explanation why the clean-up vessels are smaller and perhaps not as stable as the workboats. The Commission's standard is for "maximum feasible mitigation" and must we assure that this standard is being met by the oil spill cooperative vessels.

5. Clean Seas has recently notified the Commission staff that they plan to sell the Tidemar VII oil storage barge. We are concerned with this proposal because of the many problems experienced during actual spills with obtaining and transporting contract storage barges over long distances. Problems occurred during the Alvenus spill off the Gulf coast and the Puerto Rican spill off the northern California coast. Please provide specifics regarding the response times for contract vessels, the compatibility of Clean Seas equipment with available storage barges, and the overall rationale for this decision as it relates to providing the maximum feasible mitigation for oil spills.

C. Vessel Traffic Safety

1. Is Chevron committing specifically to install the ARPA on Platform Gail?

Page IV-19 of the Supplement to the DPP states: "Chevron is committed to the use of a United States Coasta Guard approved Automatic Radar Plotting Aird (ARPA) to be installed on a platform or a stnadby boat in the Santa Clara Unit." On page VI-18, the DPP states: "A United States Coast Guard approved Automatic Radar Plotting Aid (ARPA) unit will be installed on the platform." On page 2-13 of the ER, it is stated "The use of a United States Coast Guard approved Automatic Radar Plotting Aid (ARPA) unit to be installed on the platform is being considered." On page 4-36 of the ER, the statement made on page IV-19 of the DPP is repeated.

2. Page IV-20 of the DPP states: "If radio contact cannot be made before an approaching vessel closes within a designated safe distance of the platform, the observer will dispatch a boat or helicopter to alert the approaching ship of the platform ahead.... The actual time of dispatch of the boat or helicopter will depend upon the speed and course of the approaching vessel as determined from the observer's vessel tracking."

Would a boat or helicopter always be available at the platform? Being 2,053 feet from the buffer zone and 3,694 feet from the lane, does Chevron believe there would be time to call for a helicopter from shore?

3. Please discuss in detail the predominance of fog and low clouds which would inhibit visibility in the area of the proposed platform. How many days per year, during what seasons is visibility obstructed? (ER page 3-18)

4. Does the "Consolidated Marine Oil Terminal (CMOT) at Los Angeles" refer to Pactex or another proposed project? (ER page 3-58)

5. Page IV-18 of the DPP states that Platform Gail would be 3,694 feet (1,126m) from the north bound shipping lane. Page 4-31 of the ER states that the Platform would be approximately 4,100 feet (1,249m) north of the shipping lane. Which figure is accurate?

6. Would the proposed 500-meter safety zone around the platform exclude vessels under 100-feet? (ER page 4-35)

7. Please explain in detail the legend for Figure 2.6-1 (ER page 2-16) and indicate the pipeline routes from Gail to Grace. Are inspection routes for the pipelines going to follow the course shown on the map or the actual placement of the lines?

D. Fisheries

1. In the ER on Figure 2.6-1, explain what the single dashed lines depict.

2. The ER states that the pipelines will be 8.625" in diameter. Is this the outside diameter including protective coatings, insulation, anodes, and connections? If not, give the outside diameter, which includes these additional features. Also, provide a to-scale schematic drawing of the pipeline profiles or cross sections depicting the different components of the pipelines. If shrouds will be required, provide a to-scale drawing of these fixtures, also.

3. Provide the location of the surface soils sampling stations within the pipeline corridor. Were dart core surveys or other detailed surface soil surveys conducted within the pipeline corridor? If so, explain the type of survey which was done or if and when any are planned.

4. Explain whether any recreational fishing occurs in the immediate vicinity of Platform Gail.

5. Detail the steps Chevron will undertake to minimize anchor scarring.

6. Detail the mitigation measures, in addition to post-construction surveys, Chevron will use to eliminate problems with dropped debris or anchor scars, if the surveys determine that problems with trawlers will arise due to these impacts.

7. Provide a map accurately depicting the platform and pipeline construction zone radius and width. These areas should include the amount of space necessary for all of the construction and installation equipment and vessels, including the anchors and anchor lines.

8. Please provide the exact locations of the mooring buoys.

9. We have received reports from fishermen that oil and gas related equipment they have retrieved from their fishing gear has not been marked to identify the company using it. Describe what type of equipment will be marked and what the identification method will be.

10. Please indicate Chevron's commitment to notice construction schedules in the Oil and Gas Project Newsletter for Fishermen and Offshore Operators 30 days prior to commencement of offshore construction.

11. The analysis of impacts on the commercial fishing activities in the ER is a significant improvement over the analyses in previous ERs and DPPs, and we appreciate the efforts in attempting to address these issues. However, environmental documents for previously permitted and pending projects (Pt. Pedernales EIS/R, Santa Ynez Unit EIS/R, and Point Arguello EIS/R, for example) indicate that offshore oil and gas facilities and activities present a cumulative impact on commercial fishing and related activities. Our concern is heightened because the documents rely, as does the ER for Platform Gail, on limited Department of Fish and Game fish block and port landings information, some interviews with fishermen and other

fishing industry representatives, and in some cases, other information such as MMS studies. None of this information quantifies the impacts of displacement caused by the oil and gas facilities, dropped debris, snags, support boat traffic, or harm to the fisheries resources. Therefore the actual impacts may not be accurately represented in the documents.

We believe that quantifying the impacts of offshore facilities on ex-vessel income, and on local businesses which depend on the income and fish is critical to the Commission's review of the Platform Gail project. ERG Pacific Inc. has developed one method for assessing the economic impacts on the fishing industry for the San Miguel field development plan. This draft report shows that Platform Julius and the six hypothetical platforms in the Santa Maria Basin will affect the industry by causing a reduction in its catch. A similar analysis should be completed for the Platform Gail proposal or, Chevron should show how it will provide the information in another manner necessary to determine individual and cumulative impacts on the commercial fishing industry. The analysis should focus on the fisheries that operate in the Santa Barbara Channel.

We have requested that a similar analysis be done or equivalent cumulative impact data be submitted for the Gaviota Interim Marine Terminal. We believe that a regional study for the federal and state waters of the Santa Barbara Channel would most accurately determine the cumulative impacts of offshore oil and gas development. Therefore, we would like to discuss this request and the option of coordinating a regional study with other oil companies which have applied for long-term projects in the Santa Barbara prior to commencement of this analysis.

E. Air Quality

1. Specifically, what are the detailed project mitigation measures Chevron is proposing in an effort to reduce air emission impacts?

2. What is the reliability of the Allison turbines to continue reducing NOx emissions by 70% over the life of the platform? What are the maintenance requirements and have these turbines been tested to meet 70% NOx reduction in an actual application lasting more than 5-10 years? How will these turbines be tested and will Chevron replace them if 70% reduction cannot be maintained? In such event, will Chevron commit to a curtailment plan until 70% reduction is again achieved?

3. Does the air model assessment study (Appendix A) consider as the worst case analysis emissions generated from diesel fueled turbines during initial operation? Please explain.

4. What are the power sources of all equipment proposed on the platform including the crane, mud pumps desilter, desander and mixers as noted on page 2-9 of the ER? Are they diesel powered?

5. Page 2-14 of the ER notes the environmental monitoring systems to be used on the platforms. Are ambient air quality and emission monitors proposed to be located on the platform? Would monitors on the platform provide valuable ambient and emission data? Please explain.

6. Page 2-14 of the ER describes the proposed transportation modes. Did the air modelling study include measures to reduce emissions from crew and supply boats such as using larger boats to deliver crew and supplies to multiple platforms?

7. Page 2-20 of the ER notes that gas from Platform Gail will be further processed at Carpinteria. What type and quantity of emission increases (over existing emissions today) will occur at the Carpinteria plant? Were these emission increases included in the air quality modelling study? Please explain. We understand the Carpinteria facility has excess capacity. How will extending the operational life of this facility affect County efforts to reach attainment? Is this facility now using BACT? What additional mitigation measures could be applied to this facility?

8. Page 2-47 of the ER notes that Section 30253(3) is not applicable as the Air Resources Board and the APCD do not have jurisdiction over activities on the federal OCS. We disagree with this statement. The project has not been properly assessed to determine consistency with the CZMP. The project must also be reviewed under the requirements of Section 30250. The Coastal Act requires that projects on the OCS must be consistent with the requirements of the ARB or local APCD, including the State's Plan for attaining and maintaining federal ambient air quality standards. Thus, a review of the analysis of project emissions must be conducted by the ARB, Santa Barbara and Ventura County's APCD's to determine if the project, on an individual basis or in combination with other existing or proposed project emissions, would impede the state's strategies for and progress toward attainment.

The Commission staff need comments from the ARB, Ventura County and Santa Barbara County APCD's on the accuracy and completeness of the air model impact assessment and whether or not the model identifies any air standard or requirement exceedences and therefore requires further project mitigation. Staff has requested such comments.

The Commission does not have sufficient information to determine the potential for violating Clean Air Act, ARB, Santa Barbara County and Ventura County APCD, air quality standards and requirements in the onshore areas, or for exacerbating the efforts to attain and or maintain these standards in onshore areas. Until this analysis by these agencies is completed the project may not be found consistent to the maximum extent practicable with the CCMP. As you know, air quality impacts cross many jurisdictions beyond their origination and therefore impacts to all coastal areas must be considered during our consistency review process.

9. Page 4-5 of the ER discusses air quality and Class II PSD standards. Please explain why Anacapa Island, six miles to the south, is not noted as a Class I PSD area and how project emissions would adversely affect the island's designation.

10. Page 4-6 of the ER notes mobile source emissions related to the construction activities. How are these included in the air assessment modelling analysis?

11. Page 4-10 of the ER notes that no increase of emissions from Platform Grace associated with gas at Gail will occur. Please explain this statement particularly since additional gas will be sweetened over today's processing volume, and this has to create some incremental increase in emissions over today's emissions.

12. Alternative onshore processing sites in Ventura County and associated emissions must be considered and analyzed pursuant to Coastal Act Section 30260 in the model assessment. These sites include the Union Mandalay facility, Mobil Rincon facility and the Phillips La Conchita facility.

13. Page 6-2 of the ER discusses a comparison of the electric grid cable vs gas turbine platform sources. This comparision needs to be reviewed by the ARB, Ventura County and Santa Barbara County APCD's to verify its accuracy and completeness of appropriate information. Until such input is provided to Commission staff, we cannot determine what additional information, if any, is necessary.

F. General Comments

1. None of the submitted materials identify the impact upon-fresh water supplies on land due to increased (permitted) processing onshore and socioeconomic effects. Quantify demand for fresh water as a result of this project, availability and cumulative impact upon the overdraft of the Oxnard plain.

2. Page 2-1 of the ER notes that produced water will be treated and discharged into the ocean. Page 2-8 notes the desalination units are proposed to produce fresh water. Has Chevron explored the possiblility of further treating the connate water for use on the platform as potable or non-potable uses, including drill muds and fire suppression? What are the constraints or problems in using this water? Has industry used connate water for these purposes in the past?

3. Explain how visibility will be reduced and clarify this statement: "The distance from sensitive receptor areas coupled with reduced visibility in the project area will aid in reducing the dominant presence of the structure throughout the years." (page 4-99 of the ER)

4. Does the spare pipeline noted on page 2-1 of the ER have any other potential uses for future expansion of this platform or other platforms?

5. Page 2-3 of the ER notes that 3.2 tons of sulfur per day will be produced on Platform Grace. What form (i.e., granular or powder) will this sulfur be, how will it be transported to shore and contained, and will it be hazardous on the platform or in transport?

6. Page 2-7 of the ER discusses production facilities. How is the produced oil metered to determine quantity for federal royalty purposes? How is it metered as it is piped and commingled with other platform oils to the Carpinteria processing facility? What is the accuracy of this metering system?

G. Cumulative Impacts

The Commission is required by the Coastal Act to analyze cumulative impacts when reviewing development which would have an effect within or upon the coastal zone. The Commission has had a continuing concern for the cumulative effects of oil and gas development offshore California and within the Santa Barbara Channel. These concerns are shared by other governmental entities and the public.

The issue has been addressed in the EIS/R for the Point Pedernales Development which concluded that oil and non-oil related development in the Santa Maria Basin and Santa Barbara Channel offshore and onshore areas would cause a significant cumulative effect on environmental resources.

Because the existing information on these previously reviewed projects identify potential cumulative impacts, we find it necessary to conduct a cumulative impact analysis for the Platform Gail project. This analysis will consider the effects of existing and recently permitted oil related developments in addition to the potential effects from new proposals in the Channel; for example, ARCO Coal Oil Point, Shell Molino, Union Cojo, and the marine terminals at Gaviota and/or Las Flores. The ER states on page 2-58 that Platform Gail is one of 15 planned platforms for the Channel.

It is possible that the Environmental Assessment, being prepared by MMS which builds upon previous EISs for the Santa Clara Unit, will contain in detail the following requested information. However, because the EA will not be available until June, and the Commission must evaluate consistency prior to that time, we must receive these materials by April 15, 1986. To facilitate our analysis we are requesting additional information, as specified below.

1. Oil Spills. Provide an analysis of the cumulative probability of the occurrance of oil spills in the Santa Barbara Channel from existing, permitted, and proposed offshore oil related development. Include in this analysis the incremental affect of Platform Gail and the related pipelines.

2. Fisheries. Provide an economic analysis of the effect of existing, permitted, and proposed offshore oil related development on the commercial fishing industry. Include the incremental affect of construction and operation of Platform Gail, the pipeline, and related support boat traffic.

3. Marine Resources.

a. Provide the annual amounts of drilling muds, cuttings, produced water, and deck drainage which will be discharged from existing, permitted, and proposed offshore oil related development. Include and break out in these figures, the amounts which are expected to be discharged from Platform Gail.

b. Detail the impacts of these discharges on the marine environment, paying particular attention to federal and state listed species, commercial and recreational viable fish and shellfish species.

4. Vessel Traffic Safety. The ER states that up to 15 new platforms are anticipated in the Santa Barbara Channel. To the best of your abilities, map the location of these platforms in relation to the VTSS lanes and the buffer zones.

5. Air Quality. Provide an analysis to identify the potential cumulative impacts of existing, development, the Platform Gail project, and any reasonably foreseeable onshore and offshore oil related development in Ventura and Santa Barbara Counties. This analysis should determine 1) the potential for any violations of federal and state air quality standards; and 2) whether the identified cumulative impacts would result in further impediments to Ventura's and Santa Barbara's ability to attain the goals of their Air Quality Attainment Plans. Appropriate air modeling would be necessary to conduct this analysis.

6. Water Use. There is no evaluation of onshore fresh water demand as a result of the proposed project. Provide information on whether additional water use for processing will aggravate the overdraft situation in Ventura County.

H. Geotechnical Concerns

1. The proposed platform is located on an buried ancient slide deposit. There is a slide terrain area immediately to the north of the proposed platform and pipeline. The Geotechnical Report states that this upslope would move only 280 feet in the event of slope failure. (Page E-22) Has this type of prediction been used before, and if so, where?

2. Should the upper slope fail and displace material greater than 280 feet, what would the impacts be upon the platform, upon the pipelines, and upon the buried ancient slide deposit? Could a slope failure originating from the upper slide area act as a driving mechanism to reactivate the buried ancient slide deposit?

3. Show Platform Grace and all the associated pipeline routes (existing and proposed) on the map on page 3-9 of the ER. Do the pipelines cross the Mid-Channel Fault on their way to Platform Grace from Platform Gail? Do they cross the Hueneme Trend? What are the risks associated with these faults?

4. The proposed pipelines travel through the buried ancient slide zone, through an area of shallow gas deposits, along the base of the slide terrain, then across the slide terrain to Platform Grace. Explain the risks and the impacts of major slope displacements along the entire route of the pipeline and the projected stability and integrity of the lines.

5. Explain why the pipelines and platform are placed in the midst of these potentially hazardous areas and if these are the least environmentally damaging locations.

6. What design measures have been applied to the pipelines to withstand rupture due to seafloor slumping? How much lateral movement can the pipelines withstand before they rupture? Are there any shut-off valves proposed for installation along the unstable areas of the seafloor? Could they be used to minimize the impact of seafloor displacement?

Please submit materials as they become available to Ms. Devon Bates, Project Manager or call her to discuss these requests in further detail.

Thank you for your consideration and responses to these questions. We look forward to continuing communications with MMS and with Chevron as needed to resolve these remaining issues.

Sincerely,

SUSAN HANSCH, Manager
Energy and Ocean Resources Unit

SH/DB/ces

cc: Cynthia Norris, Chevron U.S.A., Inc.

0426N

Memorandum

To: John Doyle
Deputy Secretary
of Environmental Affairs

Date: May 12, 1986

Subject: Status of Chevron's Platform Gail Project

From: James Boyd
Executive Officer
Air Resources Board

Air Resources Board

This is to update our comments on Chevron's Platform Gail. As a result of discussions with Chevron on our earlier comments we have reached resolution on the concerns we had. Following is a list of the major concerns and how they were resolved:

1. Offsets for mitigation of ozone impacts. Chevron has agreed to use banked NOx emission reductions in Ventura County to (1) partially offset construction emissions from Platform Gail, and (2) to fully offset production emissions from Gail. Modeling will be used to determine the appropriate emission reductions for production offsets. Chevron will coordinate with ARB modeling staff to determine the amount of reductions needed. At a future date, if JIMS, SCCCAMP, or the negotiated rulemaking process indicate additional or less mitigation should have been required, Chevron would provide additional mitigation or would be allowed to bank the excess offsets, respectively.

2. Power cable. We believe Chevron has provided sufficient information to make a decision on the feasibility of using a power cable/utility grid power source in place of the proposed platform gas turbines. Although we noted several minor discrepancies in Chevron's information, the discrepancies should not have a major impact on the cost effectiveness of the power cable as a mitigation measure for NOx. We understand that Ventura County APCD previously supported use of a power cable as BACT for this project, but will accept offsets as an alternative to the cable.

3. Commitment to use and enforcement of) mitigation measures. Chevron will formally request the Development and Production Plan DPP for Gail be amended to include the proposed mitigation measures. MMS will include these measures as conditions for approval of the project.

4. Description of the inspection and maintenance (I&M) program for fugitive hydrocarbon emissions from the platform. Chevron has verbally agreed to an I&M program that would be equivalent to the one required by Santa Barbara County for Chevron's Point Arguello/Gaviota oil and gas facility.

5. Emissions from supply boats. Chevron initially assumed supply boats leave their main engines operating at idle while these boats are at the platform. Chevron later changed this assumption, stating that supply boats normally shut down their main engines while at a platform. Chevron has not verified that supply boats normally shut down their main engines while at a platform. We understand from Chevron that operation of the main engines will be assumed in the modeling analyses used to determine the offset requirements.

6. Emission changes at Platforms Grace and Hope and the Carpenteria processing facility. Any changes in emissions from these facilities as a result of Platform Gail will be addressed in the Environmental Assessment being developed by the Minerals Management Service (MMS).

Based on the offer by Chevron to mitigate the air impacts of Platform Gail and the resolution of our remaining concerns, we have no further concern with this project.

If you have any questions or if we can be of further assistance, contact Peter Venturini, Chief, Stationary Source Division, at 5-0650.

State of California

SACRAMENTO

JANANNE SHARPLESS
Secretary of
Environmental Affairs

May 13, 1986

Honorable Donald P. Hodel
Secretary of the Interior
Interior Bldg, Rm 6151
C between 18th and 19th, N.W.
Washington, DC 20240

Dear Secretary Hodel:

On March 31, 1986, I provided you with Governor Deukmejian's comments on the Development and Production Plan for Chevron's Platform Gail on Lease OCS-P 0205. Contained with that letter were comments from the California Air Resources Board (CARB). CARB requested additional information on the air quality analysis and mitigation measures.

Chevron subsequently provided CARB the additional information in response to these comments. CARB has reviewed this information and indicated that their concerns on the project have been resolved. Attached is a copy of CARB's findings.

Sincerely,

Jananne Sharpless
Secretary of Environmental
Affairs

Attachment

cc: Governor's Office
Bill Grant, MMS
Cynthia Norris, Chevron
James Johnson, CCC
✓Susan Hansch, CCC SF

1102 Q STREET, SACRAMENTO, CALIFORNIA 95814 (916) 322-5840

State of California

SACRAMENTO

JANANNE SHARPLESS
Secretary of
Environmental Affairs

June 16, 1986

Honorable Donald P. Hodel
Secretary of the Interior
Interior Bldg, Rm 6151
C between 18th & 19th, N. W.
Washington, DC 20240

Dear Secretary Hodel:

On March 31, 1986, I provided you with Governor Deukmejian's comments on the Development and Production Plan for Chevron's Platform Gail. Contained with that letter were concerns raised by the California Air Resources Board (CARB). Chevron has subsequently provided CARB additional information in response to these comments. I transmitted a copy of CARB's review of the subsequent information on May 13.

To complete the air quality analysis, CARB has also reviewed Systems Applications' NOx offset analysis and finds that the analysis is consistent with the agreed protocol of May 8. For every pound increase in NOx emissions from Platform Gail, 0.9 pound of NOx from source(s) onshore should be reduced to fully mitigate the impact from Gail. This translates into a 25 pound per hour offset requirement onshore. Attached is a copy of CARB's findings.

Sincerely,

Jananne Sharpless
Secretary of Environmental
Affairs

Attachment

cc: Bill Grant, MMS
Cynthia Norris, Chevron
Susan Hansch, CCC

1102 Q STREET, SACRAMENTO, CALIFORNIA 95814 (916) 322-5840

State of California

Memorandum

To : John Doyle
Deputy Secretary of
Environmental Affairs

Date : June 16, 1986

Subject : Modeling Results for NO_x Offset Ratio for Chevron's Platform Gail

James Boyd
Executive Officer

From : Air Resources Board

As you are aware, during the Coastal Commission's consistency determination process for Chevron's proposed Platform Gail, Chevron agreed to use "banked" emission reductions from Ventura County to offset ozone impacts from Platform Gail emissions. Modeling was to be used to determine the appropriate offset ratio.

On June 9, 1986, Systems Applications, Inc. completed an offset analysis report on the appropriate offset ratio. My staff has reviewed this report, along with supplemental documentation that was later submitted. Based on our review, we believe the analysis is consistent with the agreed May 8, 1986 modeling protocol.

The modeling results indicate that a NO_x emission reduction of 3.2 grams per second is required to offset Gail's impact. Gail's peak NO_x emissions are estimated as 3.6 grams per second. In other words, for every one pound increase in NO_x emissions from Gail, 0.9 pounds of NO_x onshore must be reduced to fully mitigate impacts from Gail. This would amount to a 25 pound per hour offset requirement onshore.

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.

RESOURCE MANAGEMENT AGENCY

county of ventura

Air Pollution Control District

Richard H. Baldwin
Air Pollution Control Officer

RECEIVED
MAY 19 1986
CALIFORNIA COASTAL COMMISSION

May 16, 1986

Ms. Devon Bates
Energy and Coastal Resources
California Coastal Commission
631 Howard St., 4th Floor
San Fransisco, CA 94105

Subject: Consistency of Proposed Platform Gail with APCD Requirements

Dear Ms. Bates:

Thank you for the extension to May 16, 1986, for the submittal of our comments on proposed Platform Gail. Even with the extension we have had to conduct a last minute review for a project that would normally take months. In addition, the District has had to incur the costs of conducting the review. Generally, this approach is inconsistent with the District's procedures for permitting onshore sources.

We have organized our determination as follows. In Attachment I we have provided a chronological overview of the events and referenced attachments. In the main body of our determination Chevron's commitments are presented first. Following this are other issues where questions remain. Finally, our determination is presented.

Before beginning our analysis, we want to note that although Chevron did not formally begin to address District requirements until three weeks ago, which has made this review an extremely difficult one for the District, Chevron has demonstrated a commendable effort to meet District requirements.

Chevron Commitment

Chevron has committed to the following District requirements:

Pipeline and Platform Construction Emissions

ROC and NOx Emission Offsets: (see item 1 Attachment X) Chevron will offset all ROC emissions. Chevron will offset all NOx emissions to the extent feasible. Emission offsets include impacts from crew and supply boat emissions.

Crew and Supply Boat BACT: (see item 1 Attachment VI) Chevron will given preference to low emitting crew and supply boats.

Government Center, Administration Building
800 South Victoria Avenue, Ventura, CA 93009 (805) 654-2806

Development Phase

ROC and NOx Offsets: (see item 1 Attachment X) Chevron will, based on modeling, fully mitigate ozone impacts caused by development emissions, including impacts from crew and supply boats, and will provide a net air quality benefit.

Turbine vs Cable: The District accepts that turbines with water injection at 70% control plus offsets represents BACT in this instance. Chevron has agreed to conduct compliance monitoring (see item 6 Attachment X) and to make these data available to the Disrict.

Platform Fugitive Emissions: (see item 3 Attachment X) Chevron has agreed to a fugitive inspection/maintenance program meeting BACT. Chevron has agreed to provide I/M logs to the MMS -- for District review.

Low Sulfur Fuels: (see item 4 Attachment VI) Chevron will meet District requirements.

Hydrogen Sulfide: (see item 5 Attachment X) Chevron will meet District requirements.

Emergency Use of a Flare: Chevron has committed to meet District requirements regarding use of the flare (see item 2 Attachment X), or pay a penalty of $1000 per day for each day of flaring which is not considered an emergency pursuant to the District's requirements.

Compliance Data: (See items 3, 4, and 5 Attachment IX) Chevron indicated it inadvertently left this requirement out of its commitments. Chevron verbally agreed to provide these data to the District through the MMS (meeting of 5/16/86). Chevron indicated it would inform the Coastal Commission of this commitment verbally, and it would follow with a written confirmation to the District and the Coastal Commission.

Other Issues:

Issues where questions remain are summarized below.

Compliance Data: Pursuant to several preceding issues, we have required that Chevron make its compliance data (e.g., flare and platform fugitive inspection/maintenance and turbine compliance data) available to the District upon request through the MMS. Verbally, MMS has indicated that if Chevron agrees, these data will be made available to the District. We do not have a written confirmation from the MMS, due to time constraints, on our access to these compliance data. If MMS does not agree to provide and send these data to the District upon request, then Chevron has agreed to send the requested material directly to the Ventura County APCD.

Compliance Enforcement: Chevron indicates that it will make the preceding commitments a condition of its permit with MMS. We have not had time to verify whether MMS will: (1) include these commitments in its permit with Chevron and, (2) enforce these commitments. If MMS fails to agree to include the commitments as a condition of its permit with Chevron regarding Platform Gail and enforce the commitments, then Chevron will enter into a separate agreement with the Ventura County APCD providing for enforcement of the agreed upon commitments.

Determination of Consistency of Proposed Platform Gail with District Requirements

The proposal is consistent with the District's Rules, Regulations, and practices. Construction emissions in the OCS are unaccomodated in the Air Quality Management Plan. To be consistent the emissions must be fully offset. The District believes Chevron has committed to mitigate the construction emissions to the extent feasible and that the Coastal Commission could make a similar finding. This would be consistent with onshore land use decision practices; Rarely are land use permits denied because of construction emissions. Land use decision bodies typically look for mitigation to the extent feasible.

Given the problems, lack of adequate time and resources, and Chevron's proposal to do more on offsets than ever offered before in OCS waters, their proposal is probably the best that can be expected.

Regretfully, this District was not included in the initial discussions about regulatory requirements for platform Gail. In fact, we were not brought into the discussions until very near the end of the review process. This created very special problems for Chevron and the District, because the District is recommending conditions on the Chevron permit which will be more difficult and costly to implement than would have been in the initial stages of design. The result is that design changes and equipment retrofit are now necessary.

Also, and equally important, District staff had to conduct a technical analysis in just three weeks for a project which normally could take three months to evaluate. This has significantly impacted the District's Air Quality Management Plan work schedule. And we are concerned that something may have "fallen between the cracks" because we were unable to conduct a carefully planned in-depth analysis. Finally, since our work was not funded by the project applicant, the District's fiscal resources have been impacted. Had Chevron been required to pay for the necessary analyses, the District could have hired additional resources. With additional resources the District's ongoing programs would not have been impacted, and a better planned analysis of the project could have been performed.

If you have any questions, or require our testimony before the Commission please contact me at (805) 654-2665, or Larry Rennacker of my staff at (805) 654-5033.

Sincerely,

Richard H. Baldwin

Richard H. Baldwin
Air Pollution Control Officer

LRGAL6

cc: Tom Dunaway, MMS
Bill Sylte, ARB
John English, SBCAPCD
J.P. Lester, Chevron
Ray Menebroker, ARB
James Johnson, California Coastal Commission
Cynthia Norris, Chevron
Steve Ziman, Chevron
Jim Lovins, Chevron

Calendar of Events

Date	Item
1/31/86	Secretary of Environmental Affairs (SEA),requests our comments on the DPP and ER.
2/28/86	Comments submitted to SEA (Attachment II).
3/13/86	Coastal Commission (CC) requests our comments.
3/28/86	Comments submitted to the CC (Attachment III).
4/2/86	Meeting with Chevron regarding our comments.
4/23/86	Chevron's written response to our meeting (Attachment IV). Chevron refutes our regulatory authority and ignores our concerns.
4/25/86	Meeting with Chevron, MMS, ARB, CC, and SEA on our comments. We reiterate our position. Chevron proposes modeling to determine development offsets, ARB (Venturini) indicates this is a positive approach.
4/28/86	Chevron submits a written proposal in response to our requirements. This is the first time Chevron has done so (Attachment VI).
4/30/86	Meeting with Chevron to discuss the 4/28 proposal. The District agrees to the use of modeling to determine operational emissions. The issues are divided into two groups: (1) construction and operational emission offsets and (2) other issues.
5/5/86	Meeting with Chevron to discuss the group (2) issues.
5/7/86	Meeting with Chevron and ARB to discuss the protocol to be used in modeling (Attachment VI).
5/9/86	Chevron submits a second written commitment to meet specificed requirements (Attachment VII).
5/9/86	Meeting with Chevron to discuss its second proposal.
5/12/86 & 5/13/86	Chevron submits additional points of clarification regarding its 5/9 letter 5/9/86. (Attachment VIII).
5/14/86	We submit our minimally acceptable requirements to Chevron. These represent in essence Chevron's commitments with a few additions/modifications (Attachment IX).
5/14/86	Chevron calls the District and indicates the our requirements regarding flares, turbine compliance monitoring, and submittal of compliance are unacceptable.
5/15/86	Final meeting with Chevron.
5/16/86	Chevron submits it final proposal to meet District requirements (Attachment X).

Attachment I

RESOURCE MANAGEMENT AGENCY

county of ventura

Air Pollution Control District

Richard H. Baldwin
Air Pollution Control Officer

March 28, 1986

Mr. Devon Bates, Project Manager
California Coastal Commission
631 Howard Street, 4th Floor
San Fransisco, CA 94105

SUBJECT: MAY 13-16, 1986, COMMISSION HEARING ON THE DEVELOPMENT AND PRODUCTION PLAN (DPP) AND ENVIRONMENTAL REPORT (ER) FOR PLATFORM GAIL

Dear Mr. Bates:

Thank you for your letter of March 20, 1986, in which you requested District comments on Chevron's proposed platform Gail. On February 28, 1986, the District submitted comments to Ms. Jananne Sharpless, Secretary of Environmental Affairs (Attachment I) on the subject DPP and ER. In addition to these comments, which we hereby incorporate by reference, additional clarification and comments are given below:

1. Insufficient Review Time

In response to our February 21, 1986, letter to Ms. Sharpless, Chevron sent us, on or about March 19, 1986, the following information:

a. Air Quality Impact Assessment of Emissions From Proposed Platform Gail, SAI Inc., December 20, 1984.

b. A brief summary of an analysis conducted by Brown & Root for Chevron on cable versus turbine power.

c. Chevron's response to ARB's comments on the proposed emission inventory and modeling protocol.

We do not have sufficient time to evaluate this additional information and respond by March 31, 1986, as requested by you. Therefore, we are requesting that the comment period be extended to two weeks after receipt of the information requested in 2 below.

Government Center, Administration Building
800 South Victoria Avenue, Ventura, CA 93009 (805) 654-2806

2. Insufficient Information

In the DPP and ER, the applicant claims that use of power from Southern California Edisons' onshore utility network will cost more than if the power were supplied by platform turbines. In support of this conclusion, the applicant provided the District with summary pages from a report prepared by Brown & Root. From the summary pages alone it is impossible for the District to verify the cost estimates. Specifically, the District needs the following data to verify the cost estimates:

a. Cost of electricity (average per unit, average per unit per year, and total)

b. Cost of gas (opportunity - average per unit, average per unit per year, and total)

c. Power demand (average per hour for the life of the project, and total)

In addition, the summary report indicates the discount rate has the potential to substantially change the cost estimates. Given the uncertainty of the discount rate in the future, cost estimates should be calculated assuming a range of rates (e.g., 8%, 10%, 12%). A copy of the complete Brown & Root report may be able to satisfy the aforementioned needs.

3. Consistency with District Requirements

There are two requirements the proposed activity must meet for it to be found consistent with District requirements: the 1982 Ventura County Air Quality Management Plan and Ventura County Air Pollution Control District Rules and Regulations. District requirements relating to the platform are given in Attachment I. Those relating to pipeline and platform construction emissions are detailed below:

Air Quality Management Plan - Construction Emissions: Although modeling of ambient onshore ozone impacts was never conducted for the pipeline and platform construction emissions, it appears likely that these emissions will have an adverse impact on onshore ambient ozone concentrations in Ventura County. Construction activity emissions of ozone precursors are generally greater than platform emissions on a per day basis. Modeling conducted for the platform indicated a degradation of onshore air quality. Since Ventura County frequently violates the Federal Ambient Air Quality Standard for ozone, any further degradation would be considered significant to this area.

The applicable requirements for the construction activity emissions is found in the federally-mandated Air Quality Management Plan. For the construction emissions to be consistent with the AQMP, Best Available Control Technology must be applied to the sources of the construction emissions, and remaining emissions must be offset.

For a definition of BACT and offsets the applicant should contact the District at the earliest possible date.

4. Staff Resources

The District has incurred expenses in reviewing the proposed activity and determining if it is consistent with District requirements. Additional work will be required to complete this determination. The District has not budgeted the resources needed to provide the level of staff support necessary to assure that the project is consistent with District requirements (e.g., analyses of information, determinations of BACT and offsets). Consequently, the District must set aside budgeted programs so that this work can be accomplished. The District proposes that Chevron agree to reimburse the District for the expenses the District incurs reviewing the subject activity pursuant to consistency determination.

In conclusion the proposed activity as defined in the DPP and ER does not meet the requirements of the Ventura County Air Pollution Control District. The ER and DPP need to demonstrate that BACT is to be applied and that remaining emissions are to be fully offset. In addition, the District needs: (1) additional time to evaluate the information submitted to date; and (2) more detailed information on the turbine versus cable cost analysis.

We look forward to working with the Commission and Chevron towards a successful and environmentally acceptable OCS development and production program. If you have any questions, please call Larry Rennacker at (805) 654-5033.

Sincerely,

Richard H. Baldwin

Richard H. Baldwin
Air Pollution Control Officer

ATTACHMENT

LRCHUD

cc: Vic Husbands, RMA
James Johnson, California Coastal Commission
Ray Menebroker, ARB
John English, SBCAPCD
Chron File

Devon

County of Santa Barbara
RESOURCE MANAGEMENT DEPARTMENT

Dianne Guzman, AICP, Director
Dev Vrat, Assistant Director

Energy Division

February 28, 1986

Jananne Sharpless
Secretary of Environmental Affairs
State of California
1102 Q Street
Sacramento, CA 95814

RE: Chevron's Proposed Platform Gail-Lease OCS-P0205

Dear Ms. Sharpless:

We have reviewed the Environmental Report for Chevron's Platform Gail, proposed for location in the Outer Continental Shelf 24 miles southeast of Santa Barbara. Several general comments are appropriate; these are found below. Comments specific to the Environmental Report/Development and Production Plan furnished by Chevron are included as an attachment. Please note that these comments have been prepared in consultation with the Santa Barbara County Air Pollution Control District, and thus reflect that agency's input, as well.

General Comments

1). An Environmental Impact Statement should be prepared to fully consider the cumulative construction and operation impacts attributable to OCS development in this area of the Santa Barbara Channel.

2). Impacts of any modification to both onshore and offshore facilities should be fully discussed, including prolonging the operational life, and associated emissions, of existing facilities.

3). Onshore air quality impacts should be examined using methodologies adopted by adjacent air quality Districts.

4. All feasible measures to reduce ozone precursors (including those measures identified in Chevron's Point Arguello Project permit issued by Santa Barbara County) should be included in this project.

If you have questions about any of the comments included herein, please contact Peter Cantle of this office, at (805) 963-7103.

Sincerely,

JOHN PATTON
Deputy Director

JP:PC:ls:5649e

cc: Bill Master, APCD
Susan Hansch, California Coastal Commission
Marsha Magness, City of Carpinteria
Nancy Post, Air Resources Board

Attachments

4441 Westmont
Ventura,Ca. 93003
May 12, 1986

Board of Supervisors of Ventura County
800 So. Victoria
Ventura, Ca. 93009

Chairman Daugherty and Members of The Board:

At it's June 10-13, 1986 meeting, the California Coastal Commission will conduct a hearing to determine if Chevron USA's plans for it's proposed Platform Gail project are consistent with all of the requirements of the Coastal Zone Management Act, local coastal plans, and other incorporated plans, including Ventura County's Air Quality Management Plan. From information from the Commission's staff, I understand that Ventura County has been requested to advise the Commission on whether Chevron's plans for Platform Gail are consistent with the air quality management program of Ventura County.

I recall that your Board adopted a very forthright and reasonable policy in 1981 that said that OCS oil development projects should have their air pollution emissions regulated, controlled, and offset in the same manner as new onshore petroleum production activities. This approach is directly applicable in the case of Platform Gail.

Since this project will be a major source of NOx and/or hydrocarbon emissions impacting on Ventura County's already adverse ozone air quality, all NOx /hydrocarbon emission sources associated with the installation and operation of this platform should be controlled to the greatest extent possible, just like a source subject to the APCD's Rule 26.1. That rule also requires that the emissions from the source be offset by at least a factor of 1.2 to 1, and also that a distance factor be incorporated in determing the amount of offsets, if the offsets are separated from the new source of emissions.

I trust that this Board will reaffirm your policy on air pollution control for offshore oil activities in your consistency recommendations to the Coastal Commission.

Sincerely,

Betty Taylor

Betty Taylor

cc: Senator Hart
Assemblyman O'Connell
California Coastal Commission
Ventura Star Free Press

DB
JJ

ENVIRONMENTAL COALITION

5-7-86

Supervisor Susan Lacey
Government Center
800 S. Victoria Ave.
Ventura, Ca. 93009

Dear Susan,

As you know in June 1986 the California Coastal Commission will be deciding whether the plans for Chevron's Platform Gail are "consistent" with the requirements of the Coastal Zone Management Act, local coastal plans, and other incorporated plans, including our Air Quality Management Plan. We understand that Ventura County has been asked to advise the Commission whether Chevron's plans are consistent with the air quality management plan of Ventura County.

Since the expected NOx and hydrocarbon emissions from both the construction and the development phases of this project would further contribute to this county's serious ozone air pollution problem, the County should request that the Commission deny Chevron a consistency finding unless all NOx and hydrocarbon emissions are fully offset to the same extent as any similar source of ozone precursor emissions would be required under the County's own APCD new source review requirements and environmental (CEQA) mitigation policies.

We believe that the County needs to uphold its current APCD regulations and request that the Commission sustain those requirements for all OCS development which adversely impacts air quality in Santa Barbara and Ventura counties.

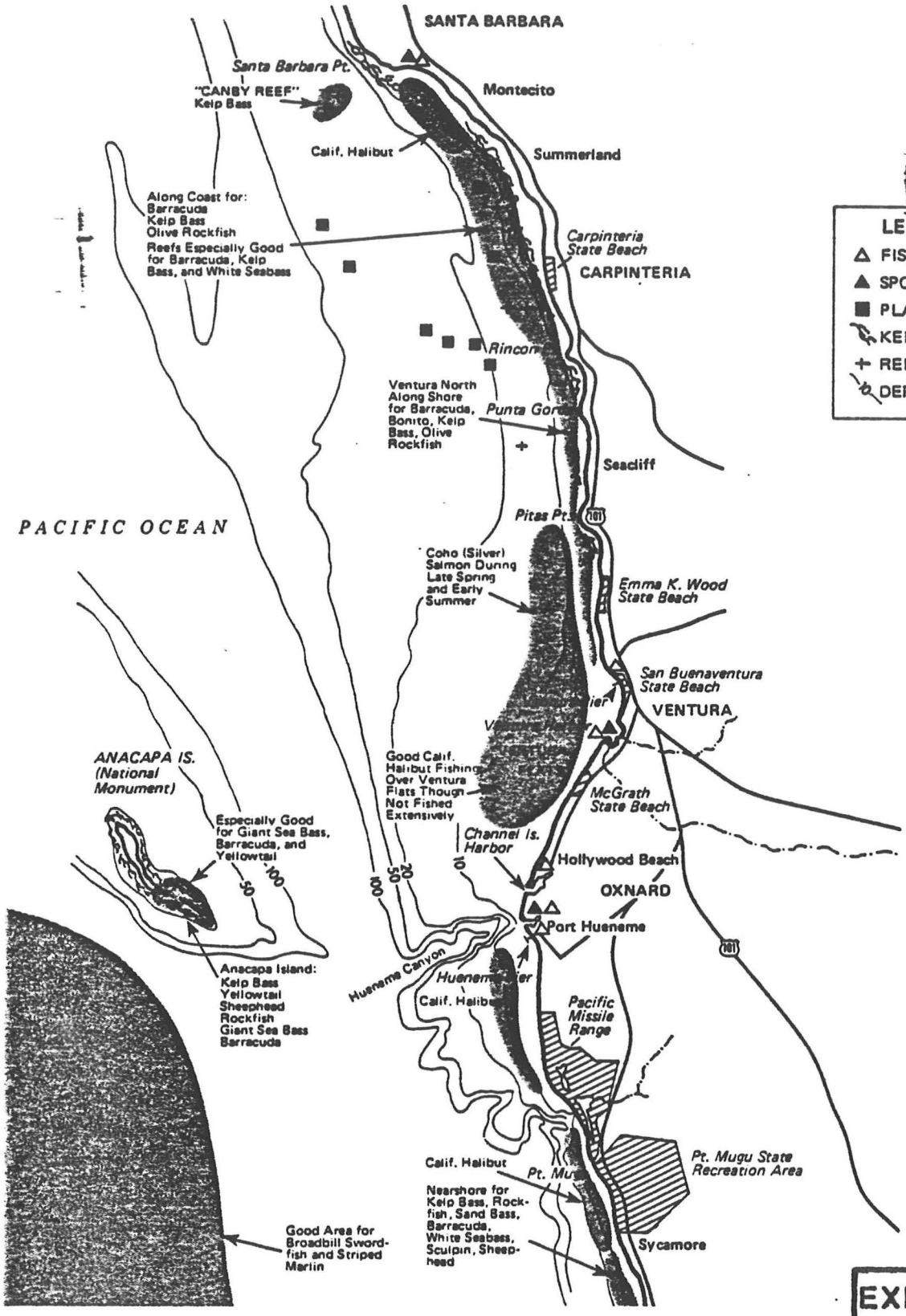
We trust that you and tha Board will continue to protect to the maximum extent possible Ventura county's air quality from further deterioration.

Sincerely,
Frank DePasquale
Frank DePasquale

cc: Board of Supervisors
Coastal Commission
Senator Gary Hart
Star Free Press

EXHIBIT NO. 13
APPLICATION NO. CC - 2 - 86
Chevron - Gail
California Coastal Commission

POST OFFICE BOX 68 • VENTURA, CALIFORNIA 93002



SOURCE: Gusey, 1982

Sportfishing and Marine Recreational Areas – Eastern Santa Barbara Char

EXHIBIT NO. 15

APPLICATION NO. CC - 2 - 86

Chevron - Gail

California Coastal Commission

Chevron U.S.A. Inc.
646 County Square Drive, Ventura, California
Mail Address: P.O. Box 6917, Ventura, CA 93006

Land Department
Outer Continental Shelf District
Area Office

May 16, 1986

PLATFORM GAIL
CHEVRON'S COMMITMENT TO
MITIGATE AIR QUALITY IMPACTS

Mr. Richard H. Baldwin
Air Pollution Control Officer
Ventura County Air Pollution Control District
800 S. Victoria Avenue
Ventura, CA 93009

Dear Mr. Baldwin:

The following information is provided as a summary of the issues discussed during our meeting on May 15, and serves as Chevron's final commitments with regard to the issues of air quality as they relate to construction and operation of Platform Gail. It is our understanding that Chevron's commitments to the Ventura County APCD will be included as permit conditions by the MMS.

1. During the construction phase of Platform Gail Chevron will utilize 100 tons of NO_x emissions which are banked in the Oxnard non-growth area to mitigate construction emissions. At the end of construction Chevron will return 90 tons of the emissions to the bank and surrender 10 tons to the district as a net air quality benefit for Ventura County. Chevron will begin using the 100 tons as offsets for a period beginning March 1, 1986 through February 28, 1987. At the end of this period Chevron will be allowed to return 90 tons of offsets to the bank.

   While Chevron is using the 100 tons to offset construction emissions, 35 tons of available offsets will remain in the bank. Chevron is leaving these offsets in the bank, rather than using them on Platform Gail, because there are other projects, as listed below, which may require use of offsets.

   a. Chevron has plans for developing two or more wells in Oxnard;

   b. Chevron may install a small gas processing plant to sell gas from production in Oxnard; and

   c. Chevron may conduct additional exploratory activity in State waters offshore Ventura County.

   Chevron agrees to offset construction ROC emissions at the rate of approximately 7.4 tons per year for a period from March 1, 1986 through February 28, 1987. At the end of that period of time, Chevron will be allowed to return the 7.4 tons of offsets to the bank.

Chevron does not believe that Ventura County Air Pollution Control District has jurisdiction over its activities since the Platform Gail project is located in Federal waters, but is nevertheless willing to provide the mitigation measures outlined above in an effort to satisfy requirements imposed by Ventura County on Chevron's project.

2. Chevron shall limit the use of the flare on Gail exclusively for emergency disposal of process gases in the event of unavoidable process upsets. In the event it is necessary to use the flare for emergency purposes Chevron will attempt to rectify the problem, will notify the MMS, and be governed by the MMS rules with regard to flaring. Chevron appreciates Ventura County APCD's concern over what it calls a "non-emergency" situation -- where a seller may be unable to reach a suitable contract with a purchaser, making gas sales temporarily impossible. However, Chevron believes with regard to flaring that any additional regulation by an agency other than the MMS is unnecessary.

   Chevron would be willing to submit to payment of a penalty to Ventura County APCD in the event Chevron would find it necessary to flare under what the County believes to be a "non-emergency" situation as described above. For each day that Chevron would find it necessary to conduct "non-emergency" flaring, Chevron would pay Ventura County APCD $1000.00. This offer is made in light of the fact that Chevron cannot agree to shut in oil production from Platform Gail in the unlikely event that Chevron is unable to sell its gas.

3. Chevron is committed to an I & M program as outlined in Chevron's letter to you dated May 7, 1986. As part of the I & M procedures Chevron intends to do the following:

   Leaking components will be tagged and repaired within 20 days, a leak will be defined as a drip rate of more than 3 drops per minute, an indication of a liquid or a gaseous leak and/or the registration of 10,000 ppm or greater measured as methane with a portable gas detection device. Components containing 10% or less V.O.C. are exempt. Critical process components which cannot be repaired within 20 days will be repaired and/or replaced not later than 90 days from the date of leak detection, unless the repair and/or replacement of such critical process component would require the shutdown of the Platform, in which event Chevron would repair and/or replace such component at the time when the platform is next shut down (process turn around). Chevron would also attempt to minimize any leak problem at the time it is identified.

   Chevron also agrees to provide the Ventura County APCD with a letter describing the processes on the platform which would require total platform shutdown for repair and/or replacement and will describe those components on the platform which can be repaired and/or replaced without total platform shutdown. Chevron will supply this information to the County prior to the hearing scheduled before the California Coastal Commission on Platform Gail during the second week of June, 1986.

4. Chevron is committed to giving preference to crew and supply boats which have low NO_x emission levels, if available. Chevron will furnish specifications in our bid request for low emission engines. Preference will be given to the companies with equipment which can meet our specifications and preference will be given to the particular equipment which can meet our particular specifications. At this time, the low emission engine under Chevron's specifications consists of an engine equipped with a turbo charger with interstage cooling and injection timing retardation of 4 degrees. This should provide an emission reduction of approximately 40% over the standard naturally aspirated marine engine (i.e. approximately 10-11 gr/bhp-hr). A naturally aspirated marine engine has an emission factor of 18.0-16.8 gr/bhp-hr. In emergency situations, Chevron reserves its right to use any craft which is available regardless of emission levels.

5. Hydrogen Sulfide (H_2S) emissions will be kept to a minimum not to exceed 10 ppm at the point of discharge except during upset or breakdown conditions, for example, as defined in VAPCD rule 32. Platform Gail has approximately 60 H_2S gas detection monitors which are calibrated to sound an audible alarm at 10 ppm. These monitors are inspected and calibrated monthly in conformance with MMS OCS order No. 5.

6. Chevron will conduct the following operations in order to insure that its turbines are performing at a 70% reduction level:

   a. Chevron will establish baseline emissions at 100% load capacity for each turbine when Chevron is able to run a turbine unit at 100% capacity without water (full load - uncontrolled);

   b. The maximum allowable rate will be the sum of the maximum rate for each turbine at full load with a 70% reduction or the achievable percentage of reduction demonstrated during compliance testing with appropriate mitigation. (Appropriate mitigation will consist of offsetting onshore impacts resulting from a maximum rate which is less than 70%, that is, if 64% is achievable then Chevron will offset the onshore impacts resulting from the difference between 64% and 70%.)

   c. Chevron will develop curves at 30, 50, 70 and 100% of load as a function of water to fuel ratio for each turbine to determine mass emission rates for each turbine.

   d. Chevron will record water and fuel rates and either log ratios hourly or electronically. Once during each shift the ratios since the last "shift review" will be observed to check for any exceedence. In the event an exeedence is noticed the individual doing the review will note the time of the exceedence, take necessary steps to correct it, and record what the exceedence was. This method of monitoring will allow Chevron to determine hourly mass emission rates, which rates will not exceed the allowable emission rates determined in accordance with paragraphs a, b, and c above.

   e. Chevron will submit to Ventura County APCD a modified EPA Method 20 test plan for its review and approval prior to Chevron's beginning

actual testing.

f. Mass emissions rates will be based on calculated volumetric flow derived from the fuel rate and measured stack concentrations.

g. On an annual basis Chevron shall test each turbine at 4 operation points (30%, 50%, 75%, 100%) that are between 90% and 100% of the average operating range of the turbines in megawatts.

The foregoing information clarifies Chevron's committments which were outlined in our letters of April 28, May 7, and May 13, it also serves to clarify the information set forth in the "attachment" pages supplied by Ventura County APCD to Chevron on May 14, 1986. We are confident from our discussions on May 15, 1986 that the foregoing committment by Chevron will enable you to prepare a favorable recommendation on our project to the California Coastal Commission. If you have any questions or comments concerning this letter please contact Cynthia Norris at (805) 658-4342.

Very truly yours,

Original signed
J. P. LESTER

CAN:dld

cc: Devon Bates, California Coastal Commission
James Johnson, California Coastal Commission
Julia Van Aucker, Minerals Management Service
Peter Venturini, California Air Resource Board

Proposal Only
The Commitments/mitigation stated in this letter are proposals only. Such will not become part of the Plat. Gail DPP until Chevron is advised that staff will recommend concurrence re Plat Gail.
Dough E Clarkson
6-16-86

Chevron

Chevron U.S.A. Inc.
6001 Bollinger Canyon Road, San Ramon, California
Mail Address: P.O. Box 5050, San Ramon, CA 94583-0905

Land Department
Western Region

June 16, 1986

Platform Gail

EXHIBIT NO. 16a
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

Devon Bates
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105

Dear Devon:

The following information is provided in response to questions raised by staff during our meeting on Monday, June 8, 1986.

1. A Vessel Collision Contingency Plan is attached hereto for your reference. This information is provided pursuant to a request from Suzanne Rogland that our contingency plan be given to her in writing. (Attachment 1)

2. Mr. Brian Baird requested that we agree to participate in an oil spill response exercise near Anacapa Island. We have discussed this exercise with Clean Seas and have been advised that the following steps would be taken in any such exercise.

   Clean Seas would view this as a full training exercise. The date, time and place will be predetermined by Clean Seas and Chevron. For this particular exercise, Chevron, the MMS, Clean Seas, the Marine Sanctuary and the California Coastal Commission would know in advance when the exercise is to take place. When the exercise begins, Cleans Seas would immediately respond with one of the Mr. Clean vessels. They would then deploy the EXPANDI boom and the GOODYEAR boom thereby supplying 3,500 feet of boom on the water with which to work. Clean Seas would call on Chevron to help Clean Seas deploy and maintain the boom if necessary.

   Clean Seas will evaluate the results of the exercise and if necessary, refine its response plan to better accommodate the affected area. Clean Seas also plans to conduct training exercises in the sensitive areas near the Channel Islands on at least an annual basis.

3. The following information is provided with regard to air quality.

a. Chevron is committed to using crew and supply boats which have a low emission level. Chevron will furnish specifications. Chevron is committed to using the companies and equipment which can meet our specifications and Chevron is committed to using the particular equipment which can meet our particular specifications. At this time, low emission engines under Chevron's specifications consist of engines equipped with a turbo charger with interstage cooling and injection timing retardation of four degrees. This should provide and an emission reduction of approximately 40 percent over the standard naturally asperated marine engine.

b. The results of our modeling for operations on Platform Gail are attached hereto for your reference. You were previously furnished a copy of this letter. (Attachment 2)

c. The grid power analysis that Chevron prepared has been provided to you previously. Supplemental information is attached hereto for your reference. (Attachment 3)

You should also be reminded that the California Air Resources Board and the Ventura County Air Pollution Control District staffs have both stated that our BACT analysis for turbines using water injection vs. grid power is an acceptable demonstration of turbines with water injection as BACT. Additionally, as you are aware, Chevron is providing 1.1:1 offsets of NO_x based on CARB-VCAPCD approved modeling study using the maximum emissions possible from our project. The clear result is that over the 30-year life of the project, Chevron would be providing about three times more offsets than emissions in the same area as the proported impacts. We note that your initial staff report did not contain this type of information, and we would request that you specifically set forth this information in your final staff report.

d. Chevron is prepared to commit 135 tons of offsets (our entire bank in Ventura County) to offset construction emissions for a period of one year. Chevron has been unable to locate any other offsets for use in this project to date. We have contacted Mr. Ivan Tether and Mr. Malcolm Weiss, both with AER*X and were advised that no offsets of which they know are presently available in Ventura County. The company has not made a complete search of the particular air basin in which we are dealing with Platform Gail. Chevron contacted Texaco and were advised that they had no offsets to lease or sell. They are committing their offsets to another project at Gaviota. We contacted Union and were advised that they had no available offsets. They plan to use their offsets for their own projects. There are no other offsets available of which we are aware.

4. We provided you with a summary of the water consumption information regarding Platform Gail at the hearing on June 9. A copy of that information is attached hereto for your reference. (Attachment 4)

One final note: During the hearing on Tuesday, we testified that Chevron's oil spill equipment had an efficiency rate of 60 to 90 percent that would be effective 86 to 90 percent of the time. This information was taken out of context and as interpreted during the commission hearing would have been inaccurate. A memo clarifying that statement is attached hereto. A separate copy is being provided to Mr. Brian Baird, so that your staff report may reflect Chevron's true intent. (Attachment 5)

The foregoing information is provided in an effort to conclude the information exchange process. We are providing this information to you by your June 16 deadline and trust that this will enable you to prepare a favorable staff report for Platform Gail.

If you have any questions concerning any of the information contained in this letter, please contact Cynthia Norris at (805) 658-4342 as soon as possible.

Very truly yours,

Cynthia A. Norris

CAN:dr
Attachments

cc: Julia Van Auker
The Minerals Management Service

Richard Baldwin
Ventura County APCD

Peter Venturini
California Air Resources Board

PLATFORM GAIL
VESSEL COLLISION CONTINGENCY PLAN

1.0 GENERAL

Platform Gail is a self-contained drilling and producing structure located approximately 9 nautical miles west/southwest of Port Hueneme and approximately 6.5 nautical miles from the east end of Anacapa Island. There are locations for a maximum of 36 wells. It is anticipated that a minimum of 25 wells will be completed during the initial development of the unit. This Collision Avoidance Plan is intended to establish a procedure of operation that will mitigate the potential of incident from vessel trafficking.

2.0 RESPONSIBILITY

The Production Foreman on duty on the Platform, or the Head Operator on duty when the Production Foreman is not on the Platform, shall have complete responsibility and authority for the execution and control of the Vessel Collission Contingency Plan.

3.0 OPERATIONAL PROCEDURES

In order to facilitate advanced planning by Chevron, the following notices will be given:

a) Inform all personnel of the possibility of vessel closeness to the Platform.

b) Explain to all personnel on board, including day workers, of the Vessel Collision Contingency Plan.

c) A minimum of four people will be on duty at all times. If someone suspects a collision, he/she will notify Platform Foreman or the Head Operator via the 36 page party phones on the inter-platform communication system.

d) The Platform Foreman or the Head Operator will sound the Collision Alarm and announce over the Platform paging system, "Potential Collision" and report to your station as spelled out on Platform Station Bells.

e) The Platform Foreman, the Head Operator or their designee (Assistant Foreman, Head Operator, or Operators (three) will activate the manual override on the platform alert system (thus activating the fog horn) and turn on the navigation-aid lights.

f) Platform Foreman or the Head Operator (or a designee) will try to make contact with the vessel on collision course via Channel 16 on marine radio and will also contact the United States Coast Guard by telephone.

g) In the event a collision is imminent and no contact can be made with the oncoming vessel, the Emergency Shut Down System (ESD) will be activated and the Platform will be evacuated.

Attachment (1)

EXHIBIT NO. 16b
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

Chevron

Chevron U.S.A. Inc.
6001 Bollinger Canyon Road, San Ramon, California
Mail Address: P.O. Box 5050, San Ramon, CA 94583-0905

Land Department
Western Region

June 16, 1986

Brian Baird
California Coastal Commission
631 Howard Street
San Francisco, CA 94105

Dear Brian:

During the testimony at the Public Hearing on June 10, 1986, Chevron made a statement concerning the capabilities of our oil spill response equipment. We stated that Chevron's equipment for Platform Gail could function 85 to 96 percent of the time and recover 60 to 90 percent of the oil. This statement, in this context, was incorrect and could easily be misinterpreted. The following information is provided so that the final staff report may correctly reflect Chevron's position regarding this statement.

On Page 23 of the staff report in the second paragraph the following statement was made: "While oil spill clean-up equipment can function with about 50 percent recovery efficiencies in calm water tank tests . . .". Chevron's statement that its equipment could recover 60 to 90 percent of the oil should have been more specifically stated as follows: The oil skimmer which Chevron has available for spills from Platform Gail has demonstrated recovery rates from 60 to 90 percent or more in tests in calm conditions at the OHMSETT Facility. (Documentation to support this statement is attached; please refer to Page 255 of the World Catalog of Oil Spill Response Products, edited by Robert Schulze, 1986, and OHMSETT Test Data as presented by Mason and Hanger-Silas Mason Company Incorporated, December, 1979.) The statement made by Chevron during testimony did not clarify that the 60 to 90 percent recovery ability was in calm water test tanks and should have been so stated during the testimony.

On Page 23 of the staff report in the second paragraph the following comments are made: "Offshore clean-up operations are limited to conditions when seas are less than six feet in height. Data on sea states in the area of the proposed Platform Gail indicate that waves are greater than six feet from 4 to 15 percent of the time . . .". While Chevron referred to the staff report in its testimony, it should have more clearly referenced this particular information as follows: Staff states on Page 23, of the staff recommendation, that offshore clean-up operations are limited to conditions when seas are less than six feet in height. Staff further states that seasonly this area exceeds six feet 4 to 15 percent of the time. Chevron prefers to view this statement to mean that mechanical recovery of an oil spill may be possible 85 to 96 percent of the time.

Should you have any questions concerning this foregoing information, please contact Cynthia Norris at (805) 658-4342.

Very truly yours,

Cynthia Norris

CN/dlh

PLATFORM GAIL OIL TRANSPORTATION STATEMENT

Chevron will transport crude oil from Platform Gail to refineries or market outlets by pipeline if pipelines are available with accessible capacity to producer's market destinations.

As an interim measure, until pipelines to producer's market destinations are available with accessible capacity, or if there is a temporary disruption of pipeline or refinery operations, or during emergencies, crude oil produced from Platform Gail will be transported by other available methods. Any use of alternative modes of transportation, although not anticipated, would be consistent with the transportation policies of the applicable Local Coastal Program.

The following definitions shall be applicable to the above-mentioned statement.

Available - means the pipeline exists and that the producer has access to it.

Accessible Capacity - means 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 - means the location where a producer will sell the crude oil to obtain a reasonable rate of return for the product.

Emergency - means the inability to operate the pipeline due to acts of God, natural disasters, labor disputes or acts of government.

Agreed and Accepted this 13th day of June, 1986.

CHEVRON U.S.A. INC.

By: _____
Assistant Secretary

EXHIBIT NO. 16d
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

Chevron U.S.A. Inc.
6001 Bollinger Canyon Road, San Ramon, California
Mail Address: P.O. Box 5050, San Ramon, CA 94583-0905

Land Department
Western Region

June 24, 1986

Platform Gail
Supplemental Information

Susan Hansch
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105

Dear Susan:

Pursuant to your request, please let the following information serve as confirmation of the discussion we had on Monday, June 23, concerning the final outstanding issues regarding Platform Gail.

Water Usage

Two hundred to five hundred barrels per day of water will be used during drilling. During the drilling mud preparation process, 50 to 100 barrels will be used and during washdown and rig maintenance the remaining 100 to 500 barrels will be used. During the drilling phase, potable water will be provided by desalinization units which will supply approximately 12,000 gallons per day.

The Port of Hueneme provides water to the oil industry from the City of Port Hueneme Municipal Water System. This water is potable since the Port has no means of providing nonpotable water to the industry. The water is put into nonpotable tanks, however, aboard the supply and work boats. The Port of Hueneme has been able to provide a peak of 30 million gallons of water per month and has never been told that they have a water restriction. The City of Port Hueneme which provides water to the Port has as its sole supplier the United Water Conservation District. The United Water Conservation District in Santa Paula is under contract to the City of Port Hueneme to provide 3,000 acre feet of water per year.

Hazard Footprint - Carpenteria Gas Plant

Devon Bates had requested information concerning the hazard footprint around the carpenteria gas processing facility. Please be advised that there is currently in existence a 200-foot safety buffer zone which was based on the maximum capacity of the facility.

Recreation Mitigation

For purposes of mitigating the visual impact Platform Gail will have on the Channel Islands and the National Marine Sanctuary, Chevron has agreed to pay $150,000 to the Friends of Channel Islands National Park, which money will be spent to rehabilitate trails in the National Park and to repair the loading dock where visitors are delivered to the park. A portion of this money will also be spent for interpretive wayside exhibits along the trails in the park. Chevron will pay this money 30 days after consistency certification approval by the Commission and understands that the payment will be made during a special ceremony with the National Park and the Friends of the Channel Islands National Park.

Bird Clean-up

Chevron also agrees to pay $40,000 in additional mitigation, this money to be used for a rehabilitation center for oiled seabirds.

Chevron believes that the foregoing information should finally conclude the mitigation measures necessary for Platform Gail. Please contact Cynthia Norris at (415) 842-3251 or (805) 658-4342 if you have any questions concerning the foregoing.

Very truly yours,

Cynthia A. Norris

CAN:dr

cc: Julia Van Auker
Minerals Management Service

Chevron U.S.A. Inc.
646 County Square Drive, Ventura, California
Mail Address: P.O. Box 6817, Ventura, CA 93006

Land Department
Outer Continental Shelf District
Area Office

June 17, 1986

PLATFORM GAIL
AIR QUALITY

Ms. Devon Bates
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105

Dear Devon:

By letter dated June 16, 1986 Chevron furnished you with our additional commitments with regard to Platform Gail. We discussed with you verbally our intent to enter into a contract with AER*X, but did not place that particular commitment in our letter. Our decision to enter into agreement with AER*X was not reached until shortly before we left for our meeting with you and was therefore not incorporated in that letter.

Please be advised that Chevron intends to contract with AER*X so that AER*X may conduct a search for offsets in the next two to three weeks for Chevron. In the event that AER*X locates offsets which are (1) currently available, (2) located in the necessary air basin, and (3) competitively priced, it is Chevron's intent to buy the offsets up to an amount of 55 tons in order to further offset Chevron's construction emissions for Platform Gail. This commitment is a proposal only as noted on the top of our June 16th letter to you and should be considered part of that letter for all purposes.

If you have any questions concerning this matter please contact Cynthia Norris at (805) 658-4342.

Very truly yours,

Cynthia A. Norris

CAN:mlt

Chevron U.S.A. Inc.
646 County Square Drive, Ventura, California
Mail Address: P.O. Box 6917, Ventura, CA 93006

Land Department
Outer Continental Shelf District
Area Office

June 18, 1986

JACKET FABRICATION
PLATFORM GAIL

Mr. Dick McCarthy
California Coastal Commission
631 Howard St. - 4th Floor
San Francisco, CA

Dear Dick:

The following information is provided for your reference in discussing jacket safety and fabrication with regard to Platform Gail. We have noted over the past several months a growing concern on behalf of the commissioners with regard to foreign vs. domestic fabrication and offer the following information as a summary of Chevron's procedures with regard to jacket fabrication from a safety standpoint.

1. Quality control and inspection procedures.

   For obvious reasons, the fabricator institutes his own quality control program to ensure compliance with the specifications. In addition, the company and the Certification and Verification Agent (CVA) conduct their own inspection. The following is a description of all the stages of inspection and the parties involved. It should be noted that these inspection stages would be the same irrespective of the fabrication site.

   a. Inspection at the mill.

      The contractor and the CVA perform regular inspection at the mill to ensure that the steel meets the specifications. Mechanical and chemical testing are witnessed and certificates are approved by the CVA and fabricator. Testing is performed on every plate for critical members such as joint cans and areas subject to fatigue loading. For primary structural members, every heat is tested.

   b. Tubular fabrication and sub-assembly.

      Normally, subcontractors are hired to fabricate and assemble components for the platform. The subcontractor, the main contractor, the CVA and Chevron conduct their own independent inspection program.

All primary member welds are 100% inspected visually and nondestructively (either radiographic, or ultrasonic (UT) and magnetic particle (MT)). Secondary member welds are 100% visually inspected and partially tested nondestructively. For Chevron's platforms, primary member welds are classified as welds to or between members 18 inches and larger in diameter, and other full penetration welds in plates such as padeyes and ring stiffeners.

c. Erection and assembly.

At this stage, the different components are assembled and erected in place. Traceability records are prepared. All welds are inspected as described in section "b". Inspection is witnessed by the contractor, CVA, and Chevron. Dimensional control inspection is carried out according to pre-approved procedure.

d. Loadout and seafastenings.

After the jacket is loaded out, the seafastenings are welded between the jacket and barge. All full penetration welds are 100% nondestructively tested by UT or MT and 100% visually inspected. Secondary welds are inspected 100% visual and spot tested using nondestructive methods. Inspection is performed by the fabricator, CVA, Chevron and the marine surveyor.

e. Post tow.

Upon arrival to the West Coast, the jacket undergoes another inspection. A plan of inspection is prepared ahead of time, and concentrates on the joints that are highly loaded during the transportation. All of the accessible joints are inspected by magnetic particle. This inspection is witnessed by the CVA who is on board the barge upon arrival. In addition, all other joints are inspected visually. The structure is not allowed to be launched until the inspection is complete and accepted by the CVA.

f. In-place inspection.

A plan of inspection is prepared whereby the jacket is inspected annually. Marine growth fouling will be cleaned in the wave action zone. The cathodic protection system is checked to insure that the sacrificial anodes are functioning properly. Critical joints are identified and periodic visual inspection on the welds is carried out.

Throughout the fabrication and installation of the platform, the traceability, weld inspection, and dimensional control records are signed by all parties involved including the CVA and filed for the service life of the platform.

2. Effective transportation fatigue on the residual strength of the jacket.

In the case of Chevron's platforms, the effective transportation fatigue is not neglected. A very sophisticated, state-of-the-art analysis is conducted. As an added assurance a factor of safety of four is used on the transportation fatigue life, while only a factor of safety of two would have been required by existing codes.

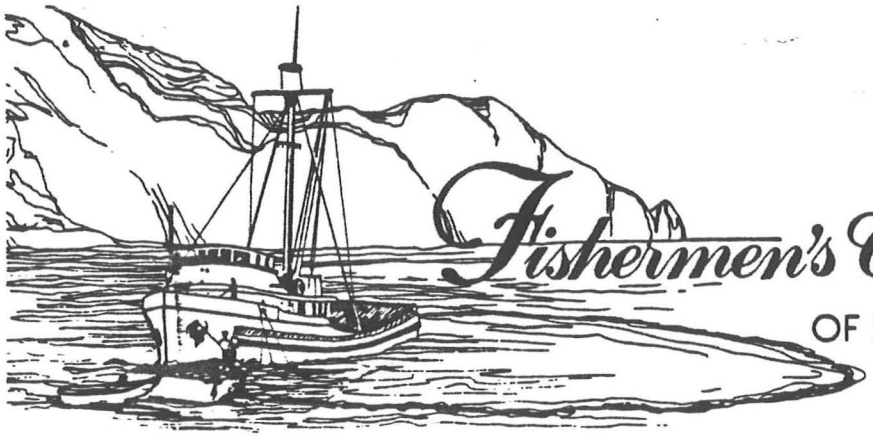
We trust the foregoing information will be useful to you and your further consideration of jacket fabrication and ask that you contact Cynthia Norris at (805) 658-4342 should you have any questions concerning this material.

Very truly yours,

Cynthia A. Norris

CAN:mlt

FISHERMAN'S WHARF—BERTH 73
SAN PEDRO, CALIFORNIA 90731
(213) 832-5377



Fishermen's Cooperative Association

OF SAN PEDRO

June 17, 1986

Mr. Peter Douglas
Executive Director
California Coastal Commission
631 Howard Street
4th Floor
San Francisco, CA 94105

Dear Mr. Douglas:

Our organization recently learned of two offshore oil projects that may substantially affect our fishing operations in California coastal waters. We understand that the Commission and the oil industry have been negotiating directly with some California fishery interests to the exclusion of others, such as ourselves. I would appreciate any information you can provide on the following two projects:

1. ARCO Coal Oil Point
2. Chevron Platform Gail

We will look forward to hearing from you.

Sincerely,

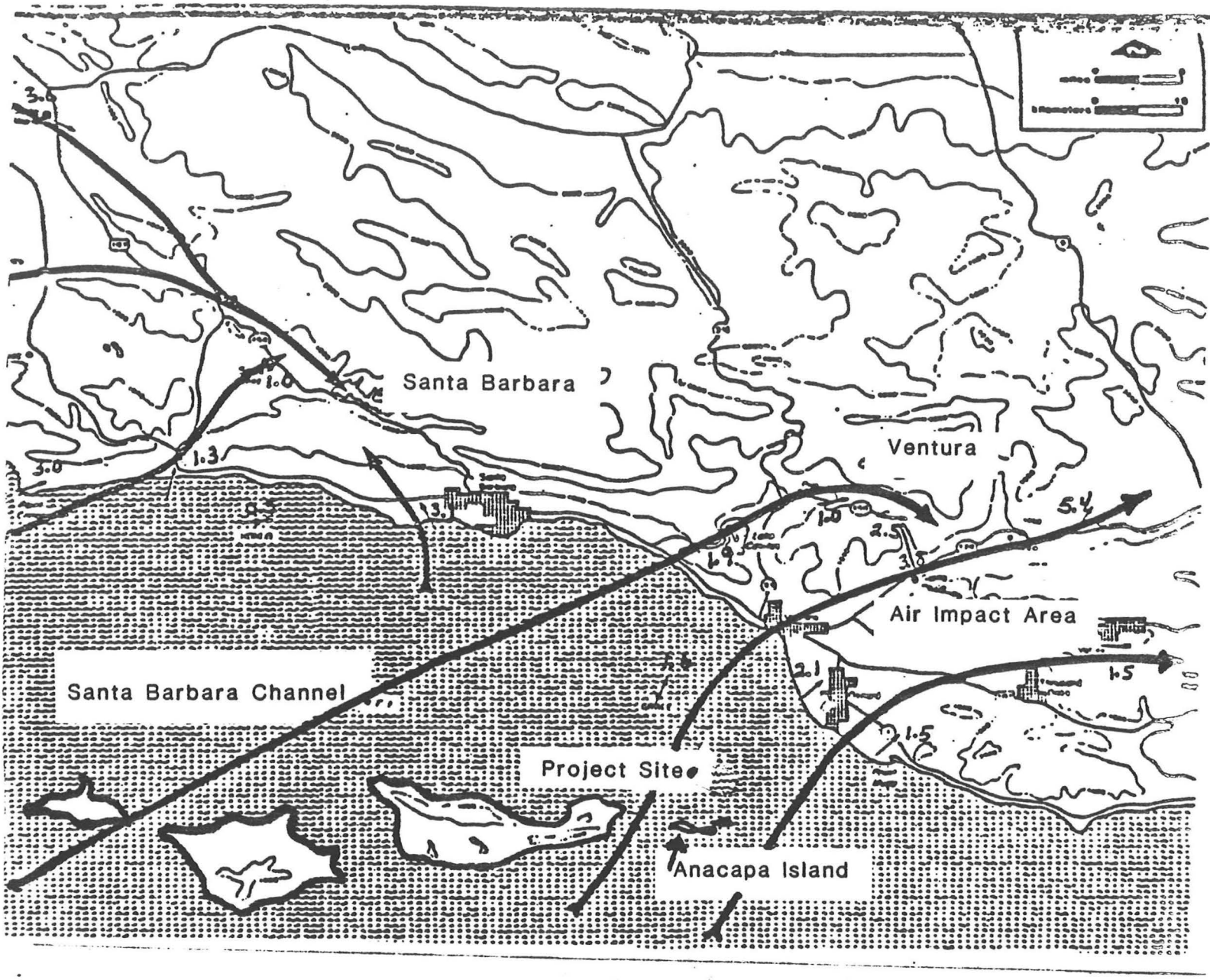
FISHERMEN'S COOPERATIVE ASSOCIATION

Frank Iacono

Frank Iacono
General Manager

FI:gp

cc: John Royal, I.L.W.U. Fishermen's Union
Terry Hoinsky, AFL-CIO Fishermen's Union



Source: Cal. Air Resources Board, 1982

EXHIBIT NO. 19
APPLICATION NO.
CC - 2 - 86
Chevron - Gail
California Coastal Commission

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
PACIFIC OCS REGION
1340 WEST SIXTH STREET
LOS ANGELES, CALIFORNIA 90017

In Reply Refer To:
MMS - Mail Stop

June 25, 1986

Mr. Peter Douglas
Executive Director
California Coastal Commission
631 Howard Street, Fourth Floor
San Francisco, CA 94105

Re: Platform Gail Development and Production Plan, Santa Clara Unit

Dear Mr. Douglas,

The Minerals Management Service would like to briefly clarify our procedures and intentions with respect to Chevron's Platform Gail Development and Production Plan (DPP). As specified in the Coastal Zone Management Act, Section 307(c)(3), our office is prohibited from approving Chevron's DPP until the Commission has concurred with Chevron's consistency certification or unless the Secretary of Commerce overrides a Commission denial.

Additional information on the Platform Gail DPP was given to MMS in a Chevron letter dated May 20, 1986. We transmitted a copy of this letter to your office on June 13, 1986. We recognize that this additional information has been provided by Chevron for the express purpose of your consistency review.

If you have any questions, please contact me at (213) 894-2083.

Sincerely,

Thomas W. Dunaway
Regional Supervisor
Office of Field Operations

cc: Ms. Cynthia Norris, Chevron U.S.A. Inc.

COUNTY OF SANTA BARBARA • HEALTH CARE SERVICES
AIR POLLUTION CONTROL DISTRICT
5540 EKWILL, SUITE B, SANTA BARBARA, CALIFORNIA 93111
PHONE: (805) 964-8111 FAX (805) 967-4872

LAWRENCE HART, M.D., F.A.C.P.M.
DIRECTOR
HEALTH CARE SERVICES
AIR POLLUTION CONTROL OFFICER

JOHN B. ENGLISH
DIRECTOR, AIR POLLUTION CONTROL

June 16, 1986

James Johnson
California Coastal Commission
925 De La Vina
Santa Barbara, CA 93101

SUBJECT: Chevron Platform Gail
Air Quality Mitigation

Dear James:

You have requested that the Santa Barbara Air Pollution Control District comment on the air quality requirements associated with Chevron's Platform Gail project. Chevron proposes to process production from Platform Gail (on the OCS) at the Chevron Carpinteria Plant within Santa Barbara County.

Prior to processing Platform Gail production through the Carpinteria Plant, Chevron must expand their existing APCD permits to provide for this source of production. Chevron will need to demonstrate to the APCD that this new source of production will not increase the emissions associated with this facility or Chevron will need to modify their permit to provide for any increase in emissions.

In reference to Platform Gail construction and operation emissions, it is our understanding that the Ventura County APCD has been working with Chevron to ensure that project emissions do not adversely effect the air quality of the air basin. We understand that Chevron will be reducing existing sources of onshore emissions to mitigate Platform emissions, as well as incorporating project design measures to reduce Platform emissions. Santa Barbara County APCD supports the implementation of these measures to ensure protection of the air quality.