



DEPARTMENT OF THE NAVY

NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:

5090
Ser N45V/ 0067

MAR 06 2008

Mr. Michael Lyons
Contaminated Sediments Task Force Coordinator
California Regional Water Quality
Control Board - Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Dear Mr. Lyons:

The Oxnard Harbor District (OHD) and Naval Base Ventura County (NBVC) are acting as co-applicants for this permit with NBVC acting as the lead agency. The intention is to dredge contaminated sediment to achieve authorized navigation depths in different parts of Port Hueneme Harbor including areas managed by NBVC, OHD, and the U.S. Army Corps of Engineers (USACE). For several years, these parties have been unable to dredge Port Hueneme Harbor and maintain safe navigability for commercial and military vessels due to the presence of contaminated sediments. There is a requirement for approximately 250,000 cubic meters of contaminated sediments to be dredged from the harbor by NBVC, OHD, and USACE as part of their routine maintenance programs.

The proposed project includes the construction of a confined aquatic disposal cell (CAD cell). The CAD cell would be excavated in the USACE maintained Turning Basin, with sufficient size and depth to accommodate the necessary contaminated sediment volume from all three parties, as well as a clean cap. Clean sand excavated from the cell would be pumped immediately south of Port Hueneme Harbor's Entrance Channel onto Hueneme Beach for beach replenishment. Subsequently, contaminated sediments from the OHD, NBVC, and USACE sites would be dredged and placed within the CAD cell. These sediments would then be covered with clean sediments dredged from the remainder of the USACE Federal Channel as part of USACE's ongoing Operations and Maintenance program.

The application required for the contaminated sediments task force master dredging permit for this project, the Environmental Assessment, the application required for Section 404 U.S. Army Corps of Engineers permit, and the \$10,000 processing fee check are enclosed.

RECEIVED
2008 APR 11 AM 11:03
OFFICE OF THE ASSISTANT SECRETARY FOR ENVIRONMENTAL AFFAIRS
NAVAL BASE VENTURA COUNTY
POINT MUGU, CA 93042-5033

5090

Ser N45V/ 0067

MAR 06 2008

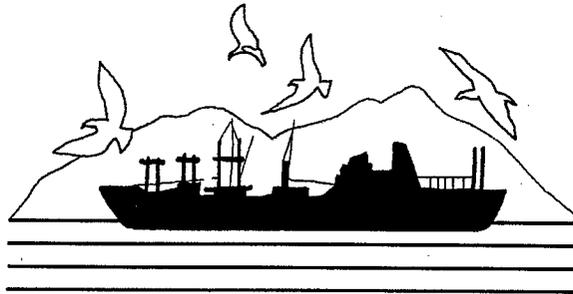
Please send a copy of the certification directly to the U.S. Army Corps of Engineers, Ventura Field Office and fax a copy to Ms. Emilie N. Lang, Wetland Ecologist, at 805-989-1011. If you have any questions, please contact Ms. Lang at (805) 989-4740.

Sincerely,



C. B. CONNERS
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. Application Master Dredging Permit
2. Environmental Assessment
3. U.S. Army Corps of Engineers Application
4. \$10,000 check



Los Angeles Region
**CONTAMINATED
SEDIMENTS
TASK FORCE**

RECEIVED
2000 APR 11 AM 11 03
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

MASTER DREDGING PERMIT APPLICATION

Form Number REG4-DREDGE-001

PLEASE INDICATE WHICH OF THE FOLLOWING THIS FORM APPLIES TO:

- Section 404 and/or Section 10 dredging permits by the Los Angeles District of the Corps of Engineers
- California Regional Water Quality Control Board, Los Angeles Region, Report of Waste Discharge, pursuant to Sections 13260, 13374, and 13377 of Article 4, Chapter 4, of the Porter-Cologne Water Quality Control Act*
- Port of Long Beach Harbor Development Permit
- Port of Los Angeles Coastal Development Permit
- California Coastal Commission Coastal Development Permit
- California Coastal Commission Federal Consistency Certification/Determination

(New 04/02)

*This application shall serve as, and be functionally equivalent to, a Report of Waste Discharge, pursuant to Sections 13260, 13374, and 13377 of Article 4, Chapter 4 of the Porter-Cologne Water Quality Control Act.



LOS ANGELES REGION CONTAMINATED SEDIMENTS TASK FORCE

(Please complete all sections and follow instructions provided with application.)

SECTION 1 - GENERAL INFORMATION

1. APPLICANT INFORMATION (see instructions)

Applicant Name CAPT Charles B. Connors, Commanding Officer, NBVC		Contact Name (if different) Emilie N. Lang	
Mailing Address 311 Main Road, Suite 1		City Point Mugu	
State CA	Zip 93042-5033	Business Phone 805-989-7903	Residence Phone NA

2. LEGAL INTEREST (see instructions)

Individual
 Legal Entity
 Government
 Non-profit

Other (Please provide description): _____

Note: You will need to provide a copy of legal interest with this application (e.g., title, lease, deed, and easement).

3. REPRESENTATIVE INFORMATION (see instructions)

Applicant's authorized agent, point of contact, and/or representative		<input checked="" type="checkbox"/> None	
Name/Title Emilie N. Lang, Wetland Ecologist		Organization Naval Base Ventura County	
Mailing Address 311 Main Road, Suite 1		City Point Mugu	
State CA	Zip 93042-5033	Business Phone 805-989-4740	Residence Phone NA

Who should receive correspondence relevant to this application? Applicant Representative Both

I hereby authorize the above named to act as my representative and bind me in all matters concerning this application.



 Signature of Applicant

 Date

3/6/08

THIS BOX IS FOR OFFICIAL USE ONLY:		Data Base Entry <input type="checkbox"/> Yes <input type="checkbox"/> No
Date received: _____	ACOE No. _____	
Date completed: _____	CCC No. _____	
SAP Approved: _____	RWQCB No. _____	
Data Submitted: _____	POLA CDP No. _____	
Date Approved: _____	POLB HDP No. _____	

SECTION II - PROJECT INFORMATION

4. GENERAL PROJECT INFORMATION (see instructions)

Project Name or Title PORT HUENEME CONTAMINATED SEDIMENT DREDGING AND CONFINED AQUATIC DISPOSAL SITE CONSTRUCTION		
Type of Dredging Project: <input checked="" type="checkbox"/> Maintenance <input type="checkbox"/> New Work		Timing of Project: <input checked="" type="checkbox"/> Single Episode <input type="checkbox"/> Multi-Episode
Project description (attach additional sheets if necessary): A CAD cell would be excavated in the USACE maintained Turning Basin, with sufficient size and depth to hold contaminated sediment, excavated from Port Hueneme, along with a clean cap. This process requires excavating approximately 437,000 m3 of clean sand to create the cell. This clean sand would be pumped immediately south of the Harbor's Entrance Channel onto Hueneme Beach, which has suffered severe erosion and is in need of nourishment. Subsequently, contaminated sediments from the OHD, U.S. Navy, and USACE sites, totaling 250,000 m3 would be dredged using mechanical equipment and placed within the cell by using a bottom-dump barge. These sediments would then be covered with approximately 143,000 m3 of clean sediments dredged from the remainder of the USACE Federal Channel as part of USACE's ongoing Operations and Maintenance (O&M) program.		
Project need and/or purpose: The purpose of the project is to restore the bathymetry of the Harbor to the original design depths, isolate approximately 250,000 m3 of contaminated sediment from the marine environment, and nourish a highly eroded beach immediately adjacent to the Harbor (Hueneme Beach). Some parts of the Harbor have not been dredged in over 40 years and are thus in severe need of dredging.		
Month and year work is proposed to begin October 2008	Estimated completion date September 2009	Estimated total project cost 12,000,000

X 1.308

5. DREDGING INFORMATION (see instructions)

Dredge Site Several Locations within Hueneme Harbor	County Ventura	Nearest City Oxnard
Latitude(s) 34. 08'55.27"	Longitude(s) 119 12'26.46"	Waterway Port Hueneme
Type and composition of dredged material (Please give percentages if available) <input checked="" type="checkbox"/> Sand _____ <input checked="" type="checkbox"/> Silt/Clay _____		
Is the material appropriate for beach replenishment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Proposed type of equipment/construction methods to be used: Mechanical Dredge and a Bottom-dump barge		
Will a temporary rehandling area or storage site be used for the dredged material? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, for what length of time? _____ Site address? _____ Type of containment? _____ Approximate size of area? _____ acres or ft ²		
Will the project result in the construction of temporary or permanent structures? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, please indicate: <input type="checkbox"/> Temporary <input checked="" type="checkbox"/> Permanent Please provide a description: The project will result in the construction of a CAD site where contaminated sediments will be disposed of.		
Will the proposed dredging affect existing public access or public recreational facilities? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe location and nature of impact: Please describe how the impacts would be mitigated:		
Will the proposed dredging affect a historic/cultural resource? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe location and nature of impact: Please describe how the impacts would be mitigated:		

BOX 5 (CONTINUED)

Depth of dredging based on Mean Lower Low Water (MLLW) datum
Existing depth: See attached figures; this number varies by area Over/depth tolerance: _____
Proposed design depth: _____ Proposed total depth: _____

Volume of material to be dredged: 898,500 cy, area of dredging: 70 acres

Type(s) of substrate being dredged:
 Sub-tidal Bottom Mudflat Wetlands Estuary Other: _____

Please list agency and identification numbers of any previous permits for this activity:

Agency	Permit/Approval	Permit No.	Issue Date

If applicable, please give the Assessor's Parcel Number: _____

6. DISPOSAL SITE INFORMATION

AQUATIC DISPOSAL (see instructions)

Does the project involve aquatic disposal? Yes No

Site: (please check all that apply) LA-2 LA-3 CAD In-Harbor RCDS Other: _____

Total volume of dredged material designated for aquatic disposal: 327,000 cy

Will the proposed disposal affect a historic/cultural resource? Yes No

If Yes, please describe location and nature of impact:

SITE INFORMATION (Please attach the following information for additional sites):

LA-2 LA-3 CAD In-Harbor RCDS Other: Beach Nourishment at Hueneme Beach

Volume of dredged material designated for this aquatic disposal site: 571,600 cy

Is the site an existing site that regularly receives dredged material? Yes No

Year site was last used for dredged material disposal: 2005

Proposed type of equipment/construction methods to be used:
Bottom Dump Barge

PROPOSED UPLAND, WETLAND, REUSE, OR FILL DISPOSAL (see instructions)

Does the project involve upland, wetland, reuse, or fill disposal? Yes No

If the project will involve upland, wetland, or fill disposal, but will not involve reuse, please explain why reuse has not been considered:

Part of the dredged material will be used for beach nourishment, as mentioned above.

Will the proposed disposal affect a historic/cultural resource? Yes No

If Yes, please describe location and nature of impact:

Site(s): (please check all that apply)

Upland Federal Wetland State Wetland Reuse Fill

Total volume of dredged material designated for upland, wetland, reuse, and fill disposal: _____ cy

SITE INFORMATION (Please attach the following information for additional sites):

(Check only one) Upland Federal Wetland State Wetland Reuse Fill

Site Name:
Hueneme Beach

BOX 6 (CONTINUED)

Site Description (see instructions): Hueneme Beach			
Site Address NA	City	State	Zip
Latitude(s) 34 08'40.10"	Longitude(s) 119 12'35.54"	Zoning	
Owner's Name Public Property		Phone Number	
Address	City	State	Zip
Does this site include jurisdictional wetlands? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, give name and permit number of approved wetlands project where material will be placed:			
Is the site an existing site that regularly receives dredged material? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year site was last used for dredged material disposal: <u>2005</u> Volume of dredged material designated for this disposal site: <u>NA</u> cy Proposed type of equipment to be used: Bottom Dump Barge			
Will disposal result in the construction of temporary or permanent structures? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe:			
Will the proposed disposal affect existing public access or public recreational facilities? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe how the impacts would be mitigated:			
Will the proposed disposal involve the transportation of dredged material by trucks? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe the number of truck trips and the route to be used:			
(Attach the above information for additional sites)			

7. SENSITIVE AREAS (see instructions)

Does the project have the potential to affect a sensitive area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Type of Habitat:	<input type="checkbox"/> Inter-Tidal	<input type="checkbox"/> Sub-Tidal	<input type="checkbox"/> Coastal Wetlands
<input type="checkbox"/> Sandy Beach	<input type="checkbox"/> Eelgrass	<input type="checkbox"/> Kelp Forest	<input type="checkbox"/> Riparian
Habitat Name:			
Habitat Size: _____ acres or ft ²		Size of area impacted: _____ acres or ft ²	
Estimated Dates of Impact: From _____ To _____			
Have you contacted the following agencies? (see instructions):			
1. U.S. Environmental Protection Agency	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
2. U.S. Fish and Wildlife	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	
3. U.S. Army Corps of Engineers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	
4. National Marine Fisheries Service	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	
5. U.S. Bureau of Land Management	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
6. Nat'l Oceanic & Atmospheric Association	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
7. CA Environmental Protection Agency	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	
8. CA Department of Fish & Game	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	
9. CA State Lands Commission	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
10. S. Coast Air Quality Mgmt. District	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
11. California Coastal Commission	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	
12. Regional Water Quality Control Board	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	

(BOX 7 CONTINUED)

If Yes to any of the above, please give the following information for each agency: If more than can be entered here, please attach a supplemental list.	
Name of Agency: US Army Corps of Engineers	
Name of Contact: Antal Szijj	
Permit required?: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, please give number: 2007-190-AJS
Special Condition(s) required?: <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, please describe: Not determined whether special conditions will be required but BMPs will be employed.
Name of Agency: Regional Water Quality Control Board	
Name of Contact: Michael Lyons	
Permit required?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, please give number: TBD
Special Condition(s) required?: <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, please describe: To be determined.
Name of Agency: California Department of Toxics Substance Control	
Name of Contact: Peter Chen	
Permit required?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, please give number:
Special Condition(s) required?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, please describe:
Name of Agency: California Coastal Commission	
Name of Contact: Mark Delaplaine	
Permit required?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, please give number:
Special Condition(s) required?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, please describe:

8. THREATENED OR ENDANGERED SPECIES (see instructions)

Does the project have the potential to affect any federal or state threatened or endangered species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, please indicate: <input type="checkbox"/> Federal <input type="checkbox"/> State	
<i>Note: If more than one, please attach a supplemental list.</i>	
Name of species:	
Location of species in relation to project:	
Estimated Dates of Impact: From _____ To _____	
Do these dates coincide with the breeding season?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Has a Section 7 consultation been initiated?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Have you prepared a mitigation plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, please attach; if No, please give the expected submission date: _____	
Does this project have the potential to affect any marine fisheries or marine mammals? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, have you consulted National Marine Fisheries Service?: <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, please give the following information:	
Name of Contact:	
Permit required?: <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, please give number:
Special Condition(s) required?: <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, please describe:

(BOX 8 CONTINUED)

Have you consulted CA Department of Fish & Game?: Yes No
 If Yes, please give the following information:
 Name of Contact: _____

Permit required?: Yes No If Yes, please give number: _____

Special Condition(s) required?: Yes No
 If Yes, please describe: _____

9. ESSENTIAL FISH HABITAT (see instructions)

Does the project have the potential to affect any essential fish habitat? Yes No
 Fishery Type: Coastal Pelagic Species Salmon Pacific Coast Groundfish
Note: If more than one, please attach a supplemental list.
 Affected Species : Please see attached EFH Assessment.

Has an analysis of the effect of the project on managed species been conducted ? Yes No
 If Yes, please attach; if No, please give the expected submission date: _____

Have you contacted National Marine Fisheries Service? Yes No
 If Yes, please give the following information:
 Name of Contact: Bryant Chesney

Permit required?: Yes No If Yes, please give number: _____

Special Condition(s) required?: Yes No
 If Yes, please describe: To be determined

SECTION III - OTHER REQUIRED INFORMATION

10. ENVIRONMENTAL APPROVALS (see instructions)

Note: Please provide a copy of the project's environmental documentation with your application.

CEQA Lead Agency: Oxnard harbor District

Type of Environmental Documentation: CE ND EIR
 Date of Approval: _____ or Approximate date of completion: April 24, 2008
 NEPA Lead Agency: US Navy

Type of Environmental Documentation: CE EA EIS
 Date of Approval: _____ or Approximate date of completion: June 4, 2008

11. OTHER APPROVALS (see instructions)

CA DEPARTMENT OF FISH & GAME - 1601 & 1603 Approval None Required
 Number _____ Date of Application _____ Date of Issuance _____

LOCAL GOVERNMENT APPROVALS

Approving Agency: _____ Approval Type: _____

Approval Date: _____ Local Contact & Phone: _____

Approving Agency: _____ Approval Type: _____

Approval Date: _____ Local Contact & Phone: _____

Approving Agency: _____ Approval Type: _____

Approval Date: _____ Local Contact & Phone: _____

12. ADJOINING PROPERTY OWNERS (see instructions)

Please provide names and addresses of property owners, lessees, etc., whose property adjoins either the project or the disposal site (disposal site information is not required for the designated aquatic sites). If more than can be entered here, please attach a supplemental list.

Name See attached application for department of the army permit			
Address	City	State	Zip
Property adjoins: <input type="checkbox"/> Dredging Site <input type="checkbox"/> Disposal Site Party given is: <input type="checkbox"/> Owner <input type="checkbox"/> Lessee <input type="checkbox"/> Other (explain):			
Name			
Address	City	State	Zip
Property adjoins: <input type="checkbox"/> Dredging Site <input type="checkbox"/> Disposal Site Party given is: <input type="checkbox"/> Owner <input type="checkbox"/> Lessee <input type="checkbox"/> Other (explain):			
Name			
Address	City	State	Zip
Property adjoins: <input type="checkbox"/> Dredging Site <input type="checkbox"/> Disposal Site Party given is: <input type="checkbox"/> Owner <input type="checkbox"/> Lessee <input type="checkbox"/> Other (explain):			
Name			
Address	City	State	Zip
Property adjoins: <input type="checkbox"/> Dredging Site <input type="checkbox"/> Disposal Site Party given is: <input type="checkbox"/> Owner <input type="checkbox"/> Lessee <input type="checkbox"/> Other (explain):			

13. CHECKLIST OF ADDITIONAL INFORMATION TO BE SUBMITTED (see instructions)

This box identifies other information that is required before your dredging application can be accepted as complete and processing of the application initiated. Please indicate whether the material is attached or in-progress. If the material is in-progress, please give the expected submission date.

	Attached	OR	In-Progress	Expected Submittal Date
Sampling & Analysis Plan (SAP):	<input checked="" type="checkbox"/>		<input type="checkbox"/>	_____
Testing Data:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	_____
Environmental Documentation:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	_____
Dredging & Disposal Plan:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	_____
Proof of Legal Interest:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	_____
Federal Consistency Determination	<input type="checkbox"/>		<input checked="" type="checkbox"/>	June 2008
_____ or Certification				
Fees:	<input type="checkbox"/> USACE		<input type="checkbox"/> CCC	<input checked="" type="checkbox"/> RWQCB

14. COASTAL DEVELOPMENT PERMIT

Use of this application for a California Coastal Commission Coastal Development Permit (CDP) requires certain additional information. If you plan to use this form to apply for a CDP please provide the following:

- Stamped envelopes addressed to each property owner and occupant of property situated within 100' of property lines of the project site.
- Stamped envelopes addressed to all other parties known to the applicant to be interested in the project.
- Verification of all other permits, permissions, or approvals granted by public agencies such as CA Dept. of Fish and Game, CA State Lands Commission, US Army Corps of Engineers, US Coast Guard, etc.

(BOX 14 CONTINUED)

- Declaration of campaign contributions (see attached form Appendix A).
- Declaration of posting (see attached form Appendix B).

If you have any questions concerning these requirements, please contact the California Coastal Commission South Coast District office in Long Beach.

NOTICE TO APPLICANTS

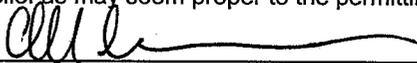
The California Coastal Commission may adopt or amend regulations affecting the issuance of coastal development permits. If you would like notice of such proposals during the pendency of this application, if such proposals are reasonably related to this application, please indicate that desire: Yes No

COMMUNICATION WITH COMMISSIONERS

Decisions of the California Coastal Commission must be made on the basis of information available to all commissioners and the public. Therefore, permit applicants and interested parties and their representatives are advised not to discuss with commissioners any matters relating to a permit outside the public hearing. Such contacts may jeopardize the fairness of the hearing and result in invalidation of the Commission's decision by court. Any written material sent to a commissioner should also be sent to the commission office for inclusion in the public record and distribution to other Commissioners.

15. CERTIFICATION OF ACCURACY OF INFORMATION

I hereby certify under penalty of perjury that to the best of my knowledge, the information in this application and all attached exhibits is full, complete, and correct, and I understand that any misstatement or omission of the requested information or of any information subsequently requested shall be grounds for denying the permit, for suspending or revoking a permit issued on the basis of these or subsequent representation, or for the seeking of such other and further relief as may seem proper to the permitting agencies.



Signature of Applicant or Applicant's Representative

3/6/08

Date

APPENDIX A – DECLARATION OF CAMPAIGN CONTRIBUTIONS

Please read and fill out the following if you are using this form to apply for a Coastal Development Permit (CDP) from the California Coastal Commission.

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of \$250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify himself or herself from voting on the project.

Each applicant must declare below whether any such contributions have been made to any of the listed Commissioners or Alternates (see attached list – Roster of Commissioners).

Check One

- The applicants, their agents, employees, family and/or any person with a financial interest in the project **have not contributed** over \$250 to any Commissioner(s) or Alternate(s) within the past year.
- The applicants, their agents, employees, family and/or any person with a financial interest in the project **have contributed** over \$250 to any Commissioner(s) or Alternate(s) within the past year.

Commissioner or Alternate _____

Commissioner or Alternate _____

Commissioner or Alternate _____

Signature of Applicant or Authorized Agent

Date

Please print your name _____

APPENDIX B - DECLARATION OF POSTING

Please read and fill out the following if you are using this form to apply for a Coastal Development Permit (CDP) from the California Coastal Commission.

TO: Applicant

Pursuant to the requirements of California Administrative Code 13054(b), this certifies that I/we have posted the "Public Notice" of application to obtain Coastal Commission Permit No. _____

for:

located:

The public notice was posted at a conspicuous place, easily read by the public and as close as possible to the site of the proposed development.

(Signature)

(Date)

NOTE: YOUR APPLICATION CANNOT BE PROCESSED UNTIL THIS "DECLARATION OF POSTING" IS RETURNED TO THE CALIFORNIA COASTAL COMMISSION OFFICE. If the site is not posted at least eight days prior to the meeting at which the application is scheduled for hearing, or the Declaration of Posting is not received in our office prior to the hearing, your application will be removed from its scheduled agenda and will not be rescheduled for Commission action until the Declaration of Posting has been received by this office.

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

**PORT HUENEME CONTAMINATED SEDIMENT DREDGING AND
CONFINED AQUATIC DISPOSAL SITE CONSTRUCTION**

Prepared for

Oxnard Harbor District
333 Ponomo Street
Port Hueneme, California 93041

Naval Base Ventura County
Laguna Road, Building 632
Point Mugu, California 93042

Prepared by

Anchor Environmental CA, L.P.
28202 Cabot Road, Suite 425
Laguna Niguel, California 92677

2008 APR 11 11 AM 11 03 RECEIVED
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
SANTA ANA COUNTY REGIONAL WATER
QUALITY CONTROL BOARD

March 2008



Table of Contents

1	INTRODUCTION – PURPOSE AND NATURE OF THE ACTIVITY	5
1.2	Introduction	5
1.3	Clean Water Act Project Purpose.....	6
1.4	Need for the Proposed Project Action.....	6
1.4.1	OHD Project Needs	7
1.4.2	U.S. Navy Project Needs	7
1.4.3	USACE Project Needs	8
2	DETAILED DESCRIPTION OF THE ACTIVITY AND ALTERNATIVES EVALUATED.....	9
2.1	Relationship Between OHD and U.S. Navy.....	9
2.2	Project Timing.....	10
2.2.1	Hydraulic Dredging	11
2.2.2	Mechanical Dredging	11
2.2.3	Barge Transportation of Dredged Material.....	13
2.3	Alternatives to the Proposed Project.....	14
2.3.1	Upland Landfill Disposal.....	16
2.3.2	Material Reuse.....	18
2.3.3	Open-ocean Disposal.....	20
2.4	Alternatives Analysis	20
2.4.1	No Action Alternative.....	20
3	AVOIDANCE, MINIMIZATION, AND ENVIRONMENTAL COMMITMENTS	22
3.1	General.....	22
3.2	Water Quality	22
3.3	Fish and Wildlife Resources	23
3.4	Air Quality and Noise	24
3.5	Harbor and Land Use.....	26
3.6	Cultural Resources.....	27
4	REFERENCES	28

List of Tables

Table 2-1	Project Alternatives Carried Forward and Eliminated from Further Study	15
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List of Figures

Figure 1-1	Site Location Map	Figure 1-2	Project Area Site Plan.....	30
Figure 1-2	Project Area Site Plan			31
Figure 2-1	Typical Cross-section through CAD Facility			32
Figure 2-2	Conceptual Project Schedule			33



Table of Contents

List of Appendices

Appendix A Draft Operations Mitigation and Monitoring Plan

Appendix B Essential Fish Habitat and Endangered Species Act Determinations



Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
BMPs	best management practices
CAD	confined aquatic disposal
CARB	California Air Resources Board
CCA	California Coastal Act
CCR	California Code of Requirements
CDFG	California Department of Fish and Game
CFR	Code of Federal Regulations
City	City of Port Hueneme
cm	centimeters
CWA	Clean Water Act
EAP	Emergency Action Plan
EFH	Essential Fish Habitat
ESA	Endangered Species Act
Harbor	Port Hueneme
hotspots	areas of contamination
LARWQCB	Los Angeles Regional Water Quality Control Board
meters ³	cubic meters
mg/L	milligrams per liter
NBVC	Naval Base Ventura County
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
O&M	Operations and Management
OHD	Oxnard Harbor District
OMMP	Operations Mitigation and Monitoring Plan
PCB	polychlorinated bipheyl
PM	particulate mater
PTO	Permit to Operate
ROC	Reactive organic compounds
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
TBT	tributyin
USACE	U.S. Army Corps of Engineers



Acronyms and Abbreviations

USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
VCAPCD	Ventura County Air Pollution Control Board



1 INTRODUCTION – PURPOSE AND NATURE OF THE ACTIVITY

1.2 Introduction

The Oxnard Harbor District (OHD), U.S. Navy, and U.S. Army Corps of Engineers (USACE) are all responsible for maintaining authorized navigation depths in different parts of Port Hueneme (Harbor), located in Ventura County, California. For several years, these parties have been unable to dredge the Harbor and maintain safe navigability for commercial and military vessels due to the presence of contaminated sediments in the USACE Federal Channel and at wharf faces managed by the U.S Navy or OHD. Altogether approximately 250,000 cubic meters (meters³) of contaminated sediments need to be dredged from the Harbor by the OHD, U.S. Navy, and USACE as part of their routine maintenance programs. There are currently no cost-effective alternatives for contaminated sediment disposal in Southern California. The costs of dredging, offloading, dewatering, rehandling, transport, and disposal of the dredged material at an upland landfill (the only available option) are excessive to the point where the costs to maintain the shipping channel nearly exceed the economic benefit to the region. As such, sufficient federal funding to complete the U.S. Navy and USACE projects would likely never occur, and the costs for the OHD to complete its project individually would result in a significant economic burden to current and future operations. Furthermore, should sufficient funding be located, the volume of sediment would place a significant burden on local transportation networks as well as result in potentially significant air quality impacts, due to the duration and volume of a trucking operation needed to move this amount of material.

The proposed project entails creating a confined aquatic disposal (CAD) site within the Harbor (Figure 1-1) as a regional solution for contaminated sediment management. CAD is a management approach where contaminated sediments are dredged and placed into a submerged depression, or pit, and covered with clean sediments to form a cap to prevent upward migration of contaminants into the water column or surficial sediment layer. The OHD, U.S. Navy, and USACE are all responsible for maintaining authorized depths in different parts of the Harbor (Figure 1-2). Some of these maintenance materials are known to be contaminated.

Initially the goal for the project was to dispose of contaminated sediment from the Harbor at a nearshore fill site planned by the Port of Long Beach (Pier J South); however, that project

was indefinitely delayed due to regulatory concerns unrelated to the Port Hueneme project and leaves no other feasible options for the material except to truck it to a Class III landfill. Unfortunately after combining the costs of dredging, offloading, dewatering, and rehandling the dredged material for disposal at an upland landfill, the resulting costs create a scenario where none of the projects could be implemented in a cost-effective manner and would likely continue to be unfunded. To solve this problem, the OHD began working with the USACE to develop an innovative, regional solution for contaminated sediment management that could be implemented within the financial constraints of the three participants. The concept of creating a multi-user CAD cell was the result of this work, and subsequently the U.S. Navy joined the project to fully implement the multi-user solution within the Harbor.

1.3 Clean Water Act Project Purpose

The overall project purpose serves as the basis for the Clean Water Act (CWA) Section 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, which allows a reasonable range of alternatives to be analyzed. The overall project purpose is to maintain navigability within the Harbor, isolate contaminated sediment from the marine environment, and maintain sandy beaches for recreational use.

1.4 Need for the Proposed Project Action

The needs of the OHD, U.S. Navy, and USACE are generally similar. Maintaining active commercial operations at the Harbor requires the full use of the OHD's berth areas along their two wharves, which necessitates maintenance dredging to remove sediments that accumulate over time and impede navigation. The OHD's Berths 1 and 2 were last dredged more than 10 years ago and have since accumulated between 1 and 4 meters of sediment along the wharf faces. The U.S. Navy is experiencing similar issues in terms of sedimentation along its wharf faces, which is impeding navigation. Significant accumulations of contaminated sediments have begun to affect military vessel operation and navigation. The contaminated sediments along the U.S. Navy's berths extend from the wharf faces outward to the edge of the USACE Federal Channel. The USACE is responsible for maintaining safe navigable depths within the USACE Federal Channel in the Harbor, which includes the Approach Channel, Entrance Channel, and Turning Basin. Previous

sediment investigations identified three areas of contaminated sediment (hotspots) located within the USACE Federal Channel. The presence of these hotspots has prevented maintenance dredging from occurring within the USACE's areas of responsibility, because of the exorbitant cost associated with disposal of the contaminated material. The remainder of the area requiring maintenance dredging is not contaminated and was determined by the USACE to be suitable for aquatic disposal (nourishment) on the adjacent beaches. The proposed project meets a public need for safe commercial navigation and unobstructed operations of vital U.S. Navy operations as well as enhancing recreation through nourishment of Hueneme Beach.

1.4.1 OHD Project Needs

The OHD was created in 1937 under the authority of an act passed by California's State Legislature that provides for the formation of harbor districts. The OHD is made up of two wharves, OHD Wharf 1 (South Terminal) and OHD Wharf 2 (North Terminal), as shown on Figure 1-2. The USACE Federal Channel, that splits OHD Wharf 1 and OHD Wharf 2, is referred to as Slip A. Maintaining active operations requires ensuring the full use of the berth areas along the two wharves, which in turn requires maintenance dredging to remove sediments that accumulates over time. The OHD's Berth 1 and 2 were last dredged more than 10 years ago and have since accumulated between 1 and 4 meters of sediment along the wharf faces. The OHD's maintenance material was recently chemically characterized (Anchor 2006) and found to be unsuitable for unconfined open-ocean or beach disposal due to elevated pesticides, tributyltin (TBT), and polychlorinated biphenyl (PCB) concentrations.

1.4.2 U.S. Navy Project Needs

First built as a temporary depot in the early days of World War II, the U.S. Navy base at Port Hueneme was officially established and began operating as the Advance Base Depot on May 18, 1942, and was later renamed the Naval Construction Battalion Center in 1945. October 11, 2000, marked the establishment of Naval Base Ventura County (NBVC).

The U.S. Navy is experiencing issues similar to those of the OHD, in terms of sedimentation along its wharf faces. Significant accumulations of contaminated

sediments has started to affect vessel operations. The contaminated sediments along the U.S. Navy's berths extend from the wharf faces outward to the edge of the USACE Federal Channel. Studies are in progress by the U.S. Navy to finalize the vertical extent of contamination within these areas.

1.4.3 USACE Project Needs

The USACE is responsible for maintaining safe navigable depths within the USACE Federal Channel at the Harbor, which includes the Approach Channel, Entrance Channel, and Turning Basin (Figure 1-2). Previous sediment investigations identified three hotspots located within the USACE Federal Channel, which are also depicted on Figure 1-2. The rest of the area requiring maintenance dredging is not contaminated and was determined by USACE to be suitable for disposal (nourishment) on the adjacent beaches.

2 DETAILED DESCRIPTION OF THE ACTIVITY AND ALTERNATIVES EVALUATED

The proposed project entails combining the resources of the OHD, U.S. Navy, and USACE into one larger project, a multi-user CAD cell. The CAD cell would be excavated in the USACE maintained Turning Basin, which has sufficient size and depth to hold the contaminated sediment volume from all three parties. This requires excavating approximately 437,000 meters³ of clean sand to create the cell. This clean sand would be pumped immediately south of the Harbor's Entrance Channel onto Hueneme Beach, which has suffered severe erosion and is in need of nourishment. Subsequently, contaminated sediments from the OHD, U.S. Navy, and USACE sites, totaling 250,000 meters³, would be dredged using mechanical equipment and placed within the cell by using a bottom-dump barge. These sediments would then be covered with approximately 143,000 meters³ of clean sediments dredged from the remainder of the USACE Federal Channel as part of USACE's ongoing Operations and Management (O&M) program. Figure 2-1 depicts a conceptual diagram of a typical cross-section through a CAD cell.

2.1 Relationship Between OHD and U.S. Navy

The OHD and U.S. Navy are co-applicants for the proposed project. The project is being constructed on U.S. Navy property and involves U.S. Navy funding. As a result, the U.S. Navy is the lead federal agency for compliance with the California Coastal Act (CCA), the Magnusson-Stevens Act, and the Endangered Species Act (ESA). The OHD and U.S. Navy are acting as co-applicants for the CWA Section 401 Water Quality Certification.

Additionally, an Operations Mitigation and Monitoring Plan (OMMP) for the CAD site will be developed for implementation by the OHD. The OMMP will describe the management and monitoring objectives for the CAD, a communications plan covering the entire CAD construction and disposal process, construction monitoring and post-disposal monitoring plans, contingency plans, annual monitoring plans, and long-term management plans for the CAD once it has been capped. The OHD will be responsible for implementing the OMMP. A draft of the OMMP is included as Appendix A.

2.2 Project Timing

Overall construction is anticipated to begin in October of 2008 and be completed by September of 2009. Nourishment activities along Hueneme Beach will likely be subject to environmental work window restrictions from the resource agencies. Work may be conducted outside of these windows, but additional consultation and monitoring would likely be required. Dredging and disposal activities would likely occur on a 24 hours per day, 7 days per week basis to allow for efficient use of the dredging equipment and to complete the project as quickly as possible. Swift completion of this project is a high priority for the OHD, U.S. Navy, and USACE and helps to reduce disturbance to the natural resources, commercial and military navigation, and the public. The following sequence of activities is listed in order of operation:

- Mobilization of construction equipment
- Excavation of CAD cell, utilizing a hydraulic dredge, and pumping the clean sand onto Hueneme Beach
- Mechanically dredge contaminated sediments from OHD Wharves 1 and 2 and place dredged material within the CAD cell by bottom-dump barges
- Mechanically dredge contaminated sediments from the U.S. Navy wharves and place dredged material within the CAD cell by bottom-dump barges
- Mechanically dredge contaminated sediments from USACE hotspots 1, 2, and 3 and place dredged material within the CAD cell by bottom-dump barges
- Mechanically dredge "clean" O&M material from USACE Federal Channels and place dredged material within the CAD cell by bottom-dump barges; dredging of O&M material could be completed by hydraulic dredge and pumped into the CAD area using a submerged diffuser (or similar method), and this material would be used as a cap of the CAD cell
- Demobilization of construction equipment

A conceptual schedule of design, permitting, and construction activities is presented in Figure 2-2. This schedule was developed based on current design knowledge, professional judgment, and experience from similar projects and as such may be modified as part of subsequent design development.

2.2.1 Hydraulic Dredging

Hydraulic dredges remove and transport sediment in the form of a slurry through the inclusion or addition of high volumes of water at some point in the removal process. The total volume of material processed may be greatly increased, and the solids content of the slurry may be considerably less than that of the in situ sediment, although solids content varies between dredges. The excess water is usually discharged as effluent at the treatment or disposal site and often needs treatment prior to discharge.

The hydraulic pipeline cutterhead suction dredge is the most common hydraulic dredge used in the United States and is generally the most efficient and versatile. With this type of dredge, a rotating cutter at the end of a ladder excavates the bottom sediment and guides it into the suction. The excavated material is picked up and pumped by a centrifugal pump to a designated disposal area via a 15- to 112-centimeter (cm; 6- to 44-inch) pipeline as slurry with a typical solids content of 10 to 20 percent by weight. The typical cutterhead dredge is swung in an arc, from side to side, by alternately pulling on port and starboard swing wires connected to anchors through pulleys mounted on the ladder just behind the cutter. By pivoting on one of two spuds at the stern, the dredge "steps" or "sets" forward.

The cutterhead dredge is capable of excavating most types of sediment material. An advantage of the cutterhead is that it can quickly dredge (typically 11,000 meters³ per day) and continuously. It can also pump the disposal material directly to the disposal or treatment area, thereby reducing costs; however, the cutterhead dredge can cause an obstruction to navigation due to the pipeline. To avoid any potential navigation hazards, buoys and markers would be needed in the dredge and pipeline route. If a hydraulic dredge is used to dredge and transport the material to a treatment facility either on a barge or on the beach, the treatment of a large quantity of water may be required prior to returning the discharge water to the ocean.

2.2.2 Mechanical Dredging

Mechanical dredges excavate material by using some form of bucket to carry dredged material up through the water column and to a barge for off-site transport. Mechanical dredges are used for removing loose to hard, compacted materials; mechanical dredges

are also the most commonly used method for removing contaminated sediments for several reasons. First, contaminated sediments are generally located along the shoreline or in close proximity to in-water structures where use of a hydraulic dredge would be difficult and may interfere with harbor operations. Second, mechanical dredges can typically be operated more accurately when excavating to specific depths below the sediment surface, which is often required for contaminated sediment removal. Lastly, and perhaps most importantly, mechanical dredges produce much less excess water with the sediment that would also require disposal or management. Mechanical dredges will also be used to remove debris from the proposed dredging prism so that it can be removed from the Harbor and transported to an appropriate upland disposal site.

The most common type of mechanical dredge is the clamshell dredge. It consists of a clamshell bucket operated from a crane or derrick mounted on a barge. It is used extensively for removing material located around docks and piers or within other restricted areas. Based on past dredge activities, typical rates of dredging with the clamshell bucket are variable, depending on the size of the bucket and sediment composition, and can range from approximately 2,300 to 3,800 meters³ per day. Clamshell dredges are typically used in water not deeper than 30 meters (100 feet), at which point accuracy and efficiency diminishes. The main disadvantage with the use of a clamshell dredge is that it usually leaves an irregular, cratered bottom, and it typically results in a higher resuspension rate.

Sediment resuspension that occurs during the operation of a clamshell dredge is primarily due to four major sources:

- Bucket impacts the sediment bed, closes, and is pulled off the bottom
- Bucket is pulled up through the water column (or lowered down into the water column)
- Bucket breaks the water surface
- Bucket jaws allow turbid water to leak through the openings between the teeth during hoisting and swinging from water to the haul barge

Turbidity may also occur during transfer of the material to a barge. In addition to the inadvertent spillage of material during the barge loading operation, sediments in the barges are often intentionally overflowed to increase the barge's effective load.

Operational controls, or best management practices (BMPs), reduce potential impacts from turbidity during dredging. Operational controls are defined as modifications in the operation of the dredging equipment to minimize resuspension of materials (CSTF 2005).

Operational controls for mechanical dredges include:

- Increasing cycle time – Longer cycle time reduces the velocity of the ascending loaded bucket through the water column, which reduces potential to wash sediment from the bucket. However, limiting the velocity of the descending bucket reduces the volume of sediment that is picked up and requires more total bites to remove the project material. The majority of the sediment resuspension, for a clamshell dredge occurs when the bucket hits the bottom.
- Eliminating multiple bites – When the clamshell bucket hits the bottom, an impact wave of suspended sediment travels along the bottom away from the dredge bucket. When the clamshell bucket takes multiple bites, the bucket loses sediment as it is reopened for subsequent bites. Sediment is also released higher in the water column as the bucket is raised, opened, and lowered.
- Eliminating bottom stockpiling – Bottom stockpiling of the dredged sediment in silty sediment has a similar effect as multiple bite dredging; an increased volume of sediment is released into the water column from the operation.
- Preventing scow overflow – Instructing the contractor will ensure that the scow will not be allowed to overflow.

2.2.3 Barge Transportation of Dredged Material

Marine grade haul barges would be used to transport the material to the CAD site. Barges have a maximum capacity of up to approximately 1,900 meters³ per load. To transport 250,000 meters³ of dredged material by barge would require approximately 132 round trips, assuming the ability to transport at maximum capacity. Because the

disposal site is located immediately adjacent to the dredge sites, the travel distance for the barges is essentially zero. The actual size of the bottom-dump barges used for this project will not be known until a contractor is retained.

2.3 Alternatives to the Proposed Project

The full range of alternatives considered for the disposal of contaminated sediments dredged at the Harbor are:

- No action alternative
- Upland disposal alternative
 - Upland Class III landfill (alternative daily cover)
- Aquatic disposal alternatives
 - Submerged CAD
 - Open-ocean disposal
- Treatment alternatives
 - Immobilization
 - Chemical removal

Alternatives eliminated from further study for this project are described below in Table 2-1.

**Table 2-1
Project Alternatives Carried Forward and Eliminated from Further Study**

Alternative	Carried Forward	Not Carried Forward	Rationale for Not Carrying Alternative Forward
No action alternative	X		
Upland Class III landfill (upland disposal)		X	<ul style="list-style-type: none"> • Significant impacts to air quality and traffic due to long-term operations • Insufficient disposal capacity at nearby Ventura County Landfills
Submerged CAD (aquatic disposal)	X		
Open-ocean disposal		X	<ul style="list-style-type: none"> • Sediment is not chemically suitable for open-ocean disposal
Immobilization (treatment)		X	<ul style="list-style-type: none"> • Not clear whether this technology would be successful in treating dichloro-diphenyl-trichloroethane (DDT) • Low level of contamination does not justify the costs of treatment and disposal when the treated sediment cannot be beneficially reused
Chemical removal (treatment)		X	<ul style="list-style-type: none"> • Lack of contractor availability in the Los Angeles Region • Lack of familiarity of this technology by agencies • Site-specific effectiveness • High production costs • Low level of contamination does not justify the costs of treatment and disposal when the treated sediment cannot be beneficially reused • May need to use multiple approaches to treat both metals and organics

The proposed project originates from the need to identify a cost-effective solution for disposal of contaminated sediments from the Harbor. Typically, maintenance dredging in the area (primarily USACE O&M dredging of the nearby Channel Islands Harbor) has been accomplished by hydraulically dredging the accumulated sediment and beneficially reusing it on nearby beaches, which experience very high rates of erosion and thus are constantly in need of sand replenishment. This has proven to be a cost-effective solution for dredging and a beneficial reuse of dredged material that benefits not only the dredged harbor areas

but also the receiving beaches. However, due to the levels of contamination within upper layers of sediment planned for removal from the Harbor, nearshore or beach placement of this dredged material is not a viable option.

Because contaminated material must be dredged in order to accomplish project needs, alternative project designs focus on disposal options for both the contaminated and clean dredged material. In the absence of the contaminated material, disposal of the clean material could be easily and cost-effectively accomplished through beneficial reuse of the sediment for nourishment of local beaches. There are three potential disposal options for the contaminated material: upland landfill disposal, material reuse, and open-ocean disposal.

2.3.1 Upland Landfill Disposal

The two factors to consider in determining the suitability of a specific permitted landfill for disposal of dredged material are the concentration of contaminants in the material and the total quantity of material to be disposed. In addition, the dredged material disposed at a landfill typically needs to pass the "paint filter" test, which requires that the material must be dewatered after dredging to prevent drainage during transport and to minimize excess infiltration during disposal.

The concentration of contaminants in dredged material determines the type of landfill that can accept the material. In California, landfills are identified as Class I, II, or III:

- Class I landfills can accept materials that are classified as hazardous wastes. Material that exceeds the chemical criteria listed in Title 22 of the California Code of Requirements (CCR), Section 66261.24 is considered a hazardous waste and must be disposed of in a Class I landfill.
- Class II landfills are similar in design to Class I landfills, but these landfills will accept only designated waste that has been determined to be below hazardous waste criteria concentrations.
- Class III landfills can accept material with some degree of contamination (typically low concentrations of contaminants) depending on the individual landfill design and location. Each Class III site operator must maintain a certification with the California State Integrated Waste Management Board that

specifies that the facility's waste acceptance criteria and testing requirements are in accordance with applicable state and federal discharge regulations.

The dredged material from OHD Wharves 1 and 2 as well as the contaminated dredged material from the U.S. Navy and USACE hotspots meets the qualifications for disposal at a Class III Landfill; however, this alternative is very expensive for several reasons. First, the material must be dewatered prior to transport, which must occur either by actively using a mechanical dewatering device (e.g., belt presses, centrifugation, hydrocyclones, or via additives) or passively by constructing a large containment area to hold the material until the water evaporates or drains. Next, the material must be trucked or shipped via railcar to the landfill. Lastly, because the regional landfills are not in need of inert material for use as alternative daily cover, the material would be subjected to a tipping fee similar to any other waste product that the landfill receives. Preliminary estimates for dredging and landfill disposal of material from the Harbor would likely exceed \$60 to \$70 per meters³.

Disposal at an upland Class III landfill raises several issues regarding its potential viability for disposal of chemically unsuitable marine sediments. Of particular concern when considering disposal of marine sediments at landfills is the high water and salt content in the material. Requirements for dewatering and chloride reduction tend to limit the economy of using marine dredged contaminated sediment at landfills, especially when large quantities of dredged materials are involved. Landfills require sediment to pass the "paint filter" test to limit water content to 12 to 15 percent. The Los Angeles Regional Water Quality Control Board (LARWQCB) does not have stated limits for chlorides in sediment but does regulate salt concentration in waters entering groundwater to 30 milligrams per liter (mg/L) chloride and 500 mg/L total dissolved solids (TDS; LARWQCB 1995). Also of concern is the ability of the regional facilities to accept the large volume of material projected for this project. The only available Class III landfill in the project vicinity (Simi Valley) has the daily capacity to accept up to 3,000 tons of material. The proposed project will generate approximately 8,000 tons per day (using a conversion factor of 1.78), which far exceeds the local capacity without even considering municipal disposal needs. Perhaps the greatest concerns relate to the potential impacts to the local residents and infrastructure that would be unavoidable if this alternative were selected. The landfills are open for operation only 9 hours per day,

6 days per week; transfer of the material from the holding area to the landfill could take 4 months to complete. At 13 meters³ per truck, six trucks per hour, 9 hours per day, and 6 days per week, over 19,000 round trips would be required to transport 250,000 meters³ of contaminated sediment. This volume of truck traffic would exacerbate the existing traffic congestion in Ventura County and result in potentially significant air quality impacts. Therefore, traffic and air quality impacts associated with transporting dredged material to upland landfills were identified as potentially significant impacts. As a result of these concerns, as well as the cost, this alternative was eliminated from consideration.

2.3.2 Material Reuse

Promoting beneficial reuse of dredged material is considered a national goal of the resource agencies. Beach nourishment, frequently implemented by the USACE in the Oxnard/Ventura area, is one example of sediment reuse. Other possibilities include the use of dredged material in the development or manufacturing of commercial, industrial, horticultural, agricultural, or other products.

There are also many processing technologies that can be utilized to increase the suitability of dredged material, particularly for materials that are chemically impacted to some degree:

- Sand separation (hydrocyclones)
- Composting (biosolids or cellulose)
- Solidification/stabilization (cement, lime, and flyash)
- Soil washing (BioGenesis)
- High temperature thermal treatment (Ecomelt, lightweight aggregate, and bricks)

All of these technologies require additives and/or treatment of the sediment, and at least one rehandling step as well as large areas for the processing equipment and sediment stockpiling. Typically, such approaches have proven not to be cost effective for projects of this size, because they require the construction of large, on site treatment facilities to process the material.

Immobilization and chemical treatment as stand-alone alternatives are also infeasible. The immobilization alternative assumes stabilization and solidification of contaminated dredged material using cement-based additives to bind the contaminants in the dredged material into insoluble, non-mobile, or nontoxic forms and enhance the physical properties of the material. The use of this technology on the West Coast has been limited due partly to the large volumes of dredged materials involved per project, special material handling requirements, physical and chemical characteristics specific to West Coast marine sediments, and the fact that there is currently no market for the stabilized material. This technology is typically applied to projects with very low sand content and very high chemical concentrations, which is not representative of most West Coast projects. Due to the uncertainties of cement stabilization in treating organic contaminants and the fact that the material will still need to be disposed of after treatment, this alternative will not be carried forward.

Dredged material treatment via chemical removal is possible using thermal destruction, chemical treatment, or bioremediation. Thermal destruction includes methods that heat the sediment several hundred or thousand of degrees above ambient temperature. These processes are generally the most effective options for destroying organic contaminants but are also the most expensive. Most thermal technologies are highly effective in destroying a wide variety of organic compounds, but they do not destroy metals.

Chemical treatment technologies involve mixing chemical additives with sediments or with sediment slurry. Chemical treatments may destroy contaminants completely, alter the form of the contaminants (so that they are amenable to other treatments), or be used to optimize process conditions for other treatment processes. Treated sediments may then be permanently disposed of or put to some beneficial use, depending on the nature and extent of residuals, including reagents and contaminants. No regional needs for this material were identified, and this alternative was also eliminated.

Bioremediation is a managed or spontaneous process in which microbiological processes are used to degrade or transform contaminants to less toxic or nontoxic forms, thereby remedying or eliminating environmental contamination. Bioremediation technologies

harness natural processes by promoting the enzymatic production and microbial growth necessary to convert the target contaminants to nontoxic end products. Like thermal destruction, bioremediation is highly effective for organics but does not target metals, which are also a concern for the proposed study area.

Issues of concern for use of this suite of treatment alternatives include contractor availability in the Los Angeles Region, limited use on the West Coast specifically for marine dredged material, production costs, space for a treatment facility, and a disposal area or beneficial use for the treated product. Because no single approach targets both metals and organic contaminants, this alternative may not be suitable for the current project. Therefore, due to economic constraints and the large volume of dredged material for this project, material reuse is not considered a viable alternative.

2.3.3 Open-ocean Disposal

Open-ocean disposal is a cost-effective alternative that is widely utilized on the West Coast. Because ocean-disposed dredged material does not require a rehandling step, sediment can be dredged and placed directly into a bottom-dump barge, hauled to one of several U.S. Environmental Protection Agency- (USEPA-) managed open-ocean disposal sites, and discharged; however, sediments must be shown to be sufficiently free of contaminants to qualify for an open-ocean disposal permit. The known contaminated sediments at the Harbor will exclude it from open-ocean disposal. Therefore, due to regulatory constraints, open-ocean disposal is not considered a viable alternative.

2.4 Alternatives Analysis

2.4.1 No Action Alternative

Section 1502.14 of the National Environmental Policy Act (NEPA) Regulations (42 USC 4371, et seq.) requires that the environmental review sharply define the issues and provide a clear basis for choice among options by the decision-maker and the public. To comply with this requirement, NEPA requires that the review include the no action alternative. Therefore, this alternative will be carried forward to ensure that the impacts associated with no action are compared to the impacts with other reasonable alternatives. The no action alternative would not meet the project objective and would

result in no readily available cost-effective disposal options for maintenance dredging at the Harbor.

With no action, sediment would continue to accumulate within the Harbor including portions within areas of responsibility for the OHD, U.S. Navy, and USACE. Navigation within the Harbor would become progressively more constrained and eventually impossible for commercial and military vessels. The Harbor is an important component of NBVC, which supports the 31st Seabee Readiness Group and Naval Surface Warfare Center. Because of its strategic location, NBVC provides a valuable contribution to the readiness of the U.S. Department of Defense's total force. With no action, the contaminated sediment within the Harbor would remain bioavailable and continue to contribute to water quality degradation and ecological risk. The no action alternative would also decrease the amount of sand available for nourishment of beaches adjacent to the Harbor, because dredged material from within the Harbor would not be available for beneficial reuse. This alternative would eliminate potential short-term, adverse impacts to navigation, recreation, air quality, fish and wildlife values, safety, and water quality related to dredging and discharge of dredged materials. The no action alternative would avoid temporary impacts to water quality, due to turbidity and suspension of contaminated material associated with dredging and disposal; air quality, due to operation of dredge equipment; noise; aesthetics; and other impacts as detailed for the other proposed alternatives.

3 AVOIDANCE, MINIMIZATION, AND ENVIRONMENTAL COMMITMENTS

The U.S. Navy and OHD and their contractors will commit to avoiding, minimizing, or mitigating for adverse effects during dredging and disposal activities. Applicable environmental commitments will be incorporated into the project plans and the contract specifications.

3.1 General

- Dredging shall be conducted in a manner to avoid overdredging in the vertical or horizontal dimensions, to the maximum extent possible.
- All trash and debris from the Hueneme Beach placement of dredged material site shall be removed each day.

3.2 Water Quality

The proposed project would comply with the terms and conditions of the CWA Section 401 Water Quality Certification and Porter-Cologne Waste Discharge Requirements as issued by the LARWQCB.

An OMMP for the CAD site will be developed for implementation by the OHD. The OMMP will describe the management and monitoring objectives for the CAD, a communications plan covering the entire CAD construction and disposal process, construction monitoring, and post-disposal monitoring plans, contingency plans, annual monitoring plans, and long-term management plans for the CAD once it has been capped.

Additionally, rules and methods set out by the CSTF LTMS's (May 2005) BMP toolbox during dredging activity shall be provided to the dredge contractor to satisfy federal and state water quality requirements, specifically:

- Increasing cycle time – A longer cycle time reduces the velocity of the ascending loaded bucket through the water column, which reduces the potential to wash sediment from the bucket. Limiting the velocity of the descending bucket reduces the volume of sediment that is picked up and requires more total bites to remove the project material. The majority of the sediment resuspension for a clamshell dredge occurs when the bucket hits the bottom.

- Eliminating multiple bites – When the clamshell bucket hits the bottom, an impact wave of suspended sediment travels along the bottom away from the dredge bucket. When the clamshell bucket takes multiple bites, the bucket loses sediment as it is reopened for subsequent bites. Sediment is also released higher in the water column as the bucket is raised, opened, and lowered.
- Eliminating bottom stockpiling – Bottom stockpiling of the dredged sediment in silty sediment has a similar effect as multiple bite dredging; an increased volume of sediment is released into the water column from the operation.
- Preventing scow overflow – Instructing the contractor will ensure that the barge will not be allowed to overflow.
- Avoiding overdredging – Overdredging in the vertical or horizontal dimensions will be avoided, to the maximum extent possible.

3.3 Fish and Wildlife Resources

The U.S. Navy is the lead Federal Agency for compliance with Essential Fish Habitat (EFH) consultations under the Magnusson-Stevens Act and the Endangered Species Act (ESA). For a summary of Essential Fish Habitat (EFH)/ESA determinations, please see the attached Appendix B.

- Operators of dredge or other heavy equipment shall not harass any marine mammals, waterfowl, or fish in the project area.
- If beach placement of dredged material on Hueneme Beach occurs after March 15 during grunion season, the zone of activity shall be restricted to a fixed position, clearly marked by flagging (500 feet in width and extending offshore). Lateral movement of the outfall shall only occur when seaward extension of the hydraulic pipeline is no longer feasible and only when dredged material would still remain within the 500-foot zone.
- If a pipeline is used for placement of dredged material on Hueneme Beach (in order to avoid covering or removing portions of the wrack line along Hueneme Beach that provides potential foraging habitat for birds such as Western snowy plover), beach recontouring during and following pipeline removal will be limited to the footprint of the pipeline.

- The proposed project activities shall not disturb the low lying bluffs, sand dunes, or existing vegetation that may be present on Hueneme Beach.
- Prior to the initial dredging, the U.S. Navy and OHD will conduct surveillance level surveys for *Caulerpa taxifolia* (*Caulerpa*), an invasive species of green seaweed native to tropical waters, that has been identified in two Southern California locations (Orange County and northern San Diego County). Surveys shall be completed no earlier than 90 days prior to the commencement of dredging and no later than 30 days prior to the onset of work. The *Caulerpa* survey will be performed by qualified biologists prior to the commencement of the dredging. Surveys will systematically sample at least 20 percent of the bottom of the entire area to be dredged to ensure that widespread occurrences of *Caulerpa* will be identified if present. Surveys will be accomplished using diver transects, remote cameras, or acoustic surveys with visual ground-truthing. The U.S. Navy and OHD will submit survey results in standard format to the National Marine Fisheries Service (NMFS) and California Department of Fish and Game (CDFG) within 15 days of completion. If *Caulerpa* is identified during the surveys, the USACE will contact these agencies within 24 hours of first noting the occurrence. In the event that *Caulerpa* is detected, maintenance dredging will be delayed until such time as the infestation has been isolated and treated and the risk of spreading from the proposed project is eliminated. Should NMFS and CDFG determine that the risk of *Caulerpa* infestation has been eliminated or substantially reduced, the requirement for *Caulerpa* surveys may be rescinded.

3.4 Air Quality and Noise

- A Permit to Operate (PTO) from the Ventura County Air Pollution Control Board (VCAPCD) or the California Air Resources Board (CARB) will be obtained prior to commencement of dredging on all dredge equipment and ancillary related dredge equipment—all associated fees will be paid, and all permit requirements will be followed.
- Dredges and other construction equipment will be properly maintained in order to minimize release of diesel and hydrocarbon effluent into the atmosphere. The contractor will adhere to all permit requirements including those regarding emissions, fuel use, and fuel consumption.

- To reduce the impact from emissions of the dredge, retarding injection timing of diesel-powered equipment for NOx may be considered.
- If a hydraulic pipeline dredge is used, the dredge shall be equipped with selective catalytic reduction control systems.
- To reduce the impact from emission of the dredge, reformulated diesel fuel may be used to reduce reactive organic compounds (ROC) and sulfur dioxide (SO2) may be considered.
- Appropriate measures will be taken to reduce fugitive dust, or particulate matter (PM), caused by beach activities. Vehicle speed on the beach will be kept at a minimum to avoid the formation of dust clouds.
- To minimize fugitive dust, staging and storage areas shall be periodically watered and maintained.
- Activities and operations on unpaved areas, such as staging areas, should be minimized to the extent feasible during high wind events to minimize fugitive dust.
- Equip all internal combustion engines with properly operating mufflers.
- Noise levels of the dredge and placement of dredged material activity shall not exceed applicable limits established by the City of Port Hueneme's (City's) Noise Ordinance.
- Construction equipment will be properly maintained and scheduled in order to minimize unsafe and nuisance noise effects to sensitive biological resources, residential areas, and the socio-economic environment. Sensitive receptors, such schools, and hospitals, will be avoided whenever possible.
- Noise levels during the dredge activity shall not exceed the limits established by the City's Noise Control Sections (i.e., Monday through Saturday, 7AM to 10PM, 55 to 75 dBA depending on receptor type; Monday through Saturday, 10PM to 7AM, 50 to 75 dBA depending on receptor type; Sunday and federal holidays, 9AM and 6PM).
- Within sound range of the nearest residential zone adjacent to the western portion of Hueneme Beach, construction activities shall not exceed the authorized City Noise Ordinance threshold. If noise exceeds threshold limits and/or reasonable complaints are received from local residents, the contractor shall implement additional measures

to reduce these impacts. Specific measures shall be identified in coordination with the U.S. Navy and OHD.

3.5 Harbor and Land Use

- Placement and removal of dredging pipes shall be under direct supervision of the U.S. Navy and OHD dredging coordinators.
- The contractor shall provide maximum public access to roads, streets, and highways that might be utilized for hauling and maintenance. When possible, large truck trips to transport equipment will be limited to off-peak commute periods. Transportation of heavy construction equipment and/or materials that require the use of oversized-transport vehicles on state highways will require a Caltrans transportation permit.
- Due to beach conditions and sight-line visibility, the contractor must seek approval for an Emergency Access Plan (EAP) from the Area Captain of the County Fire Department/Lifeguard Division prior to constructing necessary sand ramps and access points.
- The contractor shall remove any dredging or beach replenishment-related debris left on the beach as soon as practicable, usually within 24 hours.
- The dredge and associated equipment must be marked in accordance with U.S. Coast Guard (USCG) provisions. The contractor must contact the Eleventh Coast Guard District, Aids to Navigation Branch, 2 weeks prior to commencement of dredging. The following information shall be provided to the USCG:
 - Size and type of equipment to be used in the work
 - Names and radio call signs for working vessels
 - Telephone number for on-site contact with project engineer
 - Schedule for completing the project
 - Any hazards to navigation
 - The contractor shall move equipment upon request by the USCG and Harbor patrol law enforcement and rescue vessels.
 - The equipment operator shall be required to display warning lights during all hours of dredging activity and yield or move equipment and

all support crafts for law enforcement or rescue vessels if and when needed.

- The contractor shall obtain a right of way entry permit from the City for placement of dredged materials on Hueneme Beach.

3.6 Cultural Resources

In the event that previously unknown cultural resources are identified during implementation of the proposed project, all activities will cease until the provisions of 36 Code of Federal Regulations (CFR) 800.11, "Properties Discovered During Implementation of an Undertaking," are met. If resources are deemed eligible for the National Register of Historic Places (NRHP), the effects of the project will be taken into consideration in consultation with the State Historic Preservation Officer (SHPO). The Advisory Council on Historic Preservation (ACHP) will be provided an opportunity to comment in accordance with 36 CFR 800.11.

4 REFERENCES

Anchor Environmental CA, L.P. 2006. Port Hueneme Wharves 1 and 2 Sediment Characterization Results Report. Prepared for the Oxnard Harbor District. November 2006.

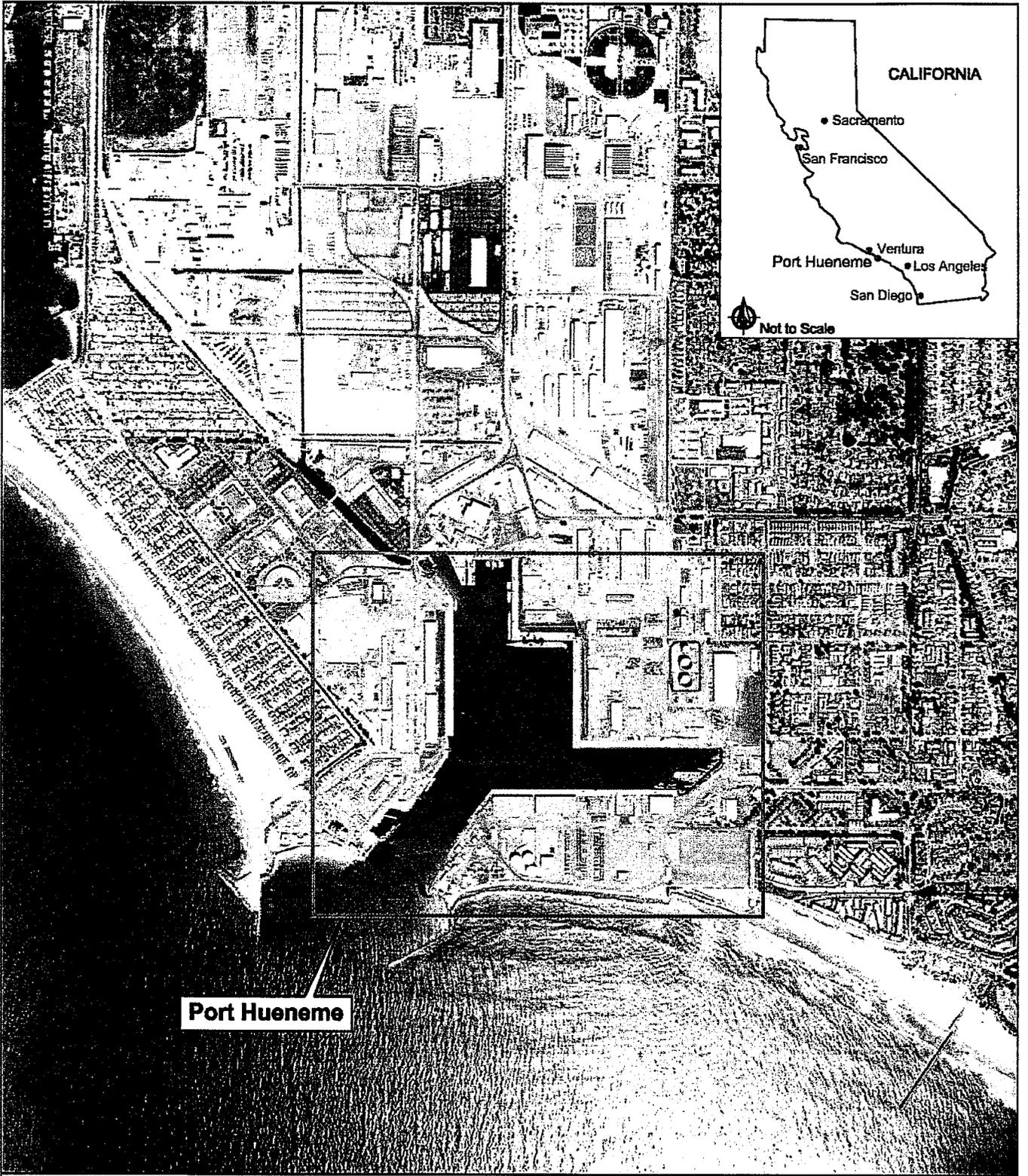
Contaminated Sediments Task Force (CSTF). 2005. Los Angeles Regional Contaminated Sediments Task Force: Long-term Management Strategy. May 2005.

Los Angeles Regional Water Quality Control Board (LAWQCB). 1995. Water Quality Control Plan, Los Angeles Region.



FIGURES

Oct 10, 2007 1:18pm dfoelmer C:\ANCHOR WORKSPACE\JOBS\070374-Port Hueneme\07037401-003.dwg F1



Note: Base map prepared from image from Google Earth Pro, 2007.

0 1/2
Scale in Miles



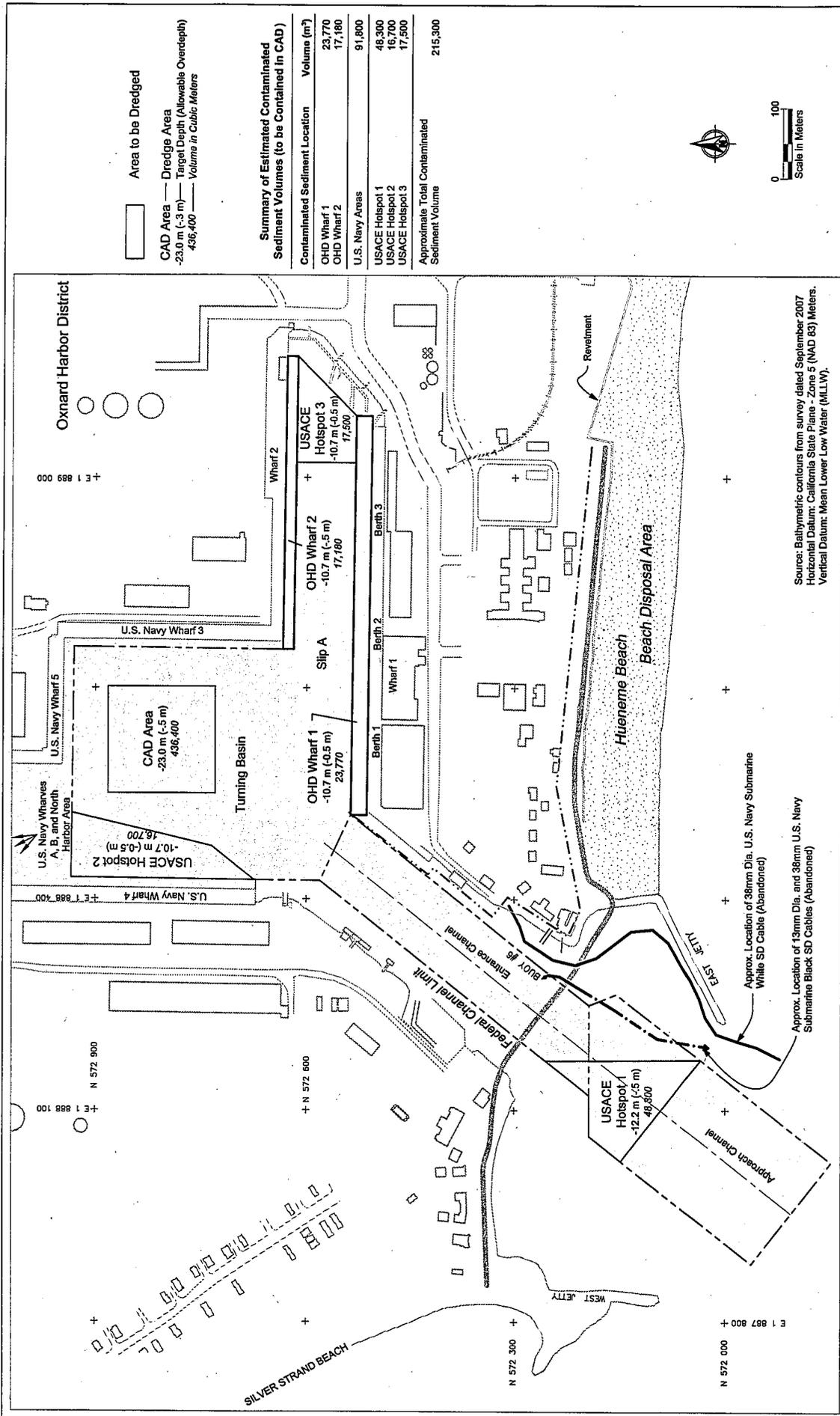


Figure 1-2
Project Area Site Plan
Port Huenehme



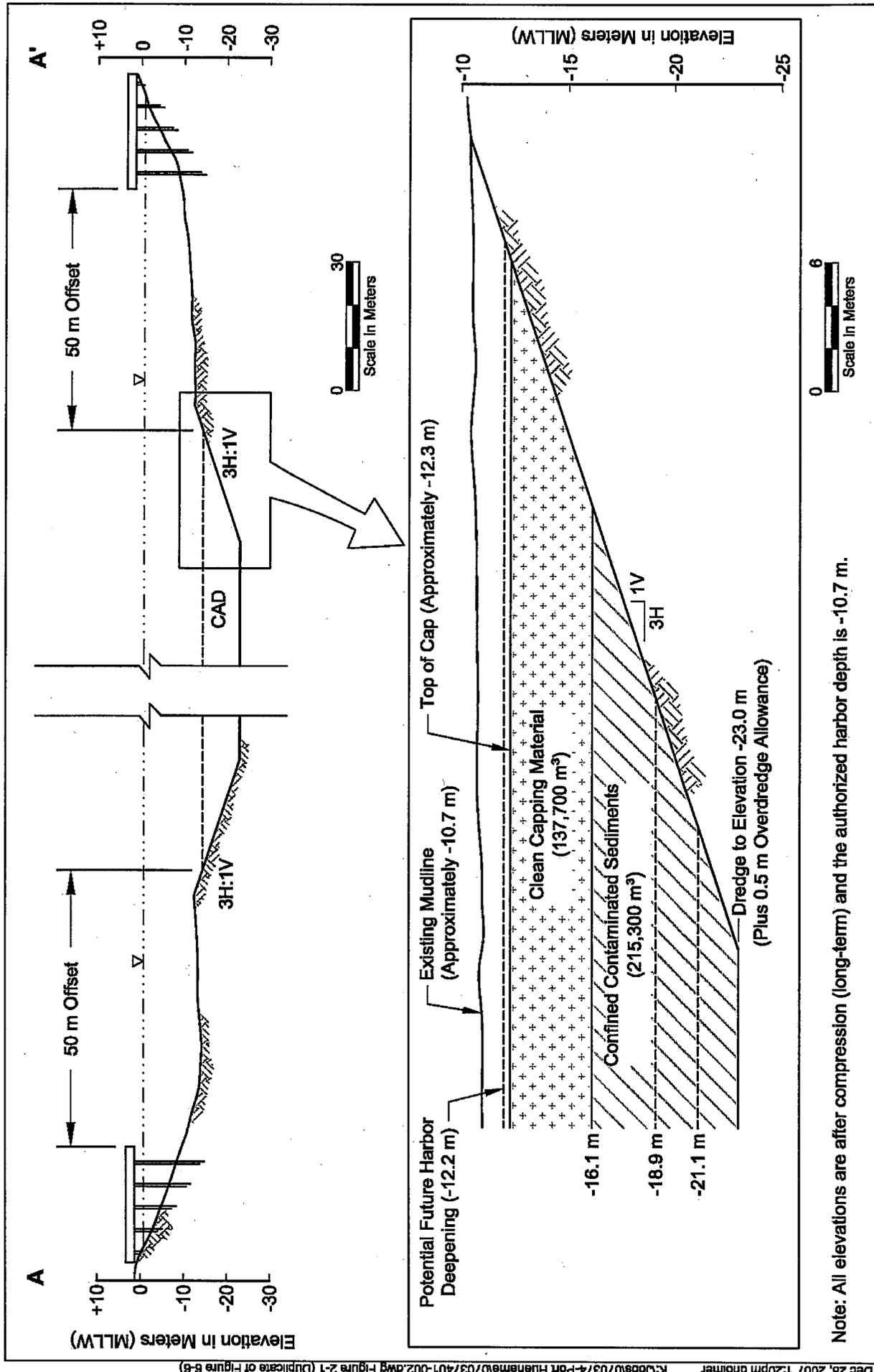
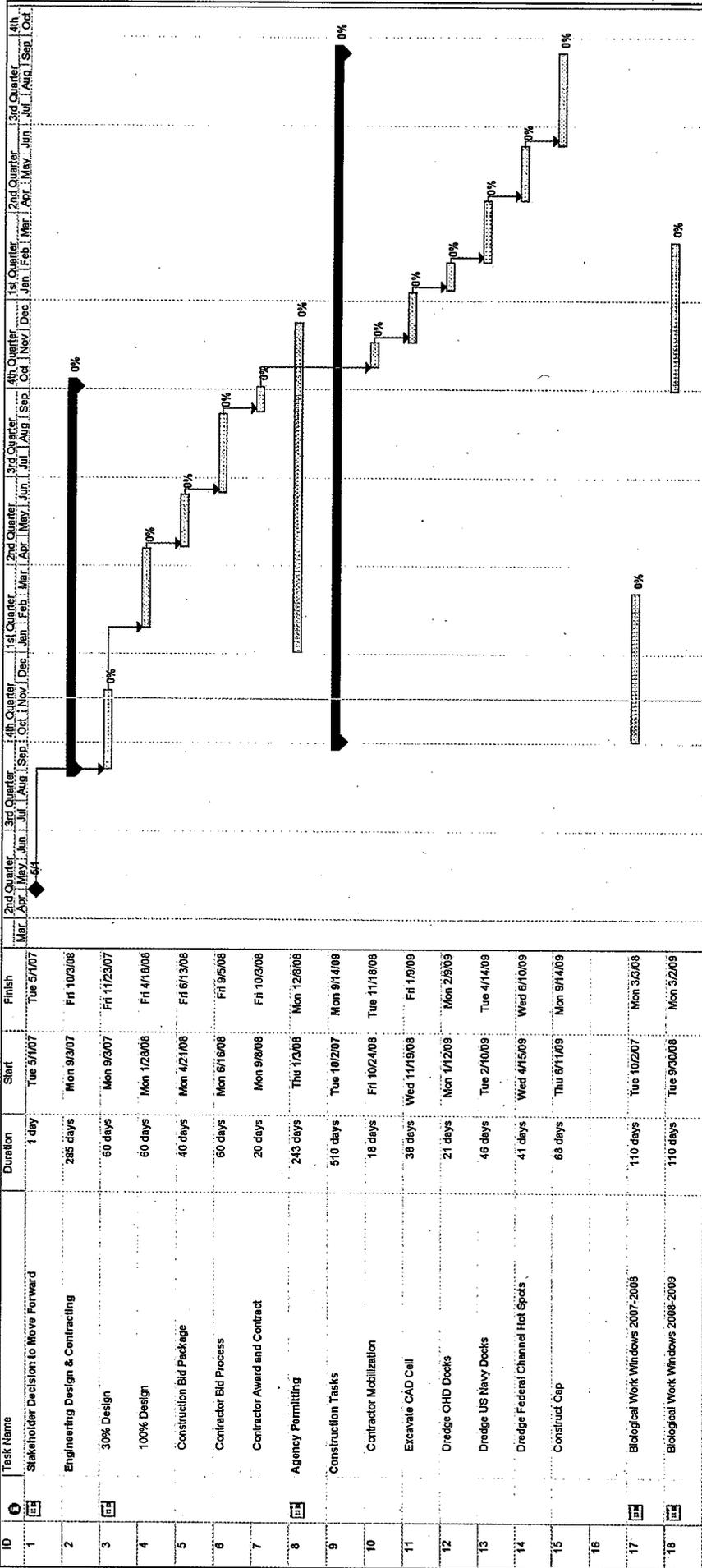


Figure 2-1
 Typical Cross-section through CAD Facility
 Port Huenueme



Project: permit timeframes
Date: Thu 11/15/07

Critical
 Critical Split
 Critical Progress

Task
 Split
 Task Progress

Baseline
 Baseline Split
 Baseline Milestone

Milestone
 Summary Progress
 Summary

Project Summary
 External Tasks
 External Milestone

Deadline