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From: Commander, Western Division, Naval Facilities Engineering Command
To: Distribution

Subj: REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR NAVAL STATION TREASURE ISLAND, SAN FRANCISCO

Encl: (1) December 17, 1992 Meeting Minutes
(2) Proposed Draft Site Characterization Summary Report Outline
(3) Monthly Status Report - Nov 1992

1. Enclosures (1) and (3) are provided for your information while enclosure (2) is provided for your review and comments . The Navy has started writing sections 1.0 through 4.0 of the RI report and will start writing the other sections. Any comments would be appreciated as soon as possible to minimize the impact associated with any revision.

2. Thank you for your guidance and involvement in this project. For further information, please contact Mr. Ernesto M. Galang, Code 1813EG, at (415) 244-2560.

GILBERT A. RIVERA
By direction

Distribution:
California Department of Toxic Substances Control (Attn: Tom Lanphar)
California Regional Water Quality Control Board (Attn: Barbara Smith)
California Department of Fish and Game (Attn: Mike Rugg)
US Environmental Protection Agency, Region IX (Attn: Julie Anderson)
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National Oceanic & Atmospheric Administration (Attn: Denise Klimas)

Copy to: (w/o encl)
NAVSTA Treasure Island (Attn: Jim Sullivan) w/encl
COMNAVBASE San Francisco (Attn: Randy Friedman)
PRC Environmental Management, Inc. (Attn: Emily Pimentel)

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Writer: E. Galang, 1813EG, X-2560
File: NS, Treasure Island

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INSTALLATION RESTORATION PROGRAM
SPECIAL TECHNICAL MEETING
NAVAL STATION TREASURE ISLAND
DECEMBER 17, 1992

Introduction

At the November 4, 1992 progress meeting, representatives from California Environmental Protection Agency, Department of Toxic Substances (DTSC), California Regional Water Quality Control Board (RWQCB), Navy, and PRC Environmental Management, Inc. (PRC) agreed to participate in a special technical meeting to discuss the issues of the collection and use of site background data and risk assessment approach issues. The meeting convened, as scheduled, on December 17, 1992 at 10:00 a.m. at the DTSC Berkeley Office. The list of attendees is attached. One of the assumptions in setting up the meeting was that the Navy would provide the most current analytical results for the remedial investigation (RI). Both Mr. Tom Lanphar, DTSC, and Ms. Bobby Smith, RWQCB, had received copies of the current analytical results prior to the meeting.

The meeting began with a general discussion of the meetings' objectives. These objectives were to decide how the data could be grouped to facilitate the risk assessment, and how to determine background concentrations for comparison purposes in the RI. To support this discussion, PRC provided the analytical results, formatted into two separate reports, for use during the meeting and the preparation of the RI.

Risk Assessment Approach

Ms. Deborah Oudiz, Staff Toxicologist of the Office of the Science Advisor, provided a draft copy of her written comments dated December 15, 1992 on the memorandum entitled "Proposed Approach for the Baseline Human Health Risk Assessment for Naval Station Treasure Island, San Francisco" prepared by PRC on October 26, 1992. The attendees requested that Ms. Oudiz provide an overview of some of the more pertinent comments that might be helpful during the present discussion. Ms. Oudiz indicated that she wants to see a site-wide risk assessment and would like to see as many sites as possible consolidated for the individual risk assessments. She also asked for a clarification on what was meant by the phase I and phase II RI. Ms. Pimentel indicated that in her experience most RIs undergo additional field investigation to clarify data gaps identified during the initial RI. She indicated that the work plan proposed an investigation on the assumption that initial field investigation results could result in the determination that further investigation would be necessary. If that is the case, then the additional investigation would be considered phase II. However, whether or not separate phase I and phase II RI reports would be required can not be determined at this time. The DTSC, RWQCB, and PRC agreed that if possible, it would be more effective to determine future investigation needs sufficiently early so that they could be incorporated into a single RI report, as well as a single human health risk assessment report.

Analytical Results

PRC provided copies of the analytical results. The results were presented in two separate reports with different formats. The first report formatted the results by site number, class (volatile, semi-volatile, and metals), matrix (soil or water), and chemical detected (reports listed only compounds detected). The second report formatted the results by class, site number, matrix and chemical.

All participants agreed revisions to the analytical report formats should include the following:

- range or average of sample quantitation limits
- median concentration
- an average based on detected results only, along with an average which includes additional values for non-detected results at one-half the detection limit
- groundwater data

Background

A discussion was held on the general need for background values to use in the evaluation of the analytical results in the RI report. Ms. Pimentel indicated analytical results for any type of field investigation are usually compared to background concentrations of metals and organics. Initially, Ms. Smith proposed that a random grid sampling scheme be developed to determine background concentrations at Yerba Buena and at Treasure Island. Mr. Lanphar suggested that comparing the site analytical data to literature values as a first step would probably be acceptable since the background data will be used for discussion purposes only and will not be used to determine clean-up goals. Ms. Smith agreed, and suggested that PRC begin by reviewing any applicable reports on Yerba Buena Island prepared by the U. S. Geological Survey. As a result of this approach PRC will determine background values separately for the two islands based on published literature. PRC clarified that the focus of the discussion in the RI would be used only for comparing analytical results to determine whether contamination in the area was above naturally occurring concentrations expected for the area on the basis of the local geology.

Site Groups

The analytical results were reviewed to determine which sites had the common characteristics criteria, allowing them to be grouped for purposes of the risk assessment. It was clarified that grouping for the ecological risk assessment would be different than that used for the human health risk assessment.

For the ecological risk assessment, Ms. Smith suggested that the two islands be considered separately based on the following:

- both islands have distinct habitats and water regimes

For the human health risk assessment, the groups were selected based on the following:

- similar contaminants at similar concentrations
- sites with similar analytic protocol
- sites are in close proximity
- sites have similar history

On the basis of the four criteria developed and presented above, the following groups were established:

Group I sites 3, 21, and 25

Group II sites 4 and 19

Group III sites 14 and 22

Group IV sites 17 and 24

Other Issues

All attendees discussed the need for another meeting to identify data gaps. Ms. Pimentel indicated that the analysis of the data would not be complete until the end of March. DTSC recommended having a meeting in mid-March to try to identify data gaps as early as possible to minimize the need for a separate RI report to address data gaps. A date for the mid-March working session meeting was not set.

PRC solicited comments from DTSC and RWQCB on their recommendations for presenting data results. DTSC recommended using "spider maps". RWQCB showed an example of data presented in the form of cross-sections with locations and depths of samples indicated on the margin and concentrations of individual chemicals presented directly on the figure. It was noted that this latter method may not work well when there are many contaminants analyzed or detected.

DEC. 17, 1992 MEETING @ DTSC OFFICE
NAVSTA TI RI/FS

ATTENDEES	COMPANY/AFFILIATION	TELEPHONE
1. Ernie Galang	US NAVY	(415) 244-2560
2. Emily Arnoldt	PRC	415 543-4880
3. Thorsten Anderson	PRC	415 543-4880
4. Christina G. Kabitzke	PRC	415 543 4880
5. Randy Fish	PRC	415 543-4880
6. Debbie Ruiz	DTSC	916 255-2045
7. Barbara H Smith	SFBWQCB	(510) 286-4222
8. Tom Lanphear	DTSC	510 540-3809

DRAFT
SITE CHARACTERIZATION SUMMARY
FOR
NAVAL STATION TREASURE ISLAND
CALIFORNIA

PRC Environmental management, Inc.
120 Howard Street, Suite 700
San Francisco, CA 94105
415/543-4880

December 20, 1992

ENCLOSURE (2)

LIST OF ACRONYMS

APR	Air Purifying Respirator
CLEAN	Comprehensive Long-Term Environmental Action Navy
CLP	Contract Laboratory Program
CME	Central Mine Equipment
DDT	Dichlorodiphenyltrichloroethane
DI	Deionized Water
EM	Electromagnetic Induction
EPA	Environmental Protection Agency
FSP	Field Sampling Plan
GPR	Ground Penetrating Radar
HCl	Hydrochloric Acid
$HN0_3$	Nitric Acid
HSA	Hollow Stem Auger
ID	Inside Diameter
MAG	Magnetrometry
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NAVSTA TI	Naval Station Treasure Island
NIOSH	National Institute of Safety and Health
OD	Outside Diameter
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
RI/FS	Remedial Investigation/Feasibility Study
SOP	Standard Operating Procedures
SVOA	Semivolatile Organic Analysis
TI	Treasure Island
TPH	Total Petroleum Hydrocarbons
VOA	Volatile Organic Analysis
YBI	Yerba Buena Island

AAL	Applied Action Level
ACL	Alternate Concentration Level
APCD	Air Pollution Control District
ARAR	Applicable or Relevant and Appropriate Requirements
ARB	California Air Resources Board
BCDC	Bay Conservation and Development Commission
CAA	Clean Air Act
CEC	Cation Exchange Capacity
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHP	California Highway Patrol
CLEAN	Comprehensive Long-Term Environmental Action Navy
CLP	Contract Laboratory Program
CPF	Cancer Potency Factor
CRP	Community Relations Plan
CWA	Clean Water Act

DFG	California Department of Fish and Game
DOD	Department of Defense
DQO	Data Quality Objective
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
DWS	State Drinking Water Standards
EIC	Engineer-in-Charge
EIR	Environmental Impact Report
EM	Electromagnetic Induction
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FSP	Field Sampling Plan
GPR	Ground Penetrating Radar
HI	Hazard Indexes
HSP	Health and Safety Plan
HSWA	Hazardous and Solid Waste Amendments
IRP	Installation Restoration Program
LCS	Laboratory Control Sample
MAG	Magnetrometry
MCL	Maximum Contaminant Levels
MCLG	Maximum Contaminant Level Goal
mg/K	Milligrams per Kilogram
mg/L	Milligrams per Liter
MPRSA	Marine Protection Research and Sanctuaries Act
MS/MSD	Matrix Spike/Matrix Spike Duplicates
MSL	Mean Sea Level
NAVSTA TI	Naval Station Treasure Island
NCP	National Contingency Plan
NPDES	National Pollution Discharge Elimination System
NTTC	Navy Technical Training Center
OP&R	Office of Planning and Research
PAH	Polynuclear Aromatic Hydrocarbons
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
PA/SI	Preliminary Assessment/Site Inspection
PCB	Polychlorinated Biphenyls
PM	Project Manager

LIST OF ACRONYMS (cont.)

PRP	Potentially Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
RA	Risk Assessment
RA	Remedial Action
RAP	Remedial Action Plan
RAS	Routine Analytical Services
RCRA	Resource Conservation and Recovery Act
RFD	Reference Dose
RI/FS	Remedial Investigation/Feasibility Study
RWQCB	Regional Water Quality Control Board
SAL	State Action Level
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SIP	State Implementation Plan
SMCL	Secondary Maximum Contaminant Levels
STLC	Soluble Threshold Limit Concentration
SVOC	Semivolatile Organic Compound
SWDA	Solid Waste Disposal Act
SWRCB	California State Water Resources Control Board
TBC	To Be Considered
TI	Treasure Island
TM	Technical Memorandum
TMV	Toxicity, mobility, or volume
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TTLC	Total Threshold Limit Concentration
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
VOC	Volatile Organic Compound
WDR	Waste Discharge Requirements
WET	Waste Extraction Test
YBI	Yerba Buena Island

INSTALLATION RESTORATION PROGRAM
MONTHLY STATUS REPORT
NAVAL STATION TREASURE ISLAND
NOVEMBER 1992

1. PROGRESS DURING THIS PERIOD:

Work Performed

The Navy and its contractor:

Collected storm water samples from accessible outfalls.

Managed laboratory data packages, arranged for the primary data validation, and reviewed the validation packages for completeness.

Finalized the waste management plan. Reviewed the field sampling results to determine hazardous waste classification per RCRA and to determine additional sampling needs if required.

2. MEETING AND REPORTS DURING THIS PROGRESS PERIOD

MEETINGS

The Navy and its contractor met with the regulatory agencies on 4 November 1992 to review the monthly progress of the investigation.

REPORTS

The Navy forwarded the following documents/reports to the regulatory agencies for review and comments:

- Monthly Progress Review Meeting Minutes (4 Nov 1992)	9 November 1992
- Preliminary Summary Tables of Analytical Results	12 November 1992
- Final RI/FS Investigation Derived Waste Management Plan	23 November 1992
- Project Monthly Status Report (Oct 1992)	25 November 1992
- Draft Field Work Plan, Volume 1 dtd 20 Nov 1992 for Characterization (Extraction) Wells Installation at Site 14	30 November 1992

3. PROBLEMS ENCOUNTERED AND RESOLUTIONS

None

ENCLOSURE (3)

4. MEETINGS AND REPORTS SCHEDULED FOR THE NEXT MONTH

Meetings

The first TRC meeting has been scheduled for 1 December 1992 at NAVSTA TI.

A technical work session meeting to address background and risk assessment approach issues was scheduled on 17 December 1992 at DTSC office in Berkeley.

Reports

Project Monthly Status Report (December 1992)
Technical Review Committee Meeting Minutes (1 December 1992)
Preliminary Summary Tables of Analytical Results (Partial)

5. ACTIVITIES PLANNED FOR THE NEXT TWO-MONTH PERIOD

The Navy and its contractor will:

- Start trenching work at Site 25 to confirm whether the anomaly at the site is a result of a buried storage tank.
- Start resampling and reanalysis of samples which exceeded holding times as a result of a laboratory error. This problem was noted in the September 1992 progress report.
- Start the disposal of waste generated from the field investigations based on the approved waste management plan.
- Continue validating the laboratory data.
- Continue working on the Remedial Investigation (RI) Report task, ecological assessment and human health risk assessment tasks.