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Ser 1811JC/00551

11 DEC 1990

Mr. Mark Malinowski  
California Department of Health Services  
Toxic Substances Control Program  
Site Mitigation Branch  
700 Heinz Avenue, Bldg. F  
Berkeley, CA 94710

Dear Mr. Malinowski:

In accordance with the Federal Facility Agreement for Naval Station Treasure Island, Hunters Point Annex, Section 18, Remedial Project Managers, Paragraph 18.3, please find attached final minutes from the November 7th informational update meeting held between the Navy, Environmental Protection Agency and Department of Health Services.

Should you have any questions regarding this matter, the point of contact is Commander, Western Division, Naval Facilities Engineering Command (Attn: Julie Carver, Code 1811JC, (415) 244-2557).

Sincerely,

Original signed by:  
MICHAEL A. MIGUEL  
Head, Environmental Restoration Branch

Attachment: Final Meeting Minutes

Copy to:

Regional Water Quality Control Board (Attn: Steve Ritchie)  
Bay Area Air Quality Management District (Attn: Scott Lutz)  
U.S. Environmental Protection Agency (Attn: Chuck Flippo)  
California Dept. of Fish & Game (Attn: Mike Rugg)  
U.S. Fish & Wildlife Service (Attn: Steve Schwarzback)  
National Oceanic & Atmospheric Administration (Attn: Chip Demarest)  
Hunters Point Technical Review Committee Public Member (Attn: Rev. Arelious Walker)  
City and County of San Francisco (Attn: David Wells)  
San Francisco District Attorney (Attn: Steve Castleman)  
Blind copy to: 09C9, 202, 09A2A.20, 24, 181, 1811, 1811RP, 1811JC, 1811RC  
Admin. Record, Harding Lawson Associates (Attn: Mary Lucas)  
OIC Treasure Island, HPA, PRC (Attn: Gary Welshans), PWC SF Bay (Code 420)  
COMNAVSEASYSOM (Attn: Robert Milner), COMNAVBASE S.F.  
NAVSTA Treasure Island  
Writer: Julie Carver, Code 1811JC, x2557  
Typist: B. Palmer, 6 Dec 90, Final Mtg Minutes #00551  
File: HP/DOHS

1. Attendees: See Attached
2. Agenda: See Attached
3. Adjustments to Approved Work Plan

Phased approach. PRC and HLA explained that changes to the approved work plans may be necessary during the implementation of the Remedial Investigations (RIs) at HPA because the scoped RIs do not allow for a change in approach when dictated by field conditions. The potential changes include adjustments to the sampling locations and analytical program. The schedules negotiated as part of the Federal Facility Agreement (FFA) do not include a phased approach, but methods to phase the work without affecting the schedules are being reviewed by the Navy and its consultants. The purpose of this meeting was not to propose actual changes but discuss mechanisms for implementing the changes once the RIs have started.

It was agreed that it would be appropriate to have meetings between the Navy, regulatory agencies, and consultants to discuss the proposed changes. Existing data and proposed changes should be submitted to the agencies several days in advance of the meeting and changes could be approved at the meeting.

Field conditions to date/proposed adjustments. PRC and HLA informed the agencies that potentially explosive levels of landfill gas were encountered while drilling at the Industrial Landfill (Site IR-1) on October 15, 1990. Work was stopped and the vapors were sampled the following day by personnel using level B protection. Analyses showed that the vapors were primarily methane. The drilling rig was moved from the drilling site two days later after emission of the gasses had subsided.

At this time, borings at Site IR-1 are being completed only in areas where elevated levels of methane are not expected. During the second phase of the primary phase RI at Site IR-1, mud rotary drilling, a drilling method identified as an alternative in approved work plans, will be used to complete borings where elevated levels of landfill gas are expected.

Additional field problems encountered include 10 feet of lost auger in Boring IR01B0039 at the Industrial Landfill.

2. Alternative Drilling Methods

Mud Rotary Drilling. Mud rotary drilling methods will be used for the completion of several borings at the Industrial Landfill where elevated levels of landfill gas are expected and which were proposed to have been drilled using hollow stem auger in the work plan. This change should not impact the field implementation schedule.

Other Methods. PRC and HLA asked for additional information from the DHS regarding dual tube drilling methods suggested for the control of flowing sands encountered at Hunters Point Annex (HPA). The agencies may be providing some information on a new mechanism that is being developed for the control of flowing sands while drilling with hollow stem augers.

3. Proposed laboratory QC procedures.

PRC stated that the following laboratories will be conducting the laboratory analyses for the RIs at Operable Units I, III, and IV:

- NET Pacific and Eagle Pitcher for organic and general inorganic analyses,
- Medtox for asbestos analyses,
- Kennedy/Jenks/Chilton for hexavalent chromium and microbiology analyses, and
- Compuchem for radiation analyses.

PRC presented the laboratory QC program being followed for the RIs at HPA. The program includes the procedures for EPA's requirements of the Contract Laboratory Program (CLP), DHS certification, and the Navy's quality assurance requirements for the Installation Restoration program. The required samples are summarized on the attached Table 1. The DHS stated that all of their required QC is built into the laboratory accreditation program. All the labs utilized during the RI work at HPA will follow CLP protocol when available, and additionally will be DHS and Navy accredited.

The QC analyses will be performed on a frequency of one per sample delivery group (SDG) which is normally 20 samples. If an SDG is less than 20 samples then the same QC samples will be analyzed.

Table 1 provides more detail regarding the laboratory QC program than what is identified in the Quality Assurance Project Plan (QAPP) for HPA. This table will be submitted to the regulatory agencies as an addendum to the QAPP.

CLP summary forms are being provided for all of the samples; actual CLP documentation packages are being provided for ten percent of the samples. If CLP documentation is required for additional samples it will be requested from the laboratories at a later date. The reporting format required by the Navy for non CLP analyses is equivalent to the CLP format.

The DHS asked what corrective actions are taken if there is a problem with the analyses. PRC stated that problems are identified early since the data are reviewed as they are received. Upon identification of a problem, PRC notifies the lab and corrective actions are taken. Laboratory performance is also monitored by the Naval Energy and Environmental Support Activity (NEESA). If problems are identified during the validation procedures, the data will be qualified.

4. Backfilling of borings.

Bentonite content. Borings drilled during the RIs are backfilled with a mixture of neat cement mixed with 5 per cent bentonite. The agencies had previously expressed concern that the cement would not cure correctly when in contact with saline groundwater and flocculation of bentonite may occur. HLA stated that the bentonite is hydrated with fresh water prior to mixing and placement in the boring; therefore, saline water should not effect the hydration of the bentonite. In addition, the enclosed data tables demonstrate that cement will cure more quickly in the presence of saline water. The DHS requested that a maximum of 3 percent bentonite by weight be used in the cement slurry.

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4. Backfilling of borings.

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Tracking of cement slurry volumes. PRC stated that the calculated and actual volume of cement slurry used to backfill borings will be recorded on the boring logs as requested by the regulatory agencies.

5. IR-3 trenching versus geophysics

PRC stated that trenching without geophysics is planned for the evaluation of the extent of the oil ponds at Site IR-3. The trenching is approved in the work plan and will be done after the results of the first phase of drilling at the oil ponds are available.

The DHS and EPA would like to see geophysics done. EPA may be able to do the geophysics as part of their oversight function and will check into this possibility. If the ponds are delineated clearly enough by geophysics then trenching would not be required.

6. Other issues.

The EPA stated that their contractor will be collecting split samples during the RIs at HPA. Their sampling plan is still under preparation and the schedule is uncertain. PRC and HLA stated that there should be advance warning of these activities because they may impact schedule and sampling activities. There may not be enough sample volume for split soil samples.

# NOV. 7<sup>TH</sup> MEETING

## SIGN-IN SHEET

<u>NAME</u>	<u>REPRESENTING</u>	<u>PHONE</u>
JULIE CARVER	US NAVY	244-2557
SANTIAGO LEE	PRC	543-4880
GARY WELSHANS	PRC	543-4880
Emir Utush	PRC	" "
Bart Simmons	DHS/Haz Mat Lab	540-3112
Mark Malinowski	DHS/Reg 2	540-3816
Chuck Phippo	EPA Region 2	744-2388
Irki Tangle	ICF/ESAT	832-3029
Laurie Mann	EPA	744-1497
Ashok VERMA	HLA	899-7386
MARY LUCAS	HLA	899-7350

## AGENDA

### HUNTERS POINT ANNEX REMEDIAL INVESTIGATION/FEASIBILITY STUDY

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NOVEMBER 7, 1990  
2:00 p.m.

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1. Adjustment to Approved Work Plan
  - a. Phased approach.
  - b. Field decisions.
  - c. Field conditions to date/proposed adjustments.
    1. Landfill gas.
  
2. Alternative Drilling Methods
  - a. Mud rotary drilling.
    1. Schedule for IR-1.
    2. Technical issues.
  - b. Dual-tube percussion.
  
3. Proposed laboratory QC procedures.
  - a. CLP and DHS requirements.
  - b. NEESA requirements.
  
4. Backfill of Borings
  - a. Bentonite/Cement.
  - b. Tracking cement slurry volumes.
  
5. IR-3 Trenching versus Geophysics.

Table 1. Required Laboratory QC Samples

Analysis	Method Blank	Matrix Duplicate	Matrix Spike	Matrix Spike Duplicate	Blank Spike	Surrogate Spike
CLP Metals	R	R	R	--	R	--
CLP Cyanide	R	R	R	--	R	--
CLP VOA	R	--	R	R	--	R
CLP SVOA	R	--	R	R	--	R
CLP Pest./PCBs	R	--	R	R	R	R
TPH, diesel	R	--	R	R	R	--
TPH, gasoline	R	--	R	R	R	--
Oil & Grease	R	R	R	--	R	--
BTEX	R	--	R	R	--	R
Chromium VI	R	R	R	--	R	--
Major Anions	R	R	R	--	R	--
pH	--	R	--	--	--	--
Asbestos	R	R	--	--	--	--
Microbiology	R	R	--	--	--	--
Radiation	R	--	R	R	R	--

R = Required; <sup>minimum</sup> general frequency is 1/20 samples. However, frequency of laboratory QC samples is dependent on the frequency of submittal and analysis; see CLP SOW and NACIP manual for specifics on frequency of laboratory QC analysis.

-- Not required

Technical Data

**ENGLISH UNITS**

**50-50 POZMIX<sup>®</sup> A CEMENT (CLASS A) BLEND WITH SALT**

2% Bentonite  
Water — 5.75 Gals./Sk. (10.77 Cu. Ft./Sk.)

**SLURRY PROPERTIES**

Per Cent Salt By Wt. of Water	Dry Salt Lbs./Sk.	Slurry Weight		Slurry Volume Cu. Ft./Sk.
		Lbs./Gal.	Lbs./Cu. Ft.	
0	9.00	14.15	106	1.26
5	2.40	14.28	107	1.27
10	4.79	14.38	108	1.29
18	8.02	14.52	109	1.31
Saturated*	17.77	14.78	111	1.37

**THICKENING TIME — HOURS:MINUTES**

(Pressure-Temperature-Thickening-Time Test)

Per Cent Salt	API CASING TESTS	
	4,000'	8,000'
0	4:10	1:56
5	3:51	1:48
10	4:20	2:05
18	4:00+	2:56
Saturated	4:00+	4:00+

**COMPRESSIVE STRENGTH — PSI**

Per Cent Salt	CURING TEMPERATURE**			
	80°F.	100°F.	120°F.	140°F.
<b>24 HOURS</b>				
0	350	600	815	1125
5	615	1025	1230	1620
10	545	910	1115	1605
18	275	465	635	1170
Saturated	105	355	430	755
<b>72 HOURS</b>				
0	880	1210	1460	2145
5	1260	1550	2020	2450
10	1220	1550	2110	3000
18	980	1230	1710	2405
Saturated	675	845	1235	1700

\*All saturated solutions at 140°F.  
\*\*Atmospheric Pressure

**METRIC UNITS**

**50-50 POZMIX<sup>®</sup> A CEMENT (CLASS A) BLEND WITH SALT**

2% Bentonite  
Water—21.77 L./Sk.

**SLURRY PROPERTIES**

Per Cent Salt By Wt. of Water	Dry Salt Kg./Sk.	Slurry Weight		Slurry Volume L./Sk.
		Kg./l.	Lb./Cu. Ft.	
0	0.0	1.70	106	1.26
5	1.1	1.71	107	1.27
10	2.2	1.72	108	1.29
18	3.9	1.74	109	1.31
Sat. (80° C)	8.1	1.77	111	1.37

**THICKENING TIME—HOURS:MINUTES**

(Pressure-Temperature-Thickening-Time Test)

Per Cent Salt	API CASING TESTS	
	1,220m	2,440m
0	4:10	1:56
5	3:51	1:48
10	4:20	2:05
18	4:00+	2:56
Sat. (80° C)	4:00+	4:00+

**COMPRESSIVE STRENGTH—MEGAPASCALS**

Per Cent Salt	CURING TEMPERATURE*			
	27° C	38° C	49° C	140° F.
<b>24 HOURS</b>				
0	2.41	4.13	5.61	7.75
5	4.24	7.06	8.48	11.78
10	3.75	6.27	7.68	11.06
18	1.89	3.20	4.37	6.06
Sat. (80° C)	.93	2.44	2.96	4.20
<b>72 HOURS</b>				
0	8.08	8.34	10.68	14.78
5	8.68	10.68	13.32	18.49
10	8.41	10.68	14.54	20.68
18	6.82	8.48	11.79	15.55
Sat. (80° C)	4.65	5.82	8.51	11.72

\*Atmospheric Pressure