

## CALIFORNIA COASTAL COMMISSION

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



W3a

October 25, 1996

To: Coastal Commissioners and Interested Parties

From: Susan M. Hansch, Deputy Director  
Alison J. Dettmer, Supervisor, Energy and Ocean Resources UnitRe: **Issuance of Emergency Permit E-96-2-G for the Installation of a Temporary Sheetpile Wall on Guadalupe Beach.**

On October 4, 1996, the California Department of Fish and Game's Office of Oil Spill Prevention and Response ("OSPR") issued to Unocal a "Declaration of Imminent Threat" of a discharge to marine waters of diluent from the 5X plume at the Guadalupe oil field. The OSPR directed Unocal "to take immediate action to prevent, reduce or mitigate damages to persons, property, or natural resources." That same day, the U.S. Environmental Protection Agency issued to Unocal a "Federal Notice of Interest under the Oil Pollution Act of 1990" requiring that a response action to mitigate the substantial threat of discharge of oil be undertaken immediately.

On October 8, 1996, Unocal requested that the executive director of the Coastal Commission issue an emergency permit to extend to the north and southeast the existing sheetpile wall on Guadalupe Beach in order for the wall extension to be undertaken prior to the 1996-1997 winter storm season. The purpose of the temporary sheetpile wall is to prevent scouring and undercutting of the existing high density polyethylene ("HDPE") wall due to the northern migration of the Santa Maria River. The HDPE wall is in place to prevent a marine release of diluent from the large hydrocarbon plume known as the "5X plume."

On October 21, 1996, the executive director issued to Unocal emergency permit E-96-2-G for the sheetpile wall extension. The Commission staff has consolidated this emergency permit with emergency permit E-95-15-G, issued to Unocal in November 1995 (and subsequently modified in January 1996) for the original 370-foot sheetpile wall. As a result of this action, there is only one emergency permit for the entire sheetpile wall.

Emergency permit E-96-2-G is attached to this memorandum.

The Commission staff will brief the Commission on Wednesday, November 13 (Item 3a), on the status of the containment and remediation efforts at the Guadalupe oil field.

## CALIFORNIA COASTAL COMMISSION

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

**EMERGENCY PERMIT****Applicant: Unocal**

October 21, 1996

**Emergency Permit E-96-2-G**

**Location of Emergency Work:** Guadalupe Beach area of the Guadalupe oil field, County of San Luis Obispo, approximately four miles west of the town of Guadalupe, adjacent to the northern bank of the Santa Maria River.

**Work Proposed:** Phase 1 consists of installing 370 lineal feet of temporary sheetpile wall directly in front of the southern portion of the high density polyethylene (HDPE) wall and removing 300 tons of riprap from Guadalupe Beach. Phase 2 consists of (1) adding 1,083 lineal feet of sheetpile to the northern portion of the Phase 1 sheetpile wall; (2) removing approximately 115 lineal feet of the Phase 1 sheetpile wall; and (3) adding 400 lineal feet of sheetpile to the southeastern portion of the Phase 1 sheetpile wall.

Phase 1 of the sheetpile wall project was authorized by emergency permit E-95-15-G, which was issued to Unocal in November 1995. This permit combines Phase 1 and 2 of the sheetpile wall project into one emergency permit.

**Background:** In November 1995, the executive director issued to Unocal emergency permit E-95-15-G to install Phase 1 of the temporary sheetpile wall. The purpose of the sheetpile wall is to prevent scouring and undercutting of the existing HDPE wall due to the northern migration of the Santa Maria River. The HDPE wall is in place to prevent a marine release of diluent from a large hydrocarbon plume commonly known as the "5X plume."<sup>1</sup>

In January 1996, Unocal submitted to the Coastal Commission a follow-up regular coastal development permit application for Phase 1 of the sheetpile wall project. To date, that application has not been filed as complete, pursuant to application filing requirements contained in 14 CCR § 13053.5(a).

In June 1996, the Regional Water Quality Control Board's Central Coast Region ("RWQCB") informed Unocal that recent survey results show continued erosion of the beach at the north end of the Phase 1 sheetpile wall that could result in additional marine releases of diluent from the 5X plume area (Exhibit 1). The RWQCB directed Unocal to prepare a plan to extend the sheetpile wall.

<sup>1</sup> San Luis Obispo County is currently preparing an environmental impact report for Unocal's proposed Guadalupe oil field remediation and abandonment project. Both the HDPE wall and the sheetpile wall are to be removed from the beach once the 5X plume is remediated.

On October 4, 1996, the California Department of Fish and Game's Office of Oil Spill Prevention and Response ("OSPR") issued to Unocal a "Declaration of Imminent Threat" of a discharge to marine waters of diluent from the 5X plume at the Guadalupe oil field (Exhibit 2). OSPR directed Unocal "to take immediate action to prevent, reduce, or mitigate damages to persons, property, or natural resources." OSPR states that "[d]ue to the potential for rains and heavy wave action, it is unwise to put this project off ... which could place the project in serious jeopardy." That same day, the United States Environmental Protection Agency issued a "Federal Notice of Interest under the Oil Pollution Act of 1990" informing Unocal that "a response action to mitigate the substantial threat of discharge of oil must be undertaken immediately" (Exhibit 3).

On October 8, 1996, Unocal requested that the executive director issue an emergency permit for Phase 2 of the sheetpile wall in order for the sheetpile wall extension to be undertaken prior to the 1996-1997 winter storm season.

**Executive Director's Determination:** This permit constitutes approval of the emergency work you or your representatives have requested to undertake at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of erosion of the sand bank seaward of the temporary HDPE wall as a result of the northerly migration of the Santa Maria River requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. (14 Cal. Admin. Code § 13009) The executive director hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 60 days, unless extended pursuant to the terms of the permit;
- (b) Public comment on the proposed emergency action has been reviewed as time allows; and
- (c) As conditioned, the proposed work would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the attached conditions.

Very Truly Yours,

PETER M. DOUGLAS  
Executive Director

By:

  
SUSAN M. HANSCH  
Deputy Director

### General Conditions

1. This permit shall not become effective unless and until the enclosed Emergency Permit Acceptance Form is signed by Unocal and returned to the executive director of the California Coastal Commission (hereinafter "executive director").
2. This permit authorizes only those project operations and locations specifically described in (1) the work plan prepared by Applied Engineering and Earth Systems Consultants (dated October 13, 1995, and amended on October 31, 1995), and (2) coastal development permit application E-96-2, as amended by letters dated March 18, 1996, June 24, 1996, August 1, 1996, and September 12, 1996 (including all revised site plans). Unocal shall not deviate from the operations, timing or sequence of operations or locations specified in the referenced documentation unless and until authorized in writing by the executive director.
3. Unocal shall fund the hiring of an independent monitor, approved by the executive director, to verify compliance with all conditions of this permit. The independent monitor shall work under the direction of the executive director and County of San Luis Obispo. Unocal shall provide funding sufficient for the independent monitor to undertake all necessary site visits, provide visual documentation (photographs, slides, video) and prepare written status reports, including a final report. Unocal shall direct funds for independent monitoring through the County of San Luis Obispo.
4. Within one week of the date of issuance of this permit, Unocal shall submit to the executive director copies of all orders, permits or other approvals for the activities authorized by this emergency permit required by other agencies or property owners, including but not necessarily limited to:
  - California Department of Fish & Game, Office of Oil Spill Prevention and Response
  - California Regional Water Quality Control Board, Central Coast Region
  - County of San Luis Obispo Department of Planning and Building
  - County of San Luis Obispo Air Pollution Control District
  - County of San Luis Obispo Environmental Health Division
  - U.S. Army Corps of Engineers
  - U.S. Environmental Protection Agency
  - U.S. Fish and Wildlife Service
5. This emergency permit shall expire on January 1, 1999, unless before that date Unocal applies for, and the executive director grants, an extension to this permit.
6. Within 90 days of issuance of this emergency permit, Unocal shall submit to the Coastal Commission an application for a regular coastal development permit for all work

conducted heretofore or hereafter under the authority of this emergency permit. The deadline for submittal of any information necessary to file the application as complete, as identified in the application filing status letter, shall be 30 days from issuance of the County of San Luis Obispo's project approval.

7. In addition to any immunities provided for by law, in exercising this permit, Unocal agrees to hold harmless and indemnify the Commission, its officers, employees, agents, successors and assigns from any claims, demands, costs, expenses and liabilities for any damage to public or private properties or personal injury that may result directly or indirectly from the project.
8. Unocal shall reimburse the Commission in full for all costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Commission may be required by a court to pay -- that the Commission incurs in connection with the defense of any action brought against the Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit, the interpretation and/or enforcement of permit conditions, or any other matter related to this permit.
9. The post-construction maintenance obligations of this permit (i.e., sheetpile wall monitoring and eventual removal of the sheetpile wall) shall remain the sole responsibility of Unocal notwithstanding the acquisition by any party or entity of any ownership interest in the property that is the subject of this permit as a result of an acceptance of one or both of the Offers to Dedicate ("OTD's") recorded as Instrument Nos. 23795 and 23796.

In accepting this permit, Unocal agrees to indemnify and hold harmless any party or entity which acquires an ownership interest in the property that is the subject of this permit as a result of acceptance of one or both of the above-referenced OTD's against any and all costs, expenses, or other liabilities which such party or entity may incur or to which it may become subject as a result of any failure on the part of Unocal to discharge any post-construction maintenance obligation imposed by any governmental agency, including but not limited to those obligations referenced in the preceding paragraph.

10. The Coastal Commission staff or its designee shall have the right of entry at any time to any portion of the project site subject to health and safety constraints to determine permit compliance.
11. Acceptance of this emergency permit shall be deemed acceptance of all conditions of this permit. Authority to conduct development activities under this permit is contingent upon full and continuing compliance with every condition of this permit. In addition to all other remedies, failure to comply fully with the requirements of any condition of this

permit shall constitute grounds for a cease and desist order issued by the executive director or the Commission (Coastal Act § 30809 and 30810).

### **Mitigation Measures**

12. Prior to commencement of project operations, a qualified biologist, approved by the executive director, shall complete a survey of all areas potentially affected by construction activities. At a minimum the survey shall document the abundance, distribution, and species identification of all plants and animals within the project area. In addition to species-specific information, survey results shall include an up-to-date map that clearly shows: (1) the locations of all rare, threatened and endangered plants, nesting birds and other animals in and adjacent to the project area; and (2) the location and extent of the various habitat types (e.g., active beach, lagoon, dune and foredune) within and adjacent to the project area. The results of this survey, including the dates of the field work, shall be submitted to the executive director within 15 days of project commencement.
13. Prior to commencement of project operations, Unocal shall mark with orange construction fencing (1) the areas of rare, endangered and threatened plants that are to be avoided during project activities; and (2) the boundaries of the construction and stockpile areas.
14. Within 30 days of issuance of this permit, Unocal shall submit to the executive director for review and approval an amended *Guadalupe Remediation Project Foredune Stabilization Plan* that encompasses all foredune and dune area adversely affected by the sheetpile wall project. The site stabilization plan shall include: (1) methods for substrate stabilization and erosion control; (2) methods for controlling the influx and establishment of undesirable plant species; (3) a low-level monitoring program; and (4) biannual written reports to the executive director that describe stabilization program activities and results. The site stabilization plan shall be implemented until a final restoration plan for the Guadalupe oil field, as approved by the Coastal Commission and other permitting agencies, is implemented by Unocal.
15. The top 12 inches of soil shall be stockpiled separately, covered and protected from erosion. The salvaged topsoil shall then be used as cover for the disturbed construction corridor after reconfiguration of dunes.
16. The project shall be completed by March 1, 1997.
17. Between September 30 and March 1 of each year, Unocal shall ensure that the sheetpile wall is covered with sand, except when covering the wall with sand would result in placing fill in the Santa Maria River or open coastal waters.

18. Within one week of completing installation of the sheetpile wall, Unocal shall replace groundwater monitoring wells 16, 17, 18, 19 and 22 that were temporarily removed for project construction.
19. Prior to installation of the sheetpile wall, Unocal shall install three test borings to a depth ten feet greater than sheetpile depth equally spaced along the proposed sheetpile wall to determine the site stratigraphy and groundwater piezometric levels at depth. These borings should be compared to those from nearby shallow wells to determine vertical gradients.
20. Unocal shall monitor monthly wells in close proximity to the edges of the sheetpile wall, as well as up- and down-gradient of the wall to compare vertical gradients below the wall to those above. Unocal shall re-evaluate monthly the extraction system to ensure the continued efficiency of the capture zones and control of the movement of free product. Extraction well pump rates should be increased in the event that water elevations behind the wall exceed current levels.
21. During the life of the sheetpile wall, Unocal shall implement the *Unocal Guadalupe Sheetpile Wall Monitoring Program (dated October 10, 1996)* (Exhibit 4).
22. During sheetpile installation activities, Unocal shall monitor daily the lagoon for visible sheening. If sheening is observed, Unocal shall immediately collect a water quality sample and notify all agencies identified in Special Condition 25.
23. All equipment maintenance, including refueling and lubrication, shall occur at least 100 feet from the nearest water resource.
24. Unocal shall store on site during all construction activities the oil spill response, containment, and clean-up equipment specified in "The Guadalupe Sheetpile Wall Project Recommended Immediate Oil Spill Response Plan" (Exhibit 5). In addition, Unocal shall have at least two Hazwopper certified personnel available at all times (day and night) to be at the project site within 15-30 minutes. These Hazwopper certified personnel shall be capable of directing the deployment of the oil spill equipment specified in the "The Guadalupe Sheetpile Wall Project Recommended Immediate Oil Spill Response Plan."
25. In addition to all other federal and state agency notifications required by law, Unocal shall notify immediately (1) OSPR dispatch; (2) OSPR staff in San Luis Obispo County; (3) the State Incident Commander; and (4) the California Coastal Commission of an oil spill.
26. In the event of an oil release, Unocal shall refer to the detailed response strategies recommended in "The Guadalupe Sheetpile Wall Project Recommended Immediate Oil Spill Response Plan" in conjunction with the USCG 1996 Area Contingency Plan for San

Luis Obispo County and Unocal's Oil Spill Response Plan for Guadalupe Oil Field (OSPR ID#O4-42-0018). The strategies contained in the above-referenced plans shall be used as guide in the event of an oil spill. Oil spill responders shall take into account real time conditions and information when deciding the best response strategy.

27. All oil spill response strategies should consider: (1) safety of the responders; and (2) protection of the Santa Maria River's sensitive habitat and endangered species. Should boom be deployed into the Santa Maria River lagoon/estuary area, Unocal shall, if feasible, deploy boom manually and/or deploy boom with shallow draft skiffs using oars rather than outboard motors.
28. Prior to commencement of project operations, Unocal shall provide bilingual notice (English and Spanish) to beach users of the project, its anticipated time schedule and any appropriate safety concerns. The notice shall inform beach users that the beach in front of the sheetpile wall may become impassable during high tides and storm events. Appropriate noticing shall include (1) signs posted at the Rancho Guadalupe County Park and Oso Flaco Lake Natural Area parking lots; and (2) signs posted along the beach, north and south of the construction area.
29. Unocal shall post a security guard on the beach during all construction activities.
30. Unocal shall have on site during all grading activities for the southeast leg of the Phase 2 sheetpile wall a qualified archaeologist approved by the executive director. If archaeological remains are encountered during installation of the sheetpile wall, Unocal shall cease or redirect all work immediately until the approved archaeologist evaluates the significance of the find. No construction activities, including storage of heavy equipment, shall be permitted outside the construction footprint.



# EMERGENCY PERMIT ACCEPTANCE FORM

Emergency Permit No. E-96-2-G

Instructions: *After reading the attached emergency permit, please sign this form and return within 15 working days from the permit's date.*

I hereby understand all of the conditions of the emergency permit being issued to me and agree to abide by them. I understand that the emergency work is temporary and a regular coastal development permit is necessary to make the project permanent.

\_\_\_\_\_  
*Signature of property owner or authorized representative*

\_\_\_\_\_  
*Name*

\_\_\_\_\_  
*Address*

\_\_\_\_\_  
*Date of Signing*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD —  
CENTRAL COAST REGION  
81 HIGUERA STREET, SUITE 200  
SAN LUIS OBISPO, CA 93401-5427  
(805) 549-3147

<b>EXHIBIT NO. 1</b>
APPLICATION NO.
E-96-2-G



June 24, 1996

Mr. Gonzalo Garcia, Senior Specialist  
Unocal Corporation  
Unocal Environmental Remediation Services  
3201 Airpark Drive, #104  
Santa Maria, CA. 93445

Dear Mr. Garcia:

**SLIC-UNOCAL GUADALUPE OIL FIELD, 5X PLUME, PROBABILITY FOR ADDITIONAL RELEASES**

Unocal's recent survey results show erosion encroaching toward the poly wall at the north end of the sheet pile. Staff believes this erosion will continue and could be accentuated by:

- coastal storm tides,
- summer thunder storms,
- releases from Twitchell Reservoir, or
- the onset of winter rains.

The river is likely to continue the northward flow because of the thinness and low elevation of the sand spit at the current river mouth. The river eddy is the result of the geometry caused by the sheet pile. The river flow bounces from the sheet pile to the ocean stabilized sand spit and back toward the poly wall. Continued river flow or ocean storm tides will continue to erode toward the polywall and eddy inward north of the sheet pile.

We are concerned the continued erosion will result in additional marine releases of diluent from the 5X area. Any pollutant release is the responsibility of Unocal. The burden to prevent a release is Unocal's responsibility. I understand, based on my June 12 telephone conversation with Bill Sharrer, that Unocal hopes to prevent a release by extending the sheet pile wall.

I also understand Unocal will soon apply for permits necessary to implement this project. Pursuant to Water Code section 13267, I direct Unocal to submit to the Regional Water Board, not later than July 1, 1996, a copy of the detailed plans for Unocal's proposed sheet pile wall extension project. Also, pursuant to my letter dated February 22, 1996, Unocal has been directed to continuously provide copies of any work plan, data, technical report or related document submitted to any government

agency. In accordance with that directive, please submit to the Regional Water Board, as soon as possible but not later than 10 days after they are filed, all permit applications and related documentation filed with any government agency in connection with Unocal's proposed sheet pile project.

If you have any questions, please call Lou Blanck at (805) 542-4626.

Sincerely,

*for Paul J. Briggs*  
for Roger W. Briggs  
Executive Officer

cc's: guadalupe std lst

b\gud5lk.doc/Lou's H disk

Task: 20309

File: Unocal Guadalupe SLIC

<b>EXHIBIT NO. 2</b>
<b>APPLICATION NO.</b>
E-96-2-G

**M e m o r a n d u m**

To : Mr. *Peter* Douglas  
Executive Director  
California Coastal Commission

Date : \_\_\_\_\_

From : Department of Fish and Game

**RECEIVED**  
OCT 10 1996

Subject : Guadalupe Beach Oil Field

CALIFORNIA  
COASTAL COMMISSION


I am enclosing copies of a Declaration of Imminent Threat issued by the Office of Oil Spill Prevention and Response (OSPR) and a Notice of Federal Interest that has been issued by the United States Environmental Protection Agency (US-EPA). We have prepared these documents at the request of the Multi-Agency Coordination (MAC) Group in order to help facilitate the issuance of an emergency permit so that work may be commenced to install a protective sheetpile wall at the Leroy 5X location within the Guadalupe Beach oil field.

As you are aware, California Coastal Commission (CCC) staff as well as Department of Fish and Game staff have been actively involved in the MAC Group overseeing the remediation activities at the Guadalupe Beach oil field. It was clear in early 1996 that the existing sheetpile protective wall was insufficient to adequately protect the high density polyethylene (HDPE) wall that was installed in 1994. Unocal, at the urging of the MAC Group prepared a work plan to extend the sheetpile protective wall approximately 400 feet east from the southern edge of the existing sheetpile and approximately 1000 feet north. The County of San Luis Obispo (the "County") had requested an opportunity to include this project in their Environmental Impact Report, and it was agreed that the County's consultant, A.D. Little, would place all of their initial emphasis on preparing this report and forwarding it to Ms. Alison Dettmer of your staff in time to be placed on the agenda for the October 1996 CCC meeting. It was understood by the MAC Group that the timing for the environmental review was extremely tight and that there would be a possibility that it would not be completed in time to present the regular coastal development permit application on the October agenda. The OSPR and the US-EPA indicated their willingness to prepare declarations of imminent threat should the environmental review process not be completed in time. As it turned out, the environmental document was over 150 pages long and was not given to Ms. Alison Dettmer in a sufficient amount of time to be included on the October 1996 CCC meeting agenda.

The condition at the Leroy 5X location remains critical. The Santa Maria River is presently 40 feet from the HDPE wall and any significant rainfall would place the integrity of the HDPE wall in serious jeopardy. It is my understanding that all agencies that are members of the MAC Group are in agreement with the issuance of an emergency permit.

Mr. Peter Douglas  
October 4, 1996  
Page Two

If I can be of any other assistance in your administrative process, please feel free to contact me at telephone number (916) 324-9326 or Stephen L. Sawyer, Staff Counsel III, at telephone number (916) 324-9812.



Pete Bontadelli  
Administrator  
Office of Oil Spill Prevention and Response

**DEPARTMENT OF FISH AND GAME**

1416 NINTH STREET  
P O BOX 944209  
SACRAMENTO, CA 94244-2090  
Telephone (916) 445-9338



## **Declaration of Imminent Threat Government Code Section 8670.62**

I, Pete Bontadelli, as the Administrator of the Department of Fish and Game's Office of Oil Spill Prevention and Response declare that:

In 1994, Unocal Corporation commenced a remediation project to remove a portion of a diluent plume more commonly known as the Leroy 5X plume at the Guadalupe Beach oil field. As an integral part of that remediation project, a high density polyethylene (HDPE) wall was installed to prevent the further migration of petroleum products from the Leroy 5X plume from discharging into marine waters.

On or about February 9, 1995, the Santa Maria River began migrating in a northerly direction and has been, and is threatening the integrity of the HDPE wall. The location of the Santa Maria River is presently 40 feet from the west side of the HDPE wall. Due to the close proximity of the Santa Maria River to the HDPE wall and a likelihood that additional rains and wave action would cause the continued erosion of sand between the Santa Maria River and the HDPE wall, that a condition of imminent threat of a discharge to marine waters exists as defined by Government Code Section 8670.62(f), and that it is necessary to take immediate action to prevent, reduce, or mitigate damages to persons, property, or natural resources.

This Declaration is executed in Sacramento, California on October 4, 1996.

A handwritten signature in black ink, appearing to read "Pete Bontadelli", written over a horizontal line.

Pete Bontadelli  
Administrator  
Office of Oil Spill Prevention and Response



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

EXHIBIT NO. 3

APPLICATION NO.

E-96-2-G

CERTIFIED MAIL P 350 642 769  
RETURN RECEIPT REQUESTED

Unocal Corporation  
Attn: Paul T. West, General Manager  
3201 Airpark Drive, #104  
Santa Maria, CA 93455

Re: Notice of Federal Interest under the Oil Pollution Act  
of 1990.

Dear Mr. West:

The United States Environmental Protection Agency ("EPA") has spent public funds to investigate the threat of discharge into or upon navigable waters and adjoining shorelines at the Unocal Guadalupe Oil Field ("the Site") from the 5X Area. The purpose of this letter is to inform the Unocal Corporation ("UNOCAL") of its potential liability under Section 1002 of the Oil Pollution Act of 1990, 33 U.S.C. §2702, with respect to the Site.

As of October 1, 1996, there exists a substantial threat of discharge of oil from the Unocal Guadalupe Oil Field's 5X Area into the Santa Maria River and Pacific Ocean. The Santa Maria River and Pacific Ocean are navigable waters of the United States. The oil from this onshore facility poses a substantial threat of discharge of oil to the Santa Maria River and Pacific Ocean.

This threat of discharge from the 5X Area constitutes an imminent and substantial threat to public health and welfare of the United States, including endangered species as well as other fish, shellfish, and wildlife, public and private property, shorelines, beaches, the habitat of endangered species, and other living and nonliving resources of the United States.

The EPA has determined that a response action to mitigate the substantial threat of discharge of oil must be undertaken immediately. EPA is requesting that you voluntarily perform the Site activities described in Enclosure A. If we cannot reach an agreement with you within twenty-four (24) hours of receipt of this letter, EPA may respond or issue an order to you directing you to respond. UNOCAL shall notify EPA OSC Christopher Weden at (415) 744-2291 and shall submit in writing within 7 days from the date of this letter its intentions to comply with the terms contained herein.

Section 1002(a) of the Oil Pollution Act provides that the responsible party for a vessel or facility from which oil is

discharged into navigable water and/or adjoining shorelines, or which poses a substantial threat of a discharge, is liable for: (1) certain specified damages resulting from the threat or the discharge of oil; and (2) removal costs incurred by any person for acts taken by the person which are consistent with the National Contingency Plan.

The damages for which oil dischargers may be liable under section 1002 of the Oil Pollution Act include:

- Natural resource damages, including the reasonable costs of assessing these damages;
- Loss of subsistence use of natural resources;
- Real or personal property damages;
- Net loss of tax and other revenues;
- Loss of profits or earning capacity; and
- Net cost of additional public services provided during or after removal actions.

In addition, Section 311(b) of the Clean Water Act, 33 U.S.C. §1321, authorizes a civil penalty of \$25,000 for each day of violation or \$1,000 per barrel of oil discharged. These penalties are higher in cases of gross negligence or willful misconduct. Failure to comply with a Federal removal order can result in civil penalties of up to \$25,000 for each day of violation or three times the resulting costs incurred by the Oil Spill Liability Trust Fund. EPA and the United States Coast Guard also have the authority to administratively assess civil penalties against violators of the Oil Pollution Prevention Regulations (40 CFR Part 112).

Thank you for your prompt attention to this matter.

Sincerely,



Christopher Weden  
EPA On-Scene Coordinator

Enclosure

cc: Multi-Agency Committee Group



ENCLOSURE A

UNOCAL shall perform the work necessary to complete the tasks described below within the dates specified in accordance with the National Contingency Plan, 40 CFR Part 300.

a. Commencing on October 15, 1996, UNOCAL shall:

1) Prevent any discharge of oil from the 5X Area into the Santa Maria River and Pacific Ocean.

2) Submit a Work Plan to EPA which describes Unocal's mitigation and removal of the source of the threatened discharge at the 5X Area site if the Plan differs from previously submitted drafts.

b. Upon EPA approval of the Work Plan

1) Immediately implement Work Plan removal activities.

2) Provide EPA, CDFG OSPR, and Regional Water Quality Control Board ("RWQCB") with written weekly summary reports. These reports should contain a summary of the previous week's activities and planned upcoming events.

c. Within thirty (30) calendar days of completion of the activities outlined in the Work Plan.

1) Submit a final report describing the implementation of the Work Plan. The report shall describe the work performed and shall include a detailed description of the source control and repair activities, all waste handling techniques (including documentation of the final disposition of all generated wastes), and a summary of any variances from the Work Plan.

EXHIBIT NO. 4

APPLICATION NO.

E-96-2-G

**REVISED DRAFT  
10-10-96**

## **UNOCAL GUADALUPE SHEETPILE WALL MONITORING PROGRAM**

### **I INTRODUCTION**

This monitoring Program is being proposed to address the concerns raised by the California Coastal Commission and other regulatory agencies over the integrity of the sheetpile wall located in UNOCAL's former Guadalupe Oil Field. UNOCAL is confident that the sheetpile wall as currently designed will protect the HDPE wall and the 5x plume. This Monitoring Program is intended to provide periodic assessments of the status of the sheetpile wall and certain parameters relating to its design, namely the scour depth in front of the wall and the profile of the sandspit/beach. The Program involves a combination of objective warning devices designed to indicate that the wall is in jeopardy, periodic surveys, and rigorous visual inspections and photographic documentation to monitor the status of the wall, lagoon/river depth in front of the wall (i.e. scour depth) and the configuration of the sandspit/beach profile. All of the data collected will be compiled and submitted to the California Coastal Commission monthly and periodic discussions with the Commission Staff are encouraged to address any areas of concern.

The Program's short duration (i.e. two years) and the incredibly dynamic nature of the shoreline will not accommodate a meaningful qualitative analysis of the long-term trends at the site. However, it is possible to use the data collected to develop an understanding of the relationship between the severity of storm events and the loss of sand along the shoreline. The data can also be used to show the seasonal beach changes occurring at the site and the volume of sand involved. It is not uncommon for the beach to lose six vertical feet of sand during the storm season which is subsequently replenished naturally during calmer periods. Such radical changes in beach profile, although dramatic, do not necessarily translate into a significant threat to the sheetpile wall or the structures/affected soils which it is designed to protect.

Despite the potential dramatic variations in the conditions at the site, the Program does establish certain "action thresholds" for initiating "alert" measures such as heightened monitoring of the site, notification of agencies, and dialogue with those agencies regarding potential corrective strategies.

Since the possibility exists that the sheetpile wall will be in place for more than two years, the data acquisition is designed to accommodate a more rigorous qualitative analysis once enough data (i.e. a significant number of data points) are available to render meaningful analysis of those data.

Survey crews conducting all of the work contained within the Monitoring Program will adhere to certain restrictions during the snowy plover/least tern nesting season. During the nesting season, survey crews will be limited to two personnel and will follow established routes during each monitoring event. Any deviations from these restrictions must be approved by the U S Fish and Wildlife Service.

The Program consists of three major monitoring elements:

- Sheetpile Wall Monitoring
- Sandspit, Shoreline, and Beach Profile Monitoring
- River Bank and Scour Monitoring

In addition, documentation of the results of each of the monitoring elements will be compiled in monthly reports and provided to the Commission Staff. The following provides the details of each of the major elements of the Monitoring Program, action thresholds/alert measures, contingencies, and documentation procedures.

## II MONITORING PLAN ELEMENTS

### A. SHEETPILE WALL MONITORING

Sheetpile wall monitoring will consist of visual inspections, horizontal movement indicators, and periodic surveys. cursory visual inspections of the sheetpile wall will be made by field personnel to ascertain the general status of the wall, and tidal/surf conditions etc. Such cursory inspections will be performed daily. These inspections will serve to alert UNOCAL to possible conditions that may warrant more formal investigations, surveys, photographic documentation, and/or alert measures as described in Section III of this Program.

Formal visual inspections will be performed monthly from May through October and weekly from November through April. The exposed portions of the sheetpile shall be inspected for signs of tilting, bulging, excessive corrosion, or loss of pile integrity. Any observations of such conditions will

be photographed and included as part of the documentation described in Section E of this Program.

Baseline conditions of the existing and proposed sheetpile wall will be based on as-built plans developed upon completion of the sheetpile wall extension. Such plans will depict among other things the horizontal and vertical locations of the sheetpile wall at 100' intervals on-center.

Bullseye levels will be installed at 100' intervals on-center along the entire wall. The bullseye levels will be used to indicate horizontal movement of the sheetpile wall and will be used as automatic indicators of any such movement of the wall. The bullseye levels will be inspected monthly from May through October and weekly from November through April. More frequent monitoring of the bullseye levels may be performed during threatening storm conditions.

Monthly surveys will be conducted at 100' intervals on-center along the sheetpile wall and compared to baseline conditions as indicated on the as-built plans.

A table showing any horizontal and/or vertical changes in the survey points (to +/- 0.1') will be prepared as part of the documentation described in Section E of this Program.

#### **B. SANDSPIT, SHORELINE, AND BEACH PROFILE MONITORING**

Sandspit, shoreline, and beach profile monitoring will consist of a combination of visual inspections, surveys, and photographs. cursory visual inspections of the sandspit in front of the sheetpile wall will be made by field personnel to ascertain the general status of the sandspit (i.e. the presence of surf coming over the sand spit, through the outlet etc.). Such cursory inspections will be performed daily. These inspections will serve to alert UNOCAL to possible conditions that may warrant more formal investigations, surveys, photographic documentation, and/or alert measures as described in Section III of this Program.

Formal visual inspections of the sandspit, shoreline, and beach profiles shall be inspected on a monthly basis from May through October and weekly from November through April. Photographs will be taken at least monthly from designated locations.

Conditions of the sandspit, shoreline, and beach profiles shall be surveyed prior to construction. Profiles perpendicular to the northern sheetpile extension will be surveyed at 200' intervals along the beach within an area bounded by a point 400' north of the northern extent of the sheetpile and a point 400' south of the southern extent of the sheetpile. These individual profiles will be taken from fixed locations and will be comprised of survey shots at approximately 50' on-center and shall be obtained in such a fashion to include all grade breaks. The limits of the individual profiles will be west from the ocean and east to 100' easterly of the sheetpile wall. Profiles intercepting the lagoon/river will cease at the waters edge and resume at the toe of the sheetpile wall. In areas south and north of the sheetpile wall, the profiles will extend easterly to the lagoon or 100' easterly of an imaginary line drawn along the axis of the sheetpile wall respectively.

The sandspit, shoreline, and beach profiles shall be surveyed monthly in the same fashion as the baseline profiles and surveys were conducted.

A written log of all visual inspections shall be kept and photographs taken at least monthly from designated locations. The log of visual inspections, photographs, and a plan view drawing depicting topographic contours and profiles of the sandspit, shoreline, and the beach will be submitted as part of the documentation described in Section E of this Program.

### **C. RIVER BANK AND SCOUR MONITORING**

River bank and scour monitoring will consist of a combination of visual inspections, photographs, and surveys. cursory visual inspections of the river bank in front of the sheetpile wall will be made by field personnel to ascertain the general status of the bank (i.e. the occurrence of excessive erosion, migration of the river outlet, etc.). Such cursory inspections will be performed daily. These inspections will serve to alert UNOCAL to possible conditions that may warrant more formal investigations, surveys, photographic documentation, and/or alert measures as described in Section III of this Program.

Formal visual inspections of the river bank shall be conducted monthly from May through October and weekly from November through April. Photographs will be taken at least monthly from designated locations.

Prior to construction, a baseline survey of the easterly bank of the river/lagoon will be conducted using 50' intervals on-center from a point

approximately 600' south of the southernmost portion of the sheetpile wall and continuing to the river outlet (if present), or the lagoon's northernmost extent.

The easterly bank of the river/lagoon shall be surveyed monthly in the same fashion as the baseline surveys were conducted.

The depth of the river/lagoon bottom at the base of the sheetpile wall (i.e. scour depth) shall be surveyed at 100' intervals on-center along those portions of the wall fronted by the river/lagoon upon completion of the sheetpile extension project. Monitoring surveys of the depth of the river/lagoon at the base of the sheetpile wall shall be made monthly from May through October and weekly from November through April.

A written log of all visual inspections shall be kept and photographs taken at least monthly from designated locations. The log of visual inspections, photographs, and drawings depicting the bank of the river/lagoon and depth of the water at the base of the sheetpile wall shall be submitted as part of the documentation described in Section E of this Program.

#### **D. CONTINGENCIES**

The following is a description of the possible actions that could be undertaken to protect the sheetpile wall. These actions are not elements of the Monitoring Program, but contingencies that could be implemented if necessary.

If corrective actions are warranted to protect or repair the sheetpile wall, such actions could include any one or a combination of the following:

- Replacement of pile members,
- Installation of sand-filled fabric or geotubes at the base of the wall,
- Breaching of the sandspit.
- Removing the surcharge from behind (i.e. East) of the wall.

Replacement of pile members is a straightforward operation. It is estimated that it would require approximately 10 days to complete pile replacement upon initiation of the activity.

Geotubes could be installed at the base of the wall to limit scouring at the base of the wall. The fabric containers would be filled with clean sand removed from roads in the oil field and placed at the toe of the wall. Their

dimensions (filled) are approximately 10'x6'x3'. The installation of geotubes would require approximately 14 days to complete upon initiation of the activity.

Breaching of the sandspit could be conducted to relocate the river outlet south of the sheetpile wall. The breach would be made with an excavator. In addition, the cut from the excavation could be placed along the sandspit to raise the elevation of the sandspit near the old outlet. Breaching would be conducted in accordance with the procedure described in the *Santa Maria River Migration at the Coast: Channel Migration Estimates and Channel Management Plan*, prepared by Everts Coastal. The breach would require approximately one day to complete upon initiation of the activity.

Removal of the surcharge (sand) from behind the wall could be conducted to alleviate differential pressure being exerted on the wall as a result of it's western exposure. Sand removal would require approximately one day to complete initiation of the activity.

The implementation of any of these contingencies would require coordination with, and approval from, the regulatory agencies and would not be initiated without prior consultation with them.

#### **E. DOCUMENTATION**

Documentation will consist of monthly reports and shall include the following information:

Field notes pertaining to visual observations of the status of the sheetpile wall, sandspit, shoreline/beach profiles, and river/lagoon bank.

Copies of photographs of the sheetpile wall, sandspit, shoreline, beach, and river/lagoon bank.

A table depicting horizontal and/or vertical changes in wall survey points.

Drawings depicting topographic contours and profiles of the sandspit, shoreline and beach.

Drawings depicting the bank of the river/lagoon and variations in the depth of the river/lagoon bottom at the base of the sheetpile wall.

Any additional significant observations made beyond that envisioned as part of the Monitoring Program will be summarized and submitted along with the monthly reports.

All documentation will be provided in report form and will utilize a series of pre-prepared forms, tables, etc. Copies of photographs will be included in the reports. The reports will be prepared as soon as practical upon compilation of the data, ideally within two weeks of the monitoring event.

### III ACTION THRESHOLDS AND ALERT MEASURES

Certain action thresholds have been identified that would necessitate additional actions (i.e. alert measures) be undertaken. The action thresholds are based upon various design criteria established for the sheetpile wall and the environment in which it is located. The alert measures are specific actions which would be taken in the unlikely event that the action thresholds are exceeded and consist of the following:

- Immediate visual inspection by experienced project personnel. *RWQCB, Santa Barbara County*
- Immediate notification of the EPA, OSPR, CCC, and SLO County.
- Increased visual and/or quantitative monitoring (i.e. surveying) and photographic documentation.
- Initiation of a conference call or meeting with the aforementioned agencies to review the status of the situation and develop a course of action including but not limited to the contingencies identified in Section D of this Program.

Exceedance of any of the following design criteria would be considered action thresholds and would trigger the alert measures:

- Groundwater elevation of 10' msl behind the wall.
- Elevation of river/lagoon bottom at the toe of wall of 0 msl or less.

Similarly, the observance of any of the following additional action thresholds would trigger the alert measures:

- Tilting of pile members of \_\_\_ degrees
- Dislodged, disconnected, or damaged pile members.
- Persistent overtopping of the sandspit (i.e. throughout the tidal cycle for two consecutive days).
- Persistent wave migration through the outlet (i.e. throughout the tidal cycle for two consecutive days)



#### **IV MONITORING METHODS**

All surveying will be conducted by licensed surveyors using conventional surveying equipment. Depth recordings at the toe of the wall will be made using a dip-stick or leadline. Formal visual inspections will be conducted by personnel knowledgeable in shoreline processes and coastal structures with extensive experience and familiarity with the Guadalupe site.

Designated photographic locations will be established at approximately four locations and will be designed to capture views of the sheetpile wall, river outlet, river/lagoon bank, and sandspit.

The bullseye levels will be calibrated upon installation in a fashion that will provide accurate estimates of the amount of tilt based upon the location of the bubble within the level. They will be installed in weather proof containers to protect them from the elements. In addition, the top of the exposed portions of sheetpile wall will be marked with paint, stakes, or other methods at regular intervals to facilitate consistency in documenting observations.

PACIFIC

OCEAN

200' O.C.  
TYP.

SAND

SPIT

PROFILE 1

PROFILE 2

PROFILE 3

PROFILE 4

PROFILE 5

SANTA MARIA LAGOON

105.5' 100' O.C.  
TYP.

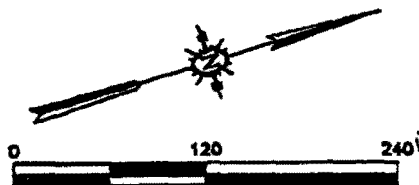
EXIST. H.D.P.E. WALL (SURVEY DATE)

EXIST. SHEET PILE

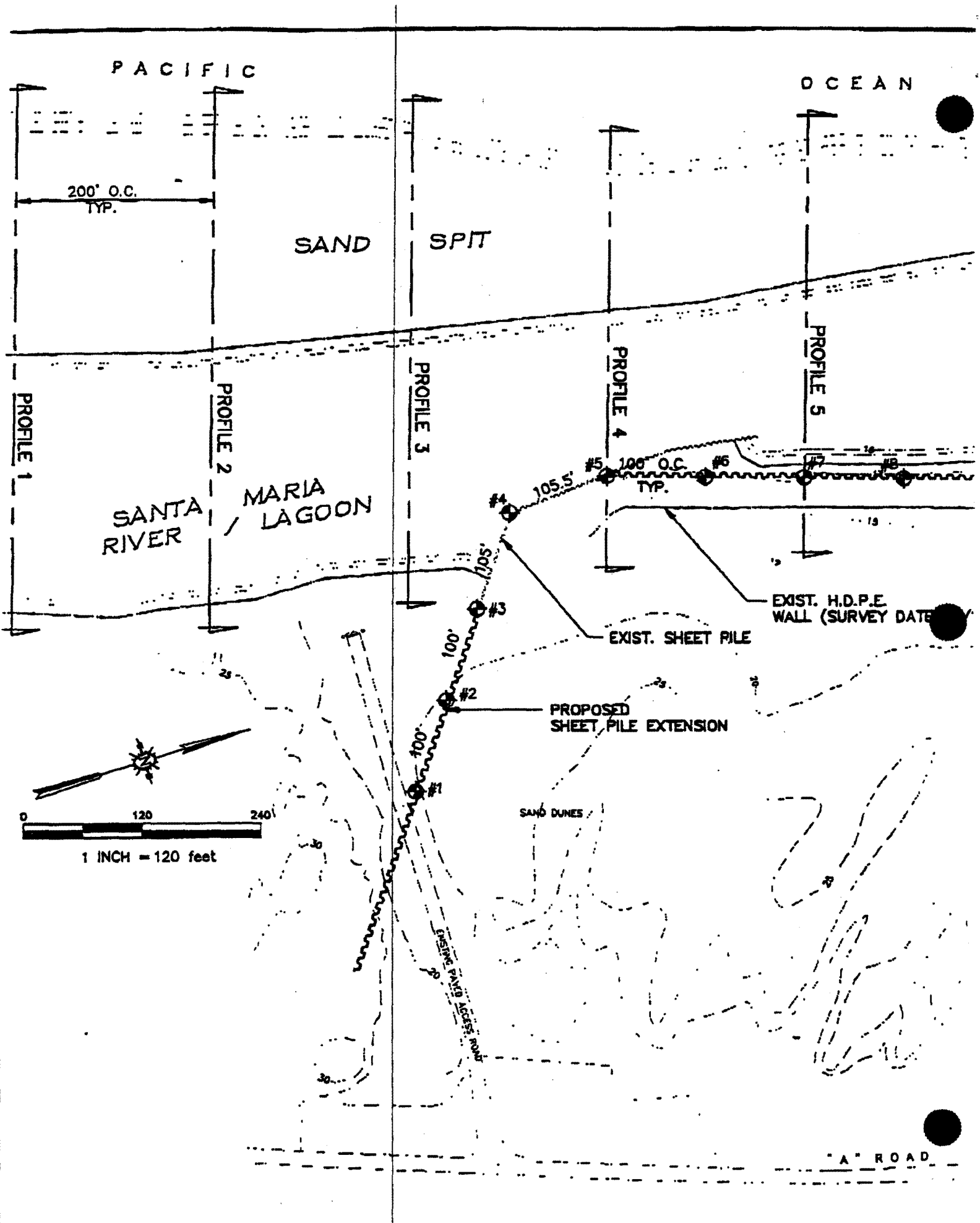
PROPOSED SHEET PILE EXTENSION

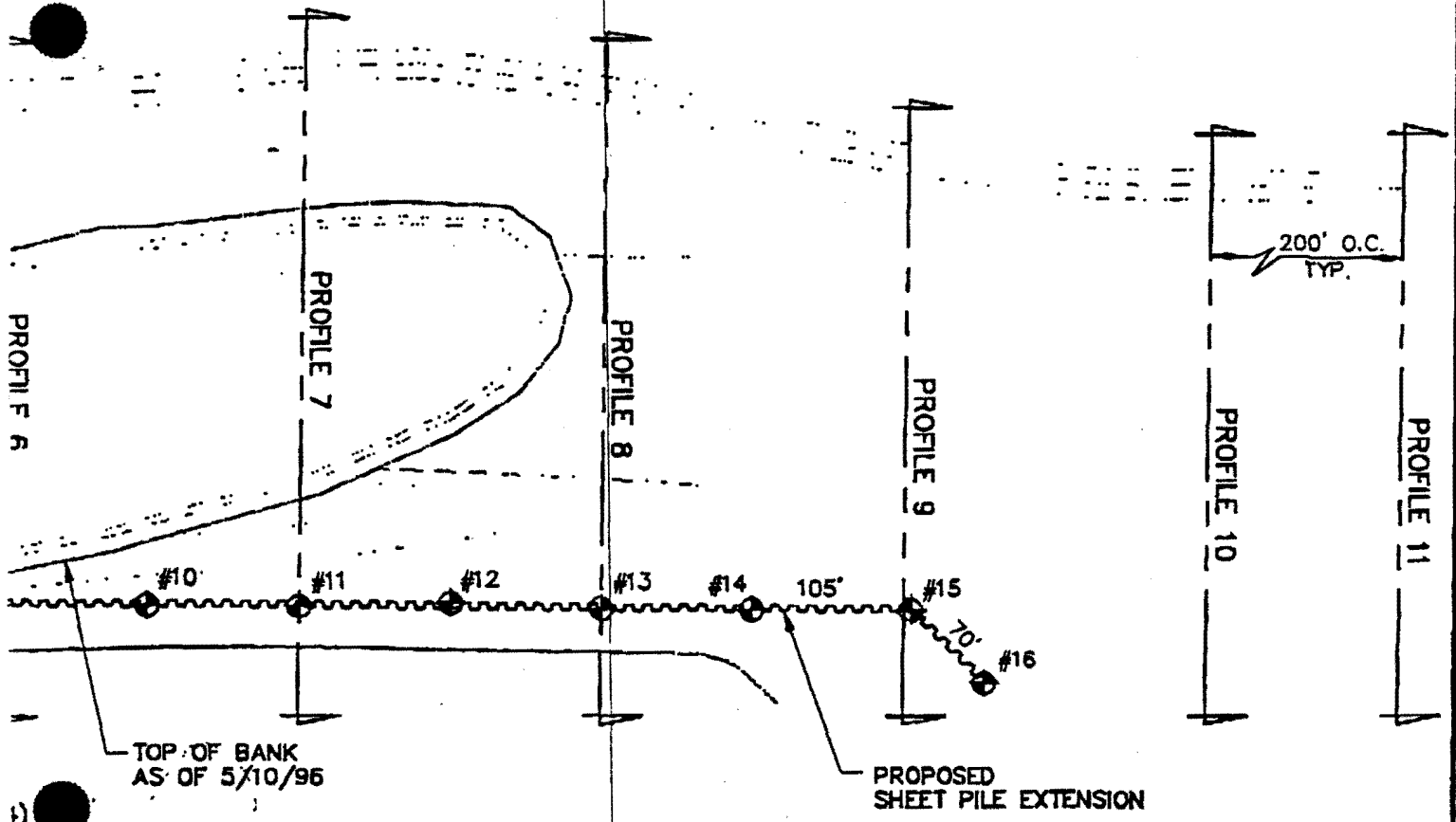
SAND DUNES

"A" ROAD



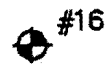
1 INCH = 120 feet





**SHEET PILE WALL AND  
BEACH PROFILE  
MONITORING EXHIBIT**  
GUADALUPE DUNES - GUADALUPE, CALIFORNIA

**LEGEND**



#16  
BULLSEYE LEVEL AND SURVEY  
CONTROL POINT

**Cannon**  
ASSOCIATES

ENGINEERS  
PLANNERS  
SURVEYORS

360 Pacific Street  
San Jose, California, 95128  
(408) 284-7427

# THE GUADALUPE SHEETPILE WALL PROJECT

## RECOMMENDED IMMEDIATE OIL SPILL RESPONSE PLAN

### Equipment for Spill Scenario 1A and 1B (See attached diagram)\*

- 1,500' of 6" or 8" harbor boom
- 6 - 10 anchors with anchor lines
- 20 fence post and driver
- Skiff with outboard motor and miscellaneous gear
- Skimmer — GT-185 or GT-260, power unit and miscellaneous gear
- Oil storage tank
- Safety gear
- Small crane for skiff and skimmer deployment
- An inventory of sorbent boom and pads

### Equipment for Spill Scenario 2 (see attached diagram)\*

- 1,000' fast current boom
- 1,500' of 6" or 8" harbor boom
- 20 fence post and driver
- Skiff with outboard motor and miscellaneous gear
- Skimmer — GT-185 or GT-260, power unit and miscellaneous gear
- Oil storage tank
- Safety gear
- An inventory of sorbent boom and pads

### Training and Safety

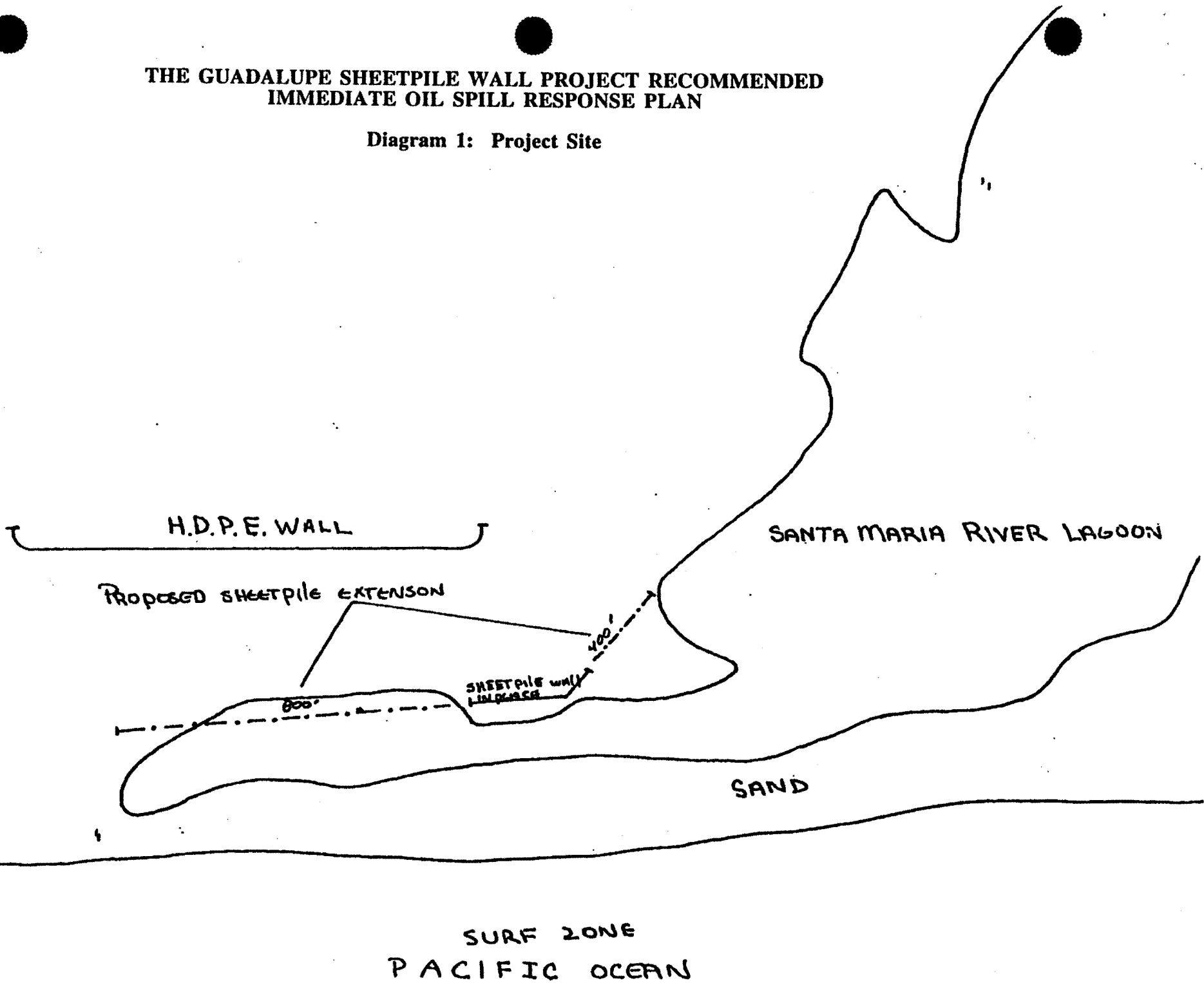
- If the the spill is at or near the breaching area, and there is a fast current, it would not be safe to deploy the gear at or around the breaching area.
- Safety is the key word and should be the number one priority. If the current is running too fast and the surf is too large, a beach clean up plan should be adapted.

\* Equipment must be stored on site during all construction activities

<b>EXHIBIT NO. 5</b>
<b>APPLICATION NO.</b>
E-96-2-G

THE GUADALUPE SHEETPILE WALL PROJECT RECOMMENDED  
IMMEDIATE OIL SPILL RESPONSE PLAN

Diagram 1: Project Site



OCT. 2 '96 1:46PM

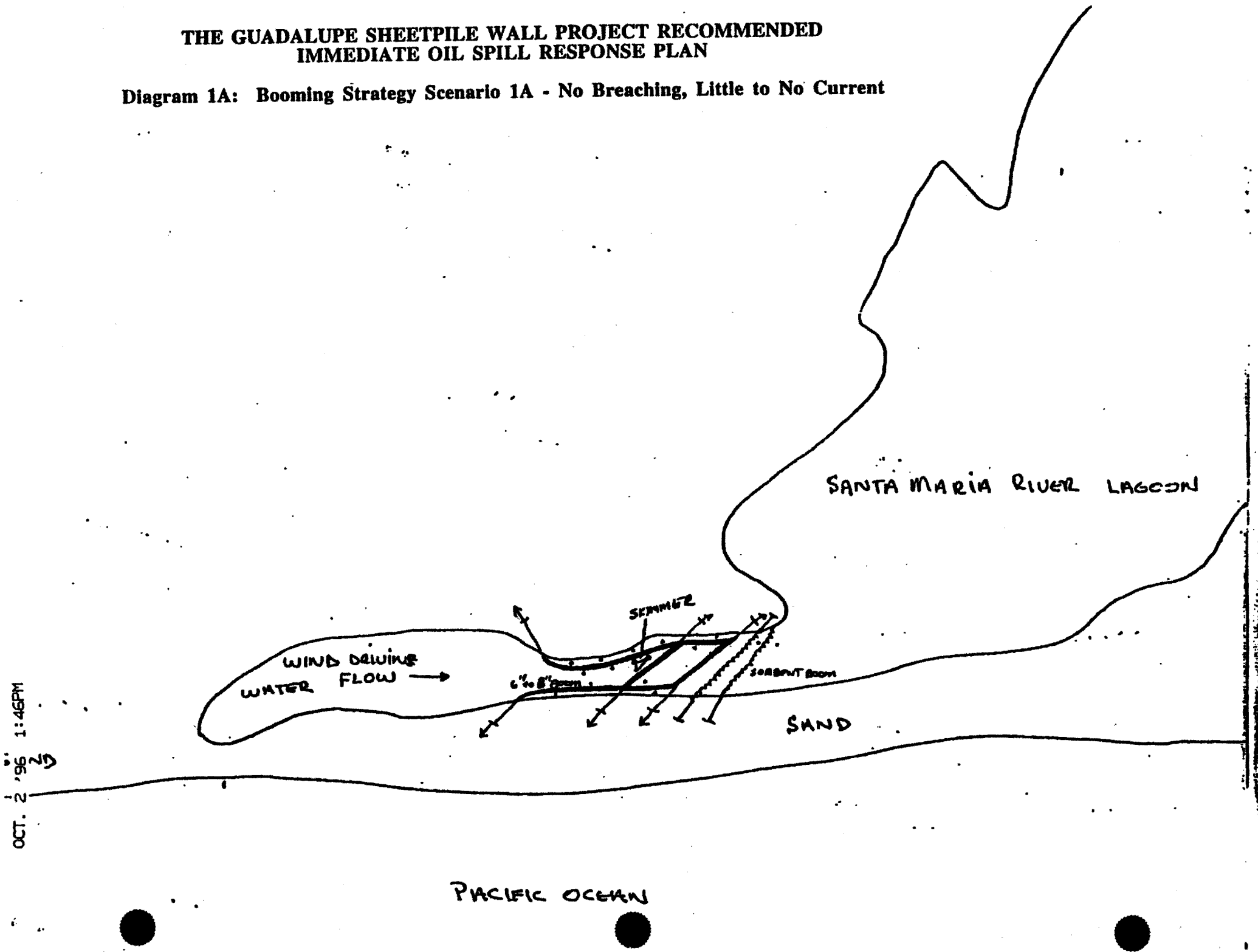
SAND

SAND

SURF ZONE  
PACIFIC OCEAN

**THE GUADALUPE SHEETPILE WALL PROJECT RECOMMENDED  
IMMEDIATE OIL SPILL RESPONSE PLAN**

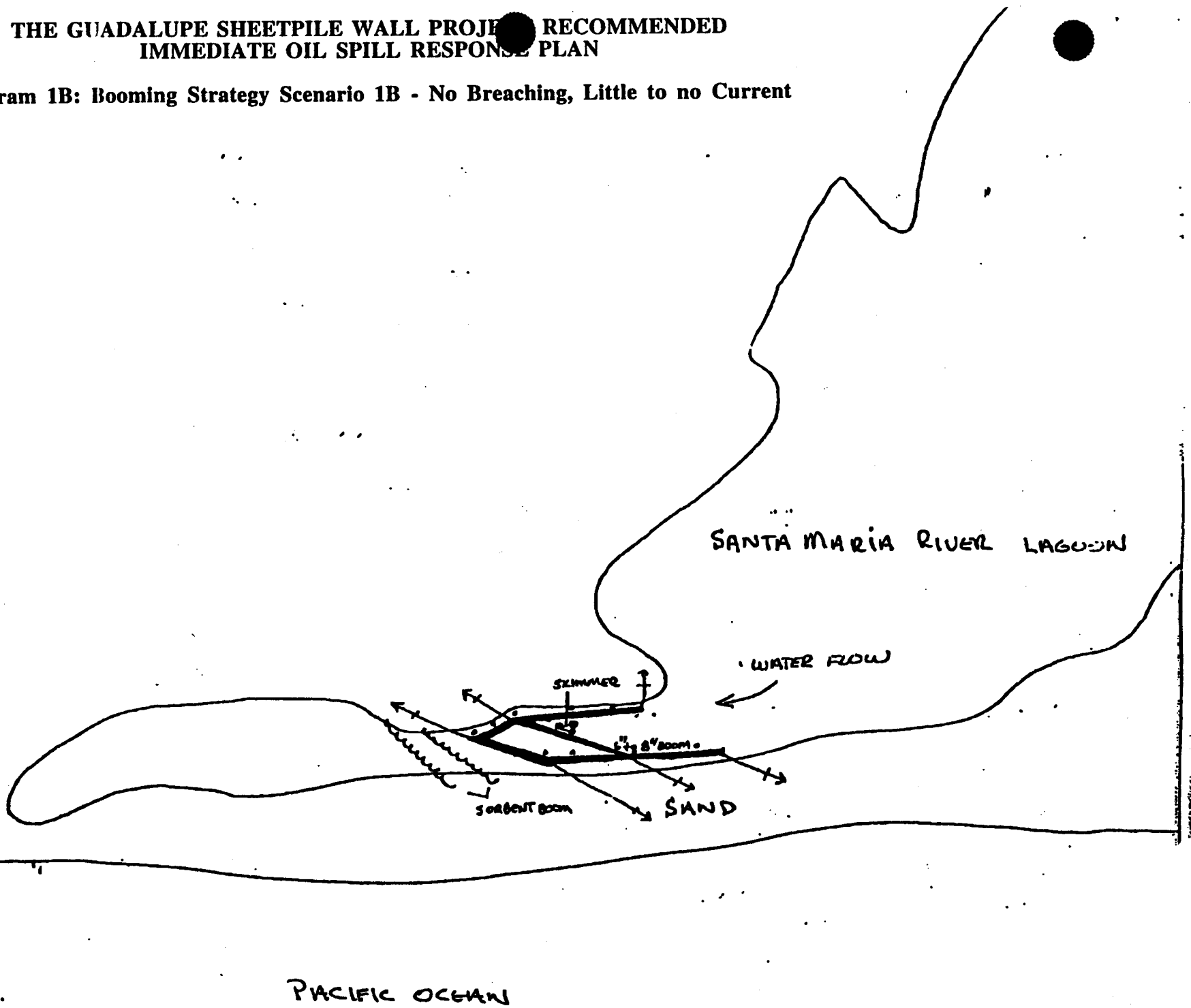
**Diagram 1A: Booming Strategy Scenario 1A - No Breaching, Little to No Current**



THE GUADALUPE SHEETPILE WALL PROJECT RECOMMENDED  
IMMEDIATE OIL SPILL RESPONSE PLAN

Diagram 1B: Booming Strategy Scenario 1B - No Breaching, Little to no Current

OCT. 2 '96 1:46PM  
3



**THE GUADALUPE SHEETPILE WALL PROJECT RECOMMENDED  
IMMEDIATE OIL SPILL RESPONSE PLAN**

**Diagram 2: Booming Strategy Scenario 2- Breached Sandbar, Fast Current**

