State of California, Edmund G. Brown Jr., Governor

California Coastal Commission 631 Howard Street, 4th floor San Francisco, California 94105 (415) 543-8555

Michael L. Fischer, Executive Director FIELD OPERATIONS William Travis, Deputy Director

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LOS ANGELES

Date Received: 7/19/82
Item Number: 10a.
Hearing Date: 12/16/82
Analyst: Eugenia Laychak

CONSISTENCY CERTIFICATION AND STAFF RECOMMENDATION

Consistency Certification No. CC-18-82

3 and 6 Month Periods End: 10-19-82/1-19-83

APPLICANT FOR FEDERAL PERMITS:

Union Oil Company

FEDERAL PERMIT FOR WHICH COMMISSION
CONCURRENCE WITH APPLICANT'S CONSISTENCY
CERTIFICATION IS REQUIRED:

Minerals Management Service Exploratory Well Drilling Permit: OCS Exploration Plan

ACTIVITY LOGATION:

On the Outer Continental Shelf on OCS Parcel 0441, approximately 4.7 miles northwest of Point Arguello, in the Santa Maria Basin.

ACTIVITY DESCRIPTION:

Drilling 8 wells on OCS P-0441 to explore for oil and gas from the Diamond M General, a floating semisubmersible drilling vessel. (Exhibits 1 and 2)

PUBLIC HEARING AND VOTE:

Public hearing and possible action at the Commission's December 15-17, 1982 meeting in Los Angeles.

STAFF NOTE: CONSISTENCY

Under regulations which implement the Federal Coastal Zone Management Act, the Minerals Management Service cannot grant a permit for any activity described in an Outer Continental Shelf (OCS) Plan of Exploration until the Coastal Commission concurs with a certification by the oil company applicant that the activity is consistent with the California Coastal Management Program (CCMP) or determines that the activity has no effect on the coastal zone.

Applicant's Consistency Certification and Findings. The applicant has submitted a consistency certification for 8 wells on OCS P-0441, stating that the proposed activities described in detail in the Plan of Exploration will be conducted in a manner consistent with California's Coastal Management Program.

I. <u>Concurrence</u>

The Commission hereby concurs with the consistency certification made by Union for OCS P-0441 as consistent with the policies of the California Coastal Management Program.

II. Findings and Declarations

The Commission finds and declares as follows:

- A. Project Description. Union Oil Company proposes to drill 8 wells on their OCS lease P-0441 in the Santa Maria Basin, about 4.7 miles northwest of Point Arguello (Exhibits 1 and 2). The Environmental Report submitted with the OCS plan states that onshore support, including boat and helicopter transportation of crew and supplies, would be based at the Ellwood pier and the Oceano airport. The wells will be drilled in waters 233 to 259 feet deep to well depths of 10,000 feet. Total time at each drill site is estimated at 85 days, and the applicant anticipates drilling two to three wells per year
- B. <u>Protection of Marine Resources</u>. Section 30230 of the Coastal Act requires protection of the marine environment:

Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Use 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.

Union's lease P-0441 is located within the Santa Maria Basin approximately 4.7 miles northwest of Point Arguello, a haul-out and breeding area for California sea lions and harbor seals. Also, several species of seabirds feed and rest in this area and the rocky intertidal areas close to shore. Point Conception, 18 miles to the southeast, is a rich intertidal area with extensive kelp beds. The Sea Otter Range, located in the northern part of the Santa Maria Basin, is 30 miles from tract 0411, although sitings of sea otters have been made as far south as Purisima Point and even Point Arguello. Sediments within the lease area are reported as sandy silt and gravel. Because the drill sites are a considerable distance from these habitat areas and the proposal is a temporary use, drilling of these wells will pose no significant impact on these animal species.

The entire length of the California coast is a part of the migratory route of the California gray whale and other species of whales and dolphins. Some of these animals therefore pass in the general vicinity of the lease. Under formal operating procedures, the exploratory drilling will be likely to cause the whales to detour around the drill rig during the migration months (November through May). A Department of Fish and Game marine biologist familiar with the migratory patterns of marine mammals has commented that a small number of drill rigs probably do not pose a significant hazard or impact to the animals as they are able to detect and avoid the anchor chains and the rigs. Although this information is the best available, it is based on limited observations. Additional information and data may change this opinion. In the event of an oil spill, however, there could be an adverse impact on the marine mammals.

In summary, based on the limited information available, while exploratory drilling in OCS P-041 will cause some short-term disturbance to marine resources, properly executed drilling may not interfere with biological productivity required to be protected by Section 30230. However, because even the best available spill containment and cleanup equipment does not offer adequate protection to these animals if an oil spill occurs, the Commission cannot find that the proposed project is consistent with Section 30230. But analysis in Section I does find the project consistent with Section 30260.

C. Protection Against the Spillage of Crude Oil. Regardless of the precautions taken against well blowouts and resulting spills of crude oil in the open ocean, there is always a risk of this occurring at a drill site. Such a spill may reach the coast of California and damage marine life, scenic areas, and recreational areas. Because of this risk, the proposed drilling operations must be consistent with Section 30232 of the Coastal Act, incorporated in Chapter 3 of the Coastal Management Program which states:

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.

Union has provided onsite equipment and personnel training, and works with oil spill cooperatives, which have dedicated oil spill response vessels. The Minerals Management Service (MMS) and the applicants have made the following agreement for inspections:

"The State Agency for Oil Spill Contingency Planning, or their designated representative may accompany MMS on unscheduled inspection or deployment exercises of the oil spill containment and recovery equipment. All unscheduled inspections or deployments will be arranged by representatives of the MMS in cooperation with the State of California in conjunction with the Service's inspection program. The purpose of the inspection or deployment will be to verify the existence of the oil spill equipment and to ensure that the equipment can be deployed in an organized and timely manner. Each company applicant has agreed to allow state personnel on board the drilling vessel to observe the inspection or deployment exercises. The Minerals Management Service has agreed to call these inspections or drills on a surprise basis."

Protection of Coastal Wetlands and Streams. The Commission and the County of Santa Barbara have expressed specific concerns about the protection of the Santa Maria and Santa Ynez Rivers and the San Antonio and Jalama Creeks if an oil spill threatens these areas. This concern is based on the limited amount of time that oil spill containment and cleanup equipment will function in the waters north of Point Conception, increasing the possibility of these streams becoming contaminated. The County has recommended that Clean Seas be required to locate oil spill booms at the mouths of these waterways to improve the response time to them.

The Commission agrees that provisions must be available for the protection of these streams if they are threatened. However, a high percentage of the time these rivers and creeks may not be open to the ocean. Much of the time that they are open the water is flowing toward the ocean, reducing the likelihood of oil contamination. Under conditions whem they are threatened, Clean Seas can have equipment and personnel to the area within 3 to 4 hours. Clean Seas has two fast response units designed specifically for this purpose. They include:

- 1) a 15-foot trailer equipped with small containment boom, a skimmer, a storage bag, absorbents, rakes and shovels; and
- 2) A 2.5 ton truck equipped with a larger boom, skimmer, and associated tools.

Other strategies may be necessary to protect these waterways. In many cases the incoming current in the rivers or streams would exceed the capability of the oil containment booms to function. In these situations the stream mouth may have to be closed using heavy earthmoving equipment. This would eliminate additional contamination, and would provide a quiet water situation behind the closure to help recover any oil that has gotten into the stream.

However, to best determine the most effective means of protecting these streams, the Commission directs the staff to visit them, with the County staff is possible, during the late fall, winter, and spring months, when the streams open to the sea. After these site visits, the Commission may hold a drill with the applicant to test response capability to a hypothetical spill near the mouths of the streams. The Commission will continue to work with the industry and the County to develop the most effective strategies to protect these streams and wetlands. The County agrees with this approach.

The Commission's standard of review is based on the maximum feasible capability to reduce the impacts of a spill, if one occurs. Section 30232 of the Coastal Act requires that effective oil spill containment and cleanup be provided for spills. The Commission cannot find the Plan of Exploration consistent with this policy due to the limited capability of state-of-the-art oil spill equipment. However, Section 30260 of the Coastal Act provides that coastal-dependent industrial facilities can be sited if the adverse impacts are mitigated to the maximum extent feasible.

The Commission finds that the oil containment and cleanup equipment and measures for response, as provided in the proposed Plan of Exploration and Consistency Certification made by Union provide maximum feasible mitigation and are consistent with Section 30260 of the Coastal Act. Concurrence by the Commission is not an indication of satisfaction with the degree of protection afforded coastal resources by the oil spill containment and cleanup equipment provided. The Commission staff's forthcoming oil spill response capability study may indicate the need to update and increase standards for onsite and cooperative oil spill cleanup and containment capabilities. Such findings will be used in future consistency certifications and permit reviews.

D. <u>Commercial Fishing</u>. The Coastal Act requires maintenance of the productivity of the marine environment in Section 30230, quoted in Section B, and in Section 30231. Specifically:

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...

The proposed well is within the Department of Fish and Game designated Fish Block 644 (Exhibit 2). The primary species of fish caught is halibut, according to the Department of Fish and Game. DFG does not believe exploratory operations in this area would significantly impact commercial fishing activities if OCS orders are followed and because Union has been and is coordinating with affected fishermen. DFG continues to stress that discharge of drill muds and cuttings could adversely affect the benthic biota in the immediate areas of the drill site. The impact on coastal waters of a temporary disturbance of OCS water has not been established.

Theorepresentatives of the fishing industry have found that the proposal by Union to drill 8 wells on OCS P-0441 does not present a conflict to their trawling activities.

Because the drilling would not substantially interfere with commercial fishing activities, and because the Commission has concluded that the discharge of muds and cuttings permitted by the Environmental Protection Agency beyond 1000 meters of the coastal zone has no demonstrated effect on the coastal zone, the Commission finds that the proposed activities would be consistent with Section 30231 of the Coastal Act (See Section J).

E. Onshore Support Facilities/Cumulative Impacts. Section 30250 of the Coastal Act states that new industrial development "shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources."

Union has stated in its Environmental Report that it is proposing to use the Ellwood pier and Oceano airport for all its support activities—all crewboat, supplyboat, and helicopter trips to service the drillship crews will originate and return to these areas. Although these drilling proposals will not affect onshore use in the Santa Maria Basin area, the increases in drilling in this basin may lead to the need for an additional service base for the Basin and the western Santa Barbara Channel. The staff is currently working with the counties of Santa Barbara and San Luis Obispo and the oil industry to study alternative sites for additional service and crew bases if needed.

The proposed exploratory activity would occur north of Point Conception, a regional where OCS operations have increased steadily over the past one to two years. The Commission is extremely concerned about the overall cumulative effects on the environment and the coastal economy of California, particularly San Luis Obispo and Santa Barbara Counties, offshore of which all of the exploratory drilling is occurring. The Department of Fish and Game and Gettoil Out, Inc. have expressed similar concerns about increased industrial development on the OCS. Conflicts include commercial fishing operations, increases in vessel support traffic, air pollutant emissions, drill muds discharges, and risk of oil spills. The combination of those impacts could become unacceptable if the present level of drilling significantly increases. The exact number of drilling rigs that can operate in an area is a subject the Commission staff is now addressing. Until this number can be determined, the Commission finds that because the proposal would not increase the number of drill rigs currently offshore California, the project is consistent with Section 30250.

- F. Geologic Hazards. Section 30253(1) of the Coastal Act states that new development shall minimize risks to life and property in areas of high geologic...hazard". The Division of Mines and Geology and the State Lands Commission routinely review OCS Plans of Exploration to determine whether the proposed drilling program can be safely conducted in view of the geologic conditions of the lease and well site. Both agencies have reviewed the Union proposal. The Division of Mines and Geology finds the discussion of geologic and seismic hazards in the Environmental Report and Exploration Plan adequate for the proposed well locations. The State Lands Commission finds that shallow gas hazards may exist on the lease parcel but the proposed drilling program, if carried out with caution, satisfactorily addresses those concerns. Therefore, the Commission finds the project meets the requirements of Section 30253(1).
- G. <u>Air Quality</u>. Section 30253(3) of the Coastal Act states that new development "shall be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development".

The Air Resources Board states that data on meteorology and pollutant transport in the Santa Maria Basin are not as complete as for the Santa Barbara Channel but that emissions from OCS drilling activities will have a significant adverse effect on onshore air quality. The ARB has recommended that the Commission require an oil company applicant to implement nitrogen oxides (NOx) control measures identified as "interim" in the Air Quality Task Force, once implementation is approved by the American Bureau of Shipping (ABS); that the applicant install a device on the drilling vessel to gather data on fuel consumption, and hence NOx emissions, from drilling activities; and that, where such equipment already exists on a drilling vessel, an applicant collect data on wind speed, direction, and temperature.

The applicant has agreed to implement interim NOx control measures once ABS approval is obtained, to provide fuel consumption data to estimate NOx emissions and wind data if the drilling vessel is so equipped.

The Commission finds that the proposal is consistent with Section 30253 and the CCMP because the applicant has agreed to implement the interim NOx control measures as soon as ABS approval is obtained and to collect data necessary to improve NOx emission and pollutant transport information. The Commission, however, is concerned that investigations continue on pollutant reduction measures, and that long-term measures be developed that will reduce NOx and other pollutant emissions to a greater degree than interim measures.

H. <u>Vessel Traffic Safety</u>. The principal Coastal Act policies applicable to vessel traffic safety are Sections 30260 and 30262 which apply specifically to coastal-dependent industrial development such as the proposed exploratory drilling project. Under 30260 and 30262 the project must first be tested under all applicable Chapter 3 policies. If the proposal does not meet these policies the project is analyzed under Section 30260, quoted and discussed below.

Because of the risk of collision or ramming and the consequent risk of oil spills and hazards to coastwise vessel traffic, the Commission finds the location of drilling vessels on the OCS affects the use of land and water in the coastal zone. Therefore, the Commission considers the effects on navigation in each drilling proposal reviewed for consistency with the CCMP.

The proposed drilling is located in the Santa Maria Basin, north of the existing Vessel Traffic Separation Scheme in the Channel. Because no traffic lanes are designated in the Santa Maria Basin, substantial navigation does occur along the coast and weather is foggy or stormy several months of the year, the presence of temporary structures could present a hazard to navigation and risks of oil spills. The Commission finds therefore that the proposed activities do not meet the policies of Chapter 3 of the Coastal Act and must be analyzed under Section 30260. The Commission notes that the drilling unit, the Diamond M General, is equipped with an Automatic Radar Plotting Aid which constitutes mitigation of the hazards posed by the project, as discussed in Section I. If another drilling rig is used, the applicant agrees to install and operate such a device.

I. <u>Industrial Development</u>. Coastal-dependent industrial development such as offshore oil drilling must first be tested under all applicable policies in Chapter 3. If the proposal does not meet these policies, development is analyzed under the less stringent requirements of Section 30260. The proposed development does not meet Sections 30230 or 30232 of the Coastal Act. Therefore, the three tests of Section 30260 apply:

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new of 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.

The first requirement of Section 30260 is that the applicant must demonstrate that alternative locations for the project are either infeasible or more environmentally damaging. Union could directionally drill from other points on this lease to reach

the same targets. These other locations would be more environmentally damaging because of the extended time and risk that would be involved in directional drilling. The Commission finds, therefore, that the project meets the requirements of the first test.

The second requirement concerns the public welfare. Clearly it is in the interest of the public welfare to search for domestic sources of oil and gas. However, this is not the only consideration in determining whether the project meets the public welfare test. Commercial fishing activities and facilities, biological resources, and recreational uses also must be considered as significant aspects of the public welfare. The proposed well would not be located within a designated biologically sensitive area or sanctuary, nor would it affect beach use unless an oil spill occurs. The drilling would, however, directly conflict with commercial fishing. Because Union has coordinated with fishermen in selecting the exact drilling time and location, has agreed to provide data on fuel consumption, and has agreed to operate an Automatic Radar Plotting Aid, the Commission finds the proposal meets the requirements of the second test.

The third requirement is that adverse impacts be mitigated to the maximum extent feasible. Union's dragging of the site, if needed, coordination with fishermen, its use of the best available oil spill control and containment equipment and use of an radar alarm device fulfill this third test. It should be noted, however, that the Commission will continue to examine the issue of oil spill equipment and may require additional protection in the development stage.

The Commission therefore finds that the proposed well meets the three requirements of Section 30260 and is consistent with the CCMP.

J. NPDES. Because Union is proposing to drill in 6 locations beyond 1000 meters of the coastal zone, the Commission will not review the discharge of drilling fluids and cuttings as allowed under the Environmental Protection Agency's NPDES permit. In its October 1981 resolution, the Commission found that discharges beyond 1000 meters of the coastal zone have not been shown to affect the use of land and water in the coastal zone. The Commission, therefore, decided not to review these for consistency. The Commission continually reviews new information on this issue and may require consistency review in the future for discharges beyond 1000 meters of the coastal zone if evidence is presented which indicates such discharges affect the uses of land and water in the coastal zone.

Two locations are within 1000 meters of State waters, allowing the Commission to review the NPDES permit and the discharge of drilling fluids and cuttings. The Regional Water Quality Control Board in the Central Region has acted on a study from a drilling muds technical advisory committee composed of representatives of the Department of Fish and Game, the oil companies and U.C. Santa Barbara, which recommends that during exploratory drilling ocean disposal of drill muds be permitted with monitoring of the potential effects on marine resources. In addition to this monitoring program, selected wells within State waters would be subject to much more detailed reasearch level monitoring to determine specific effects, if any, in different types of ocean substrates. The Board required the more detailed monitoring program for all exploratory wells; this decision has been appealed to the State Board and a decision is not expected until March 1983.

The Regional Board staff and oil industry representatives have selected several other wells for the detailed study in both rocky and sandy, silty substrates. Because a specific, detailed monitoring program would be quite expensive, \$250,000 to \$500,000 per well, wells within a sandy, silty substrate have been selected by the Regional Board staff to be monitored in detail, and detailed monitoring of the subject wells would result in a duplication of effort. The Commission finds that although the information on the effects of discharging drill fluids and cuttings limited, the NPDES permit for the two wells within 1000 meters of the coastal zone is consistent with the Coastal Management Program. Studies being conducted by the Regional Water Quality Control Board, and the Commission's own review of the effects of these discharges, may result in information requiring findings to the contrary fn future reviews of NPDES discharge permits.

APPENDIX A

Onsite Equipment (First Line of Defense). Oil spill containment and cleanup equipment stored on an exploratory drilling vessel or on a production platform is primarily designed to provide a first line of defense for a major spill or to contain and clean up small spills that may occur. This equipment must be able to surround the largest areas possible within an acceptable period of time. If the equipment is too large and difficult to handle, then its purpose is defeated. The following list includes the equipment which the Commission has established as minimum requirements for Plan of Exploration consistency certifications in the past. The applicant has committed in its plan to include this equipment onboard the drilling vessel:

- 1) 1,500 feet of open ocean oil spill containment boom;
- 2) one oil skimming device capable of open ocean use;
- 3) bales of oil sorbent material capable of containing 15 barrels of oil;
- 4) a boat capable of deploying the oil spill boom on the site at all times or within fifteen minutes of the drilling vessel; and
- 5) oil storage capacity of 29 barrels, minimum, for recovered oil.

Oil Spill Cooperatives (Major spills, second line of defense). Removal of spilled oil in coastal or marine waters is undertaken by the party responsible for the spill, under the supervision and, if necessary, the direction of the U.S. Coast Guard. Because of this requirement, oil production companies operating in the Outer Continental Shelf belong to oil spill cooperatives which have oil spill cleanup equipment designed for open ocean use. The oil spill cooperative used for the Santa Barbara Channel and the Santa Maria Basin is Clean Seas.

Dedicated Oil Spill Response Vessels. Clean Seas currently has a 136-foot oil spill response vessel stationed in Santa Barbara harbor. The vessel, Mr. Clean, is outfitted with equipment which is designed for response to oil spills in the open ocean. Clean Seas is continuing to investigate state-of-the-art equipment additions to the vessel, and the Commission staff is currently working on potential improvements through the Oil Spill Response Capability study. This vessel will provide the initial response from Clean Seas to oil spills in the Santa Barbara Channel from Point Conception to Point Dume, and beyond the Channel Islands.

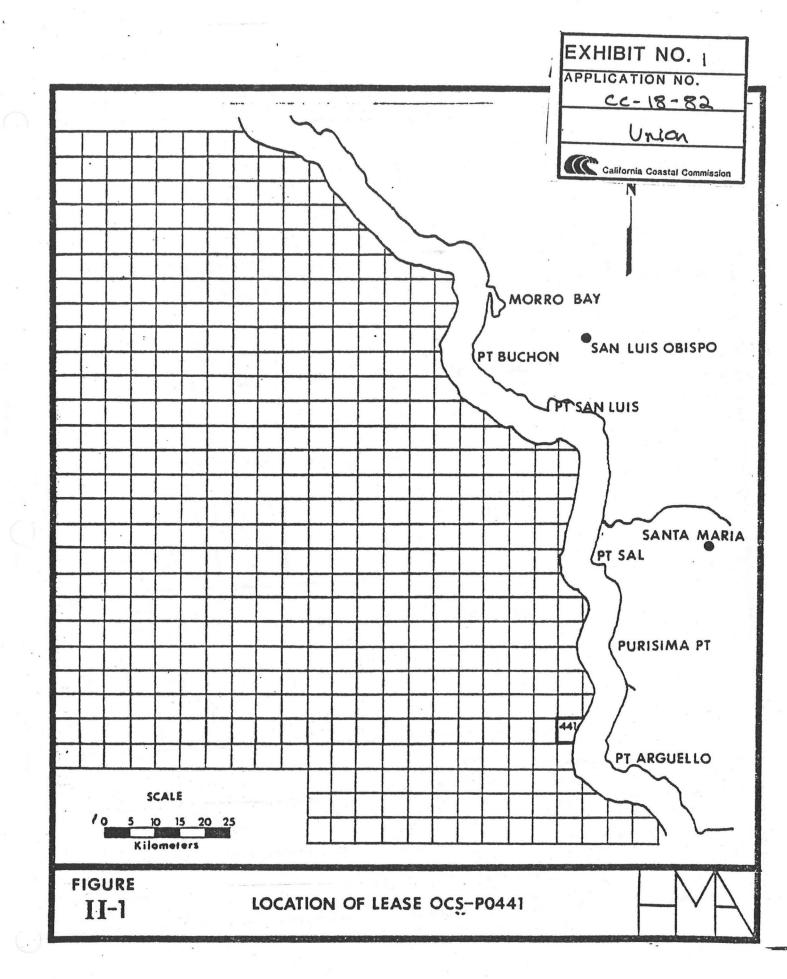
Clean Seas has recently acquired a second oil spill response vessel which will be fully equipped with oil spill containment and recovery equipment. This vessel, Mr. Clean II, is located in Port San Luis to provide the initial response to oil spills north of Point Conception.

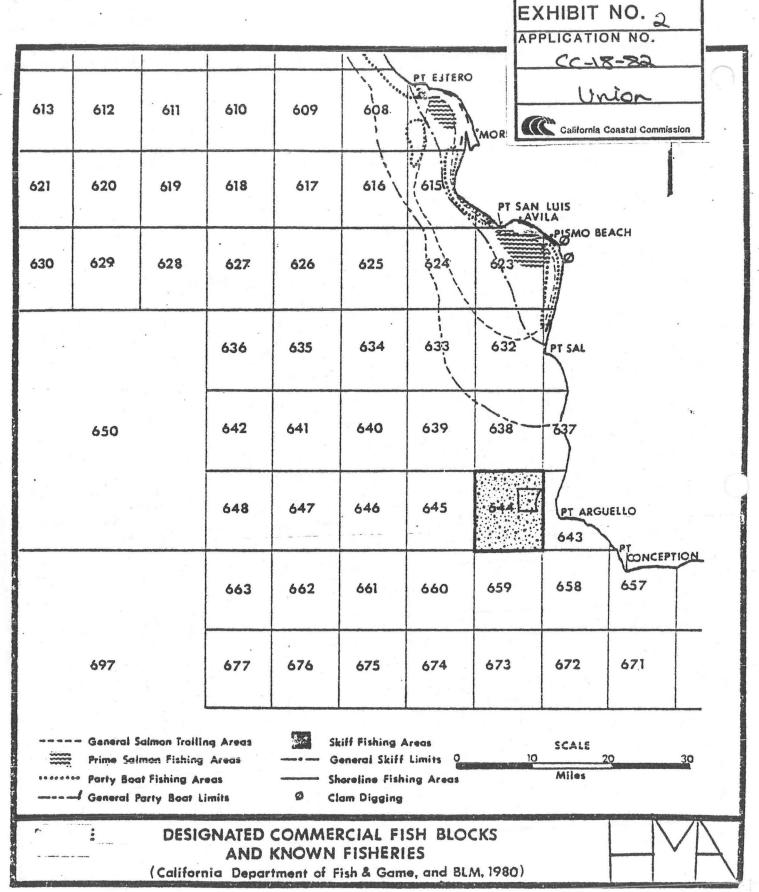
Personnel Training. An adequate oil spill response training program must recognize the different roles necessary to provide an acceptable response to an oil spill. In general, the program can be broken down to two categories: 1) training for supervisorial personnel; and 2) training for workers charged with actually putting equipment into the water. This training can be done by an individual oil company, or through the local oil spill cooperative depending on the level of the training.

<u>Supervisorial Training</u>. The Clean Seas oil spill cooperative conducted a two-day training program for supervisorial or management personnel operating in the Santa Maria

Basin. Union sent their oil spill "Containment and Cleanup Coordinator, Offshore Containment and Cleanup Coordinator, Onshore Containment and Cleanup Coordinator, and other individuals with management or supervisorial functions to the training session. The session focused on the supervisor's role in directing workers to use equipment properly, interface with the Clean Seas organization, and making the supervisors aware of proper coastal resource protection goals.

Equipment Use Training for Workers. Workers responsible for actual use of the oil spill equipment must receive "hands on" training to use the equipment properly. Union has inhouse training procedures that include full deployment of all offshore oil spill containment and cleanup equipment. The Clean Seas oil spill cooperative puts on training sessions that cover use of specific types of equipment. Member oil companies are encouraged to send personnel to these sessions.





Note: Blocks encompassing project area are highlighted.

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