

## CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5200

Page: 1 of 11Date: July 24, 1997**Th-6a****ADMINISTRATIVE PERMIT**

**Application No.:** E-97-12

**Applicant:** Unocal Corporation

**Agent:** Tom Jordan, Jordan Environmental Services

**Project Location:** Sandy beach areas bounded by Front Street and San Luis Obispo Creek, and intertidal areas near Avila Pier; Avila beach, San Luis Obispo County. (Exhibit 1)

**Project Description:** Periodic collection of (1) soil samples using a geoprobe rig or hollow-stem auger drilling rig, (2) groundwater samples using a geoprobe rig and (3) groundwater samples from existing temporary monitoring wells.

**Other Approvals:** Regional Water Quality Control Board, Central Coast. Cleanup or Abatement Order No. 94-85 (1994).

**EXECUTIVE DIRECTOR'S DETERMINATION:** The findings for this determination, and for any special conditions, appear on subsequent pages.

**NOTE:** Public Resources Code Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:


Date: Thursday August 14, 1997  
Time: Meeting begins at 9:00 a.m.  
Place: Crowne Plaza Holiday Inn - LAX  
5985 West Century Blvd.  
Los Angeles, CA 90045-5463  
(310) 642-7500

IMPORTANT: Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgment and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

PETER DOUGLAS  
Executive Director  
California Coastal Commission

By:   
Alison Dettmer  
Supervisor  
Energy and Ocean Resources Unit

Acknowledgment:

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance...of any permit..." applies to the issuance of this permit.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Permittee or Representative

**STANDARD CONDITIONS:**

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

**SPECIAL CONDITIONS:**

This permit is granted subject to the following special conditions:

1. If sampling activities are proposed during the California grunion spawning season (March 1 through September 1), the project site shall be monitored by a professional biologist, approved by the Executive Director, to determine if grunion runs are occurring. If grunion runs are observed, Unocal shall cease all sampling activities during any forecasted four-day grunion spawning period, and if eggs are found, all activities on the beach shall cease until grunion eggs have hatched.
2. All sampling activities authorized by this permit shall cease by December 1, 1998. Extensions of this deadline may be approved at the discretion of the Coastal Commission's Executive Director upon a showing of good cause made prior to the above-specified cessation date.

### **EXECUTIVE DIRECTOR'S DETERMINATION:**

The Executive Director hereby determines that the proposed development will cost less than \$100,000 and that on this basis it is within a category of development that qualifies for approval by the Executive Director through the issuance of an administrative permit, pursuant to Public Resources Code 30624. Subject to Standard and Special Conditions attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. Because this development is located between the nearest public road and the sea, the Executive Director further finds it to be in conformity with the public access and public recreation policies of Chapter 3.

### **FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:**

#### **A. Background**

##### **A.1 Project Location**

Avila Beach is located on the northern end of San Luis Bay near Point San Luis, in San Luis Obispo County. Soil and groundwater sampling activities will be conducted on sandy beach areas bounded by Front Street and San Luis Obispo Creek, and in intertidal areas, particularly near Avila Pier. (Exhibit 1)

##### **A.2 Avila Beach Oil Spill History**

Petroleum hydrocarbon storage and transfer activities have been conducted in the Avila Beach area since the early 1900's. Gasoline, diesel, gas oil (a semi-refined product similar to diesel) and crude oil were pumped between Unocal's bluff top tank farm and the Unocal Pier through a network of underground pipelines that run beneath Front Street and Avila Beach Drive. Unocal is still conducting crude oil and gas oil operations at Avila Beach.

In 1989, petroleum hydrocarbon contamination in soil and groundwater was discovered during a routine geotechnical survey for a commercial building permit. Subsequent investigations have revealed gasoline-, diesel-, and crude oil-grade hydrocarbons underlying the town (particularly along and in the vicinity of Front Street), beach areas, and intertidal areas as shown in Exhibit 2. The hydrocarbons are contained both above and below groundwater, and within the soil. Contamination has been identified at depths ranging from 0.5 ft. at the far west end of the beach to 59 ft. near San Rafael Street.

Portions of the plume within the intertidal zone and underlying western areas of the beach are located in the Commission's area of retained permit jurisdiction; the eastern plume portions fall within San Luis Obispo (SLO) County's permit jurisdiction under its certified Local Coastal Program, but remains within the Commission's appeal jurisdiction. (Exhibit 3)

The underground petroleum hydrocarbon contamination is reportedly caused by leaks from Unocal's pipelines and, possibly, its tank farm. According to Unocal, the suspect pipelines have since been repaired or removed from service.

### **A.3 Site Characterization and Assessment**

Unocal began conducting site assessment work in 1989, and has continued pursuant to several Cleanup and Abatement Orders (CAOs) issued by the Regional Water Quality Control Board - Central Coast Region (RWQCB).

Most notably, CAO 94-85, issued in 1994, required Unocal to (1) submit a workplan to evaluate potential environmental and health risks associated with the petroleum-contaminated soils, (2) submit and implement a groundwater cleanup plan until prescribed cleanup levels are attained, (3) submit a report documenting the results of the environmental and health risk assessment and a soil cleanup plan with implementation time table, (4) submit quarterly monitoring reports to the Executive Officer to verify progress towards prescribed cleanup levels, and (5) clean up soils and groundwater to specified levels.

In addition, at the request of the RWQCB and SLO County, Unocal agreed to fund an independent site assessment to review the methodology and verify the results of its own assessments. The independent site assessment also served as the initial component of an Environmental Impact Report (EIR). The results of the independent assessment, released in 1996, identified the existence of "data gaps." Furthermore, analysis by the RWQCB of all data existing to date also revealed the existence of data gaps.

Therefore, based on the results of the independent site assessment and on the results of its own analysis, the RWQCB directed Unocal to address the outstanding data gaps. Unocal proposes to fill these gaps through the sampling activities requested in this permit application.

### **A.4 Request for CDP to Conduct Necessary Soil and Groundwater Sampling**

Soil and groundwater sampling activities have been ongoing at Avila Beach as part of site characterization and assessment work. However, given the following factors, Unocal hereby requests formal authorization through this permit application (1) to conduct the sampling activities necessary to address the data gaps identified by the RWQCB (particularly, to collect soil samples), (2) to complete the required quarterly groundwater sampling, and (3) to conduct any additional sampling deemed necessary by Unocal:

- the RWQCB's requirement to Unocal to further address data gaps, particularly in areas within the Commission's retained permit jurisdiction (e.g., the intertidal);
- the difficulty in pre-determining the exact number and precise location of sample borings because they are dependent on daily field conditions and whether or not contamination is detected in adjacent borings (e.g., Unocal must continue collecting samples at specified intervals in a particular direction until a "non-detect" is encountered); and

- the desire on the part of all interested agencies and parties to facilitate and expedite site characterization and remediation.

## **B. Project Description**

Unocal proposes to collect soil and groundwater samples on sandy beach and intertidal areas at Avila Beach as part of an overall effort to characterize fully the extent of petroleum hydrocarbon-contaminated soil and groundwater and to assess the possibility that the contamination could be released into surface waters.

Unocal estimates that it will conduct up to 100 geoprobe/hydropunch borings during the approximate one-year term of this permit. Unocal proposes to cease the soil and groundwater sampling described in this permit by December 1, 1998, the date by which Unocal is to remove all existing temporary groundwater monitoring well/piezometer clusters located on Avila Beach and restore the project area to pre-project conditions (Administrative Permit No. E-97-02 as issued February 20, 1997, and amended April 24, 1997, and June 19, 1997).

Unocal proposes (1) to conduct approximately one to two soil borings in October, and (2) to conduct additional soil borings to address (a) the data gaps identified by the RWQCB, (b) any additional requirements or issues raised by any other regulatory agency, and (c) any additional sampling deemed by Unocal to be necessary. As of July 16, RWQCB staff estimated that approximately 12 additional borings would be required near Avila Pier (*personal communication with G. Hubner, RWQCB, July 16, 1997*).

Unocal also proposes to conduct two types of quarterly groundwater sampling pursuant to RWQCB requirements: (1) sampling using a Geoprobe rig (hydropunch), and (2) standard sampling from temporary monitoring wells that have already been installed on the beach. Groundwater sampling will be conducted at specific times during the tidal cycle in the months of August, November, February and May. Finally, Unocal proposes to conduct any additional hydropunch sampling that it deems necessary.

### **B.1 Soil Borings**

Unocal proposes to collect soil samples using a Geoprobe rig, which consists of sampling equipment mounted in the bed of a standard 4-wheel drive pickup truck with camper shell. The Geoprobe sampler extends from the pickup, hydraulically drives a steel 2-inch diameter tube to the desired depth, and retracts a soil sample. As the sampler is extracted, the hole caves in on itself, leaving no sign of disturbance. The loudest noise levels associated with the Geoprobe are generated while it drives the steel tube into the ground (the noise levels are comparable to a boat motor); otherwise it operates at levels comparable to normal background conversation. Approximately one to four hours is required for each boring, depending on its maximum depth and the number of desired samples.

All soil borings will be completed using a Geoprobe rig where possible. However, in areas of the beach underlain by rock too hard for a Geoprobe to penetrate, borings will be completed using a

hollow-stem auger drilling rig. This rig is physically much larger than a Geoprobe because it is mounted on a full-size truck chassis; it may require the assistance of a tracked vehicle to access the beach (i.e., by towing); it generates drill cuttings that must be drummed, placed onto an auxiliary vehicle, and removed from the beach for disposal; and it drills a larger-diameter hole (nine inches in diameter instead of one) that must be abandoned by grouting.

## **B.2 Quarterly Groundwater Sampling**

Groundwater sampling with the Geoprobe rig is as described above for soil borings, except that a stainless steel screen will be driven to the desired depth and groundwater removed. Currently, samples will be collected at approximately 12 locations.

Sampling from the existing wells (there are currently four installed within the Commission's retained permit jurisdiction) may be conducted using one of two methods. Manual sampling employs the use of hand-held or electric pumps to purge the well prior to collecting the water sample. The purged water is transported and disposed of in accordance with applicable regulatory requirements. Vehicle-assisted sampling employs an all-terrain, off-road vehicle (e.g., a John Deere "gator," which measures six feet in length and weighs about 600 pounds) equipped with a portable electric pump, storage tank, and associated hoses. Each well will require approximately one hour (vehicle-assisted) or two hours (manual) to sample.

## **B.3 Beach Access**

All vehicles and equipment will access the beach through the gate on Front Street, west of San Juan Avenue, and proceed to the desired sampling locations along the wetter, more consolidated beach areas near the water.

Unocal is obligated, through a license issued by the Port San Luis Harbor District (PSLHD), to comply with requests by the PSLHD concerning minimizing impacts to recreation and ensuring public safety. Unocal must pre-notify the PSLHD in writing of all activities planned for beach areas, and must coordinate specific work dates and times with the PSLHD staff on a daily basis during project implementation. Unocal may be restricted from performing various activities during times of high beach use at the discretion of the Harbor Manager. For example, the Harbor Manager prohibits Unocal's contractor from traversing the beach with mobile equipment when beach use is high.

All work will be scheduled so as to avoid weekends and holidays. While work may occur at any time between 6:00 AM and 7:00 PM, its occurrence is dependent upon the observed level of beach use and any additional concerns or restrictions expressed by PSLHD (i.e., the exact time of day that the work is conducted is not as important as is the level of activity on the beach at the time the work is being performed).

Once work dates are agreed upon by the contractors and the PSLHD, Unocal will notify the Coastal Commission staff at least 72 hours prior to initiation of the work.

## C. Coastal Act Issues

### C.1 Marine Resources

Coastal Act Section 30230 states:

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

Coastal Act Section 30231 states in part:

*The biological productivity and the quality of coastal waters ... 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, ... preventing depletion of ground water supplies...*

#### C.1.1 Sampling on Sandy Beach and Intertidal Areas

The proposed soil and groundwater sampling activities could cause potential adverse effects to marine resources and organisms. For example, tidal fauna may be affected by increased turbidity or physically damaged by operations equipment.

However, the proposed sampling activities will not significantly affect marine resources because (1) all activities will occur in sandy beach habitat areas, thus no impacts to hard-bottom substrate or communities will be caused by the project activities; (2) the area of disturbance will be very small (limited to drilling vehicle track size and drill diameter); (3) any disturbance will be very temporary (e.g., one to four hours per boring); (4) sandy beach invertebrates reside in a dynamic habitat area, thus are naturally tolerant of habitat disturbance; (5) activities will be conducted in areas where no unique, rare or endangered species exist; (6) the epifaunal organisms (those that reside principally on top of the sand substrate) which dominate the dry sand regions consist largely of insects and beach hoppers--species which are highly motile and able to avoid the sampling equipment; (7) the number and biomass of any invertebrate organisms lost will be extremely low due to the small project area; and (8) recovery of the affected populations is expected to be rapid.

#### C.1.2 Grunion

Grunion (*Leuresthes tenuis*) spawning activities have been reported at Avila Beach. The periods when the grunion lay their eggs are called grunion runs, since the grunion come ashore in masses. From late February to early September, spawning activity occurs only on the second, third and fourth nights following the peak tides of the 14-day lunar cycle, when the tides that follow will be lower than those the night before. The grunion are washed onto the beach by the waves.



Between breakers, the female grunion digs a vertical burrow in the wet sand and deposits a mass of 1,000 to 3,000 eggs.

Since the proposed sampling activities may be conducted during part of the grunion spawning season, they could potentially disturb grunion spawning activities. The Executive Director is thus requiring in **Special Condition No. 1** that if any sampling activities are conducted during the California grunion spawning season (March 1 - September 1), sampling activities shall be monitored by a professional biologist approved by the Executive Director to determine if grunion runs are occurring. If grunion runs are observed, Unocal shall cease all sampling activities during any forecasted four-day grunion spawning period, and if eggs are found, all activities on the beach shall cease until grunion eggs have hatched.

### C.1.3 Conclusion

The Executive Director therefore finds that as conditioned the proposed project will have no significant impacts to marine resources and thus is consistent with Coastal Act Sections 30230 and 30231.

## **C.2 Public Access and Recreation**

Coastal Act 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.*

Coastal Act Section 30211 states:

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

Coastal Act Section 30220 states:

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

Avila Beach is one of San Luis Obispo County's most popular beaches because of its protected location and scenic features.

Although heavy equipment will occasionally be used on the beach, the proposed sampling activities will not block, restrict, or significantly interfere with the public's access to and recreational use of the beach and ocean because (1) all work will be scheduled to avoid weekends and holidays; (2) Unocal is obligated (through a license issued by the PSLHD) to comply with requests by the PSLHD concerning minimizing impacts to recreation and ensuring public safety;

(3) Unocal may be restricted from performing various activities during times of high beach use at the discretion of the Harbor Manager; (4) the Harbor Manager prohibits Unocal's contractor from traversing the beach with mobile equipment when beach use is high; (5) occurrence of work is dependent upon the observed level of beach use and any additional concerns or restrictions expressed by PSLHD; and (6) activities will be extremely temporary (e.g., one to four hours per Geoprobe soil boring or hydropunch; one to two hours per monitoring well).

Allowing flexibility in the exact hours in which work will be conducted on the beach will enable project activities to proceed throughout the entire day during weather conditions that are unfavorable for beach users, and thus enable Unocal to possibly minimize the number of days spent on the beach. Thus the proposed sampling activities are consistent with the recreation-related directive of Coastal Act Section 30210.

Finally, the proposed soil and groundwater sampling activities are part of site characterization and assessment work undertaken to enable remediation of hydrocarbon-contaminated soil and groundwater at Avila Beach. Furthermore, one specific use of the collected data will be to evaluate the potential for discharge of hydrocarbon-contaminated groundwater to the ocean or creek. Thus the intent of the proposed sampling activities is consistent with the directive contained in Coastal Act Section 30220 to protect coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas.

Given the scope and duration of the proposed sampling activities, and the existing license and agreements between Unocal and the PSLHD governing beach access and use, public access and recreation opportunities will not be significantly adversely affected. In fact, the intent of the proposed activities is to ultimately protect and restore public recreational opportunities. The Executive Director therefore finds that as conditioned, the project is consistent with Coastal Act Sections 30210, 30211, and 30220.

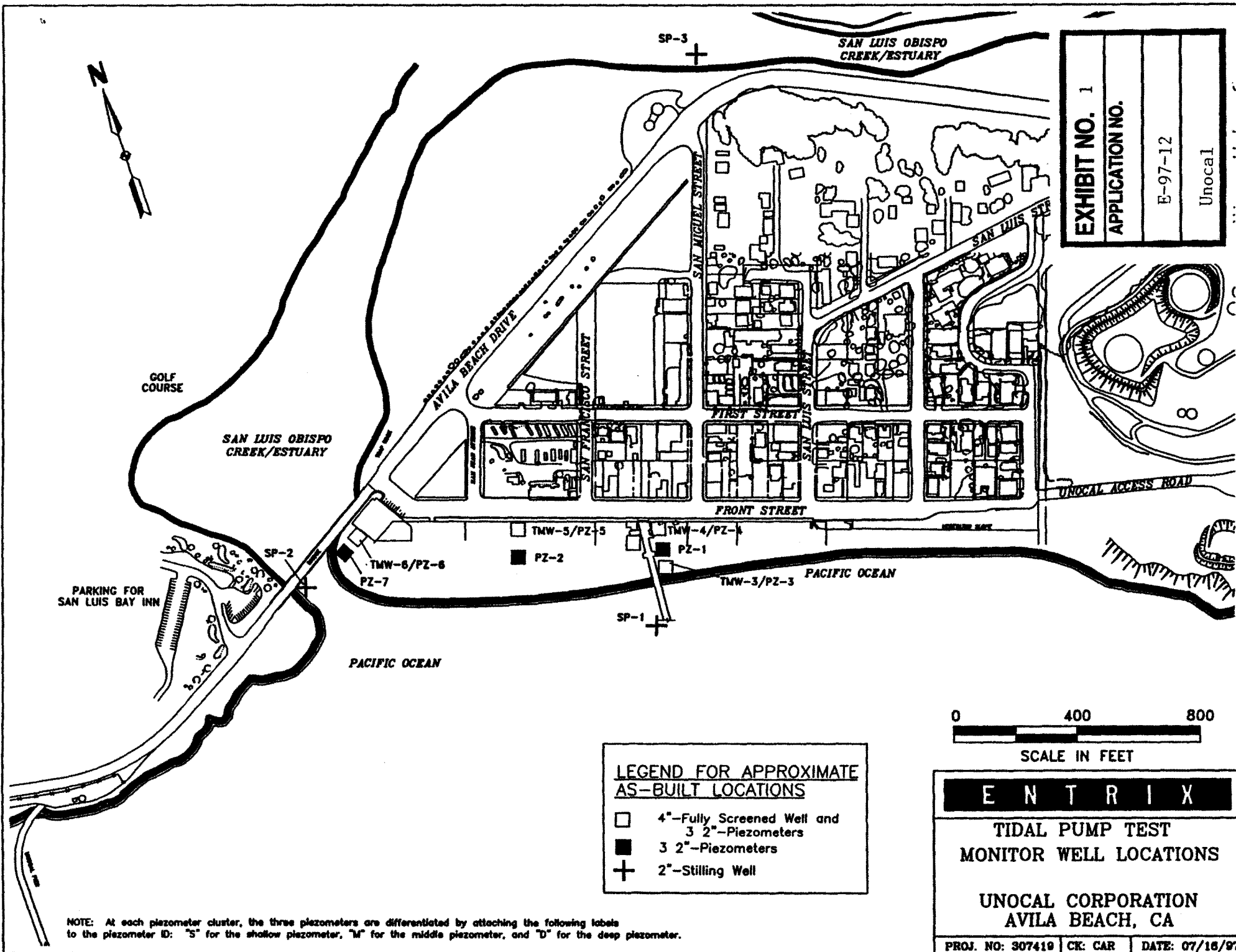
#### **D. California Environmental Quality Act (CEQA)**

The Coastal Commission's permit process has been designated by the State Resources Agency as the functional equivalent of the CEQA environmental review process. Pursuant to CEQA section 21080.5(d)(2)(i) and section 15252(b)(1) of Title 14, California Code of Regulations, the Commission may not approve a development project "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment." Thus the CEQA requires the consideration of feasible alternatives to a proposed project, including those less environmentally damaging, and the consideration of mitigation measures to minimize or lessen any significant environmental impacts.

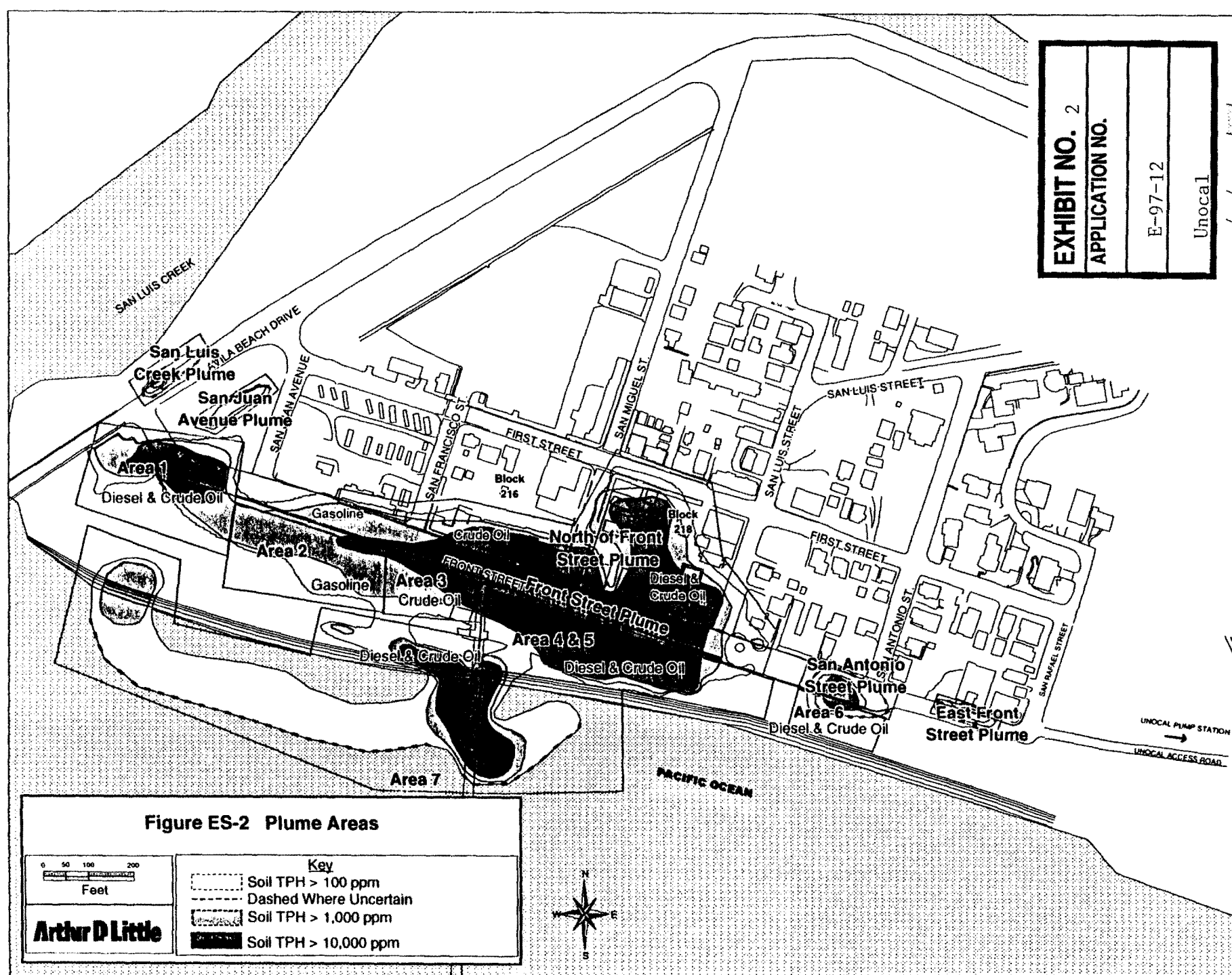
The "no project" alternative would result in no further plume delineation or site characterization. Pursuing the "no project" alternative would inhibit the assessment, and subsequent remediation, necessary to prevent the contamination from further encroaching upon land, marine, and groundwater resources. Therefore, the no project alternative is not a less environmentally damaging alternative.

As discussed above, the proposed project activities are subject to mitigation measures that make them consistent with the Coastal Act and reduce their impacts to a level of insignificance.

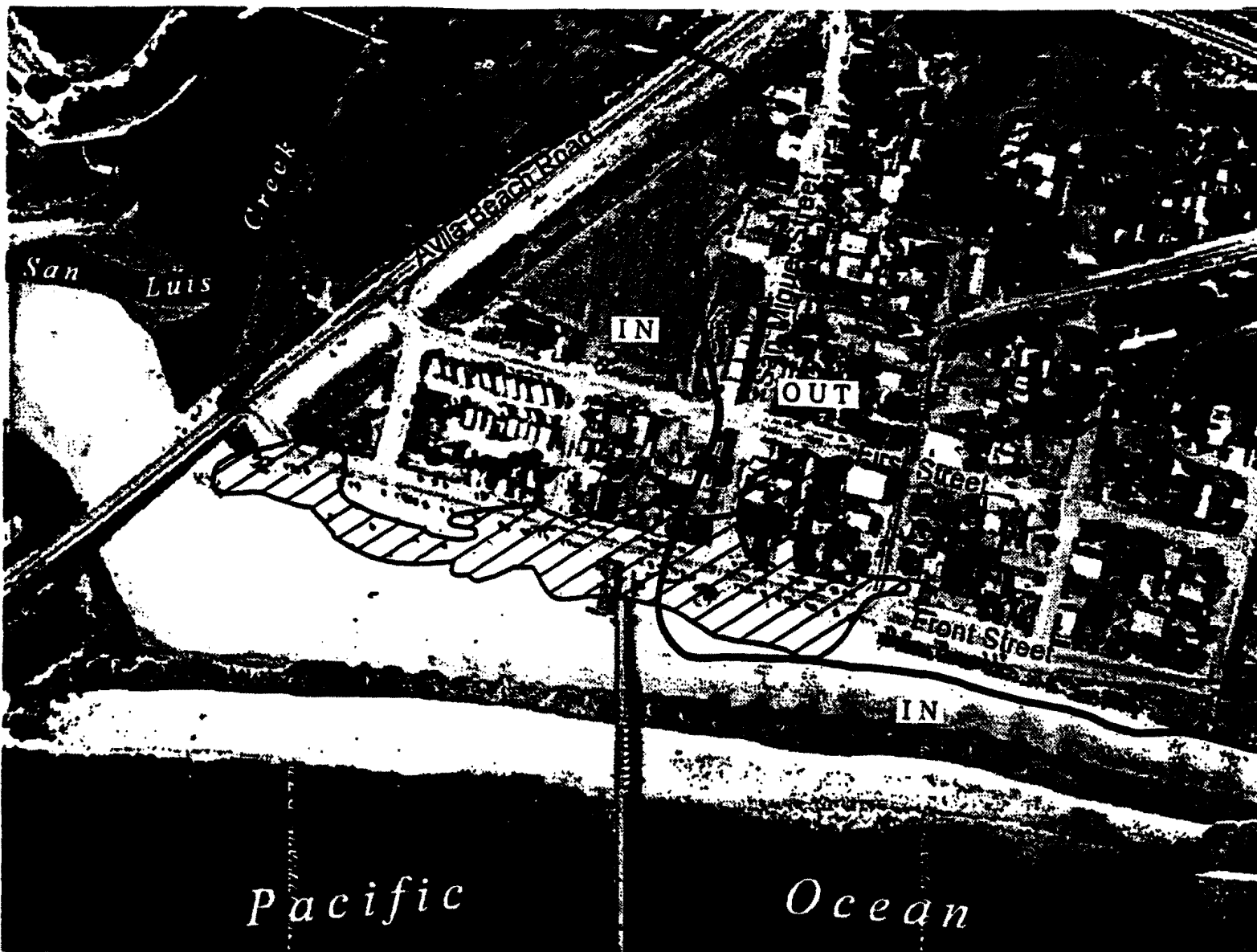
The Executive Director finds no feasible less environmentally damaging alternatives or additional feasible mitigation measures, other than those identified herein, that would substantially lessen any significant adverse impact which the project activities may have on the environment. The Executive Director therefore finds the project is consistent with the provisions of the CEQA.



<b>EXHIBIT NO.</b> 2
<b>APPLICATION NO.</b>
E-97-12
Unocal



# Avila Beach



**Area of Hydrocarbon Plume**  
(From Groundwater Technology Site Plan,  
File 1308SMA, March 1994)



**Coastal Commission Original  
Permit Jurisdiction Boundary**



No Scale

Source: California Department of Boating and Waterways  
August 30, 1993  
Flight Line 91, Frame 4  
Original Scale of Photography 1:12,000

**EXHIBIT NO. 3**

**APPLICATION NO.**

E-97-12

Unocal



California Coastal Commission

Note: Hydrocarbon plume and original  
permit jurisdiction boundary are approximate