

**MEETING MINUTES
RESTORATION ADVISORY BOARD
NAVAL WEAPONS STATION, SEAL BEACH DETACHMENT, CONCORD
CONCORD, CALIFORNIA
JANUARY 5, 2005**

These minutes reflect general issues raised, agreements reached, and action items identified at the Restoration Advisory Board (RAB) meeting for Naval Weapons Station (NWS) Seal Beach Detachment, (SBD) Concord, California. The meeting was held from 6:30 p.m. to 8:30 p.m. on January 5, 2005, at the Concord Police Department Community Room in Concord, California. Agreements and action items are described by topic under Sections I through V and are summarized in Section VI. A list of participants and their affiliations is included as Attachment A, and the meeting agenda is included as Attachment B.

I. WELCOME, INTRODUCTIONS, PUBLIC COMMENT, AND AGENDA APPROVAL

Welcome and Introductions

The RAB Community Co-chair, Mary Lou Williams (Concord resident), called the RAB meeting to order and initiated a round of introductions for attendees.

Public Comments

Ms. Williams opened the floor to public comments. No public comments were offered.

RAB Announcements

Ray O'Brien (Bay Point resident) announced that Patrick Lynch (Clearwater Revival Company, Technical Assistance Grant [TAG] recipient for the Local Reuse Association) was available during and after the RAB meeting to answer any questions about his comments on the Site 30 Taylor Boulevard Bridge Engineering Evaluation/Cost Analysis (EE/CA) for the non-time-critical removal action that were submitted to the Navy via e-mail on January 3, 2005.

Igor Skaredoff (Martinez resident) thanked the Navy for providing him responses to the comments he provided on the Draft Site 1 Tidal Area Landfill remedial design document. Mr. Skaredoff received the Pre-final (95%) remedial design document and noted that his comments were incorporated into the document. Mr. Skaredoff stated that he reviewed the Pre-final remedial design document and that there are some discrepancies between text and figures, but overall it is a well put together document.

February 2005 RAB Agenda Approval

Margaret Wallerstein, PhD (Navy RAB co-chair), reviewed the proposed agenda for the February 2005 RAB meeting, which will take place at the Concord Police Department Community Meeting Room in Concord, California. The Navy plans to provide a presentation on the draft feasibility study for Solid Waste Management Unit Sites 2, 5, 7, and 18. Ms. Wallerstein reminded the RAB that future meetings in 2005 are scheduled for the first Wednesday of the month. Ms. Wallerstein asked for the RAB to approve the February 2005 agenda. The RAB approved the agenda for Wednesday, February 2, 2005.

March 2005 RAB Meeting Date Change

Ms. Wallerstein requested that that RAB consider moving the March 2005 RAB meeting from March 2 to March 9, 2005, due to a schedule conflict. The RAB approved the date change for the March 2005 RAB meeting. The March RAB meeting will take place on Wednesday, March 9, 2005, at the Concord Police

Department Community Meeting Room.

II. NOVEMBER RAB MEETING MINUTES APPROVAL AND UNRESOLVED BUSINESS

Ms. Wallerstein asked the RAB if there were any comments on the meeting minutes for November 8, 2004. Ms. Wallerstein asked the RAB for approval of the November 2004 RAB meeting minutes. The November 2004 RAB meeting minutes were approved.

Action Item

1. The Navy will distribute the final November 8, 2004 RAB meeting minutes.

Unresolved RAB Business

The RAB reviewed the unresolved business and action items from the meeting on November 8, 2004 (Attachment C).

Updated Navy Organization Chart (Action item #3)

Ms. Wallerstein announced that she provided the RAB with an updated Navy organization chart on January 4, 2005.

III. COMMITTEE REPORTS AND ANNOUNCEMENTS

RAB Co-Chair Update

Ms. Williams stated that the Navy submitted a response to RAB community co-chair comments that were brought up at the conference held in Salt Lake City, Utah, in July 2004. Ms. Williams agreed to provide Ms. Wallerstein a copy of the Navy's response to RAB community co-chair comments to Ms. Wallerstein to distribute to the RAB via e-mail. Ms Williams stated that after attending the conference and meeting other RAB co-chairs from across the country, that the Concord RAB is a very well informed and organized group.

Action Item

2. Ms. Williams will provide Ms. Wallerstein a copy of the Navy's response to RAB community co-chair comments from the July 2004 conference in Salt Lake City, Utah, to Ms. Wallerstein to distribute to the RAB via e-mail.

IV. REMEDIAL PROJECT MANAGERS (RPM) UPDATE

Navy Update

Steve Tyahla (Navy) reviewed the Navy's RPM update (Attachment D). Mr. Tyahla announced that the Navy submitted the "Draft Site 30 Taylor Boulevard Bridge EE/CA Non-Time-Critical Removal Action" for agency review on November 24, 2004. Comments are due to the Navy on the EE/CA on January 25, 2005.

Mr. Tyahla stated that the Navy is looking forward to a very busy year in 2005 for NWSSBD Concord.

U.S. Environmental Protection Agency (EPA) Update

Phillip Ramsey (EPA) stated that EPA submitted comments to the Navy on the Site 17 Record of Decision (ROD) (Forklift Repair Site) in redline strikeout mode. If any of the RAB members are interested in seeing EPA's comments on the Site 17 ROD, Mr. Ramsey will provide them via e-mail. Most of EPA's comments on the Site 17 ROD were editorial.

Mr. Ramsey stated that EPA submitted comments on the Site 31 sampling and analysis plan (SAP) in December 2004. EPA is concerned that the history provided in the document about the site is not complete. EPA has recommended that the Navy revise the Site 31 SAP, and prepare a remedial investigation workplan that clearly identifies source areas, including the railroad tank car transfer facility and the spoil ponds.

Mr. Ramsey stated that at the December 7, 2004, meeting the RPMs discussed Site 22 and the potential impacts to Seal/Mount Diablo Creek. The RPMs have scheduled a site walk on January 14, 2005, to discuss sampling needs at the creek. Mr. Skaredoff requested that interested RAB members be invited to join the RPMs on their Site 22 visit. Mr. Tyahla stated that he would be happy to provide the RAB a separate tour of Site 22 once the RPMs have had an initial visit and assessed the terrain. Mr. Tyahla took a poll of RAB and community members interested in attending a site visit. Ms. Wallerstein agreed to look into if interested community members who are regular attendees of the RAB would be able to accompany the RAB on a Site 22 visit. Kevin Cornish (Lafayette resident) requested that the site visit be completed during the rainy season in order to assess the Seal/Mount Diablo Creek flow.

Mr. Glaser asked if EPA is satisfied with the timeliness of Navy sampling at the creek in Site 22. Mr. Ramsey stated that the Navy has recognized the significance of the potential impact of Site 22 on Seal/Mount Diablo Creek, which will require additional work.

Mr. Ramsey stated that EPA will be providing comments to the Navy on the draft Litigation Area treatability study SAP in January 2005. Mr. Ramsey stated that EPA would have significant comments on the Litigation Area treatability study SAP.

Mr. Ramsey stated that EPA would be providing comments to the Navy on the draft Site 30 EE/CA in January 2005. EPA does not currently have a lot of comments on the Site 30 EE/CA, but will request that the Navy collect samples for polychlorinated biphenyls analysis before any excavation work.

Mr. Ramsey stated that he received the preliminary data on the Site 13 offsite sampling EPA conducted in November 2004. Mr. Ramsey will give a brief update on the data during his RPM update at the February 2005 RAB meeting.

Action Items

3. Mr. Tyahla will coordinate with the RAB via email to determine an acceptable date for the Site 22 visit.
4. Ms. Wallerstein agreed to look into whether interested community members who are regular attendees of the RAB would be able to accompany the RAB on a Site 22 visit.
5. Mr. Ramsey will present the data results of EPA's Site 13 offsite sampling event at the February 2005 RAB meeting.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Update

A written SFBRWQCB RPM update was distributed to the RAB and is included in Attachment D. Laurent Meillier (SFBRWQCB) provided a list of RPM meetings he attended in November and December 2004, which include:

- Underground Storage Tank (UST) RPM meeting on November 30, 2004
- Monthly RPM meeting on December 7, 2004

Mr. Meillier stated that during the November UST meeting the RPMs discussed the IA17 work plan as well as access and funding issues the Navy has encountered during excavation of the Christenbury Road Pipeline. At the UST meeting, the RPMs also discussed soil removal due to a total petroleum hydrocarbon (TPH) release at Site E108. Mr. Meillier stated that during a meeting regarding Site A3A, the SFBRWQCB would provide the Navy a closure letter for the site.

During the December 2004 RPM meeting, the SFBRWQCB requested that the Navy collect surface water samples for analysis of arsenic in Seal/Mount Diablo Creek.

Mr. Meillier stated that if the Navy agrees to TPH sampling at Site 17 and the site adjacent to Site 17, the Water Board would sign the Site 17 no-further-action ROD.

Mr. Meillier said that future SFBRWQCB comments would be electronic, unless otherwise requested.

V. SITE 30 TAYLOR BOULEVARD BRIDGE EE/CA FOR A NON-TIME-CRITICAL REMOVAL ACTION PRESENTATION

Stan Ali (Tetra Tech EM Inc. [TtEMI]) provided an overview of the Site 30 EE/CA presentation. The presentation is included as Attachment E.

After Mr. Ali's presentation, Mr. Skaredoff requested that Mr. Lynch provide a brief summary of his comments that were distributed to the RAB on January 3, 2005, on the Site 30 EE/CA. Mr. Lynch's comments are included as Attachment F. Mr. Tyahla addressed a few of Mr. Lynch's comments during the RAB meeting. After a final draft of Mr. Lynch's comments are made available to the Navy, the Navy plans to submit comprehensive responses to the TAG contractor's comments along with responses to agency comments.

Mario Menesini (Walnut Creek resident) asked if the Navy has made a comparison between Site 30 and another marsh restoration project. Mr. Ali stated that the Navy had examined similar sites around the Bay area.

Dean McLeod (Bay Point resident) stated his opinion that the debris at Site 30 was from cleanup after the 1906 earthquake. Mr. McLeod asked why the Navy is proposing to remove the waste at Site 30, but not at other larger sites, such as the former Copper Smelter and the Site 1 landfill. Mr. Ramsey stated that Site 30 is a priority due to the ecological receptors at the site.

VI. NEXT MEETING AND ACTION ITEMS

The next RAB meeting will occur from 6:30 to 8:30 p.m. on Wednesday, February 2, 2004, at the Concord Police Department Community Meeting Room in Concord, California.

The following action items and agreements were generated during the RAB meeting on January 5, 2005:

#	Action Item	Target Date for Completion	Completion Date (or Status)
1	The Navy will distribute the final RAB meeting minutes for the meeting held November 8, 2004.	2/2/05	01/14/2005
2	Ms. Williams will provide Ms. Wallerstein a copy of the Navy's response to RAB community co-chair comments from the July 2004 conference in Salt Lake City, Utah, to Ms. Wallerstein to distribute to the RAB via e-mail.	2/2/05	
3	Mr. Tyahla will coordinate with the RAB via e-mail to determine an acceptable date for the Site 22 visit.	2/2/05	
4	Ms. Wallerstein agreed to look into whether interested community members who are regular attendees of the RAB would be able to accompany the RAB on a Site 22 visit.	2/2/05	01/10/2005 (regular RAB attendees may attend the Seal Creek site tour)
5	Mr. Ramsey will present the data results of EPA's Site 13 offsite sampling activity at the February 2005 RAB meeting.	2/2/05	

ATTACHMENT A

**ATTENDEES AND AFFILIATIONS
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2005
(One Page)

**ATTENDEES AND AFFILIATIONS
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2005

<u>Name</u>	<u>Affiliation</u>	<u>Telephone</u>
Wayne Akyama	Shaw Environmental	(925) 288-2003
Stan Ali	TtEMI	(415) 222-8236
Lisa Anich	Friends of Mount Diablo Creek	(925) 689-2642
Beth Byrne	Concord Resident	(925) 686-4815
Harry Byrne	Concord Resident	(925) 686-4815
David Cooper	EPA	(415) 972-3237
Kevin Cornish*	Lafayette Resident	(925) 296-5540
Gregory Glaser*	Concord Resident	(925) 363-5570
David Griffith*	City of Concord	(925) 671-3427
Carolyn Hunter	TtEMI	(415) 222-8297
Patrick Lynch	Clearwater Revival Company	(510) 522-2165
Dean McLeod	Bay Point Resident	
Laurent Meillier	SFBRWQCB	(510) 622-2440
Mario Menesini*	Walnut Creek Resident	(925) 935-1168
Julie Nelson*	Pittsburg Resident	(925) 252-1982
Ray O'Brien*	Bay Point Resident	(415) 385-9220
Jim Pinasco	DTSC	(619) 255-3719
Phillip Ramsey	EPA	(415) 972-3006
Cindi Rose	TtEMI	(415) 222-8286
Igor Skaredoff*	Martinez Resident	(925) 229-1371
Michelle Trotter	DTSC	(916) 255-6441
Steve Tyahla	IPT West	(650) 746-7451
Margaret Wallerstein	Navy RAB Co-chair	(562) 626-7838
Mary Lou Williams*	RAB Community Co-chair	(925) 685-1415

Notes:

DTSC	Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
IPT West	U.S. Navy Integrated Project Team West
RAB	Restoration Advisory Board
TtEMI	Tetra Tech EM Inc.
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
*	Community RAB Member

ATTACHMENT B

**AGENDA
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2005
(One Page)

AGENDA

NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD RESTORATION ADVISORY BOARD MEETING

Wednesday, January 5, 2005

6:30 p.m. – 8:30 p.m.

Concord Police Department Community Room
1350 Galindo Street
Concord, CA 94520

- 6:30 – 6:40 Call to Order
- Welcome
 - Introductions
 - Public Comments
 - February Agenda Approval
- Lead: Community Co-chair
- 6:40 – 6:50 Approval of November 8, 2004 Meeting Minutes
Review Unresolved Business
Lead: Navy Co-chair
- 6:50 - 7:30 Committee Reports/Announcements
- RAB Report
 - Remedial Project Managers' Update (Navy/EPA/DTSC/RWQCB)
- 7:30 – 7:40 Break
- 7:40 – 8:30 Site 30, Taylor Blvd. Bridge EE/CA Presentation
- 8:30 Adjourn

ATTACHMENT C

**ACTION ITEM TABLE FROM THE NOVEMBER 2004
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2005
(1 Page)

ACTION ITEMS
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH, DETACHMENT CONCORD,
CONCORD, CALIFORNIA
January 5, 2005

The following action items and agreements were generated during the RAB meeting on November 8, 2004.

#	Action Item	Target Date for Completion	Completion Date (or Status)
1	The Navy will distribute the final RAB meeting minutes for the meeting held October 4, 2004.	12/6/04	Completed on 12/20/04
2	Mr. Ramsey will send Ms. Wallerstein the website address to EPA's guidance on explosives for distribution to the RAB.	12/6/04	Completed
3	Ms. Wallerstein agreed to provide the RAB an updated Navy organization chart.	1/5/05	Completed on 1/4/05
4	Ms. Wallerstein will distribute the MOU between USFWS and the Navy and the IR site map to Mr. Gray.	1/5/05	Completed
5	Once all of the team building plans for December 6, 2004, have been finalized, the Navy will distribute information to the RAB.	11/26/04	Completed on 11/19/04

ATTACHMENT D

**NAVY RPM AND SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL
BOARD REMEDIAL PROJECT MANAGER'S UPDATES
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2005
(3 Pages)



***Navy RPM Update for 5 January 2005 meeting of
Naval Weapons Station Seal Beach, Detachment Concord
Restoration Advisory Board (RAB)***

Prepared by Steve Tyahla, Navy Lead Remedial Project Manager

- Summary of Navy Remedial Project Manager (RPM) Activities since the last RAB Meeting held on Monday, 8 November 2004.
 - **10 November-** At EPA's request, the Navy hosted a site visit to the Litigation Area for the regulatory agencies. [On this date representatives from the U.S. EPA, the Regional Water Quality Control Board (RWQCB), and the Contra Costa Mosquito and Vector Control District were in attendance.]
 - **18 November-** The Navy issued a letter submitting the document entitled "*Draft Sampling and Analysis Plan (Field Sampling Plan/ Quality Assurance Project Plan), Supplemental Feasibility Study, Litigation Area, Naval Weapons Station Seal Beach, Detachment Concord.*" [Comments are due by 18 January 2005. This draft plan outlines the Navy's proposal for conducting a treatability study and additional field sampling for the Litigation Area in support of the supplemental feasibility study. The additional work is being proposed by the Navy based on comments received on the draft supplemental feasibility study support that was issued on 19 March 2004.]
 - **24 November-** The Navy issued a letter submitting the "*Draft Engineering Evaluation/ Cost Analysis Non-Time Critical Removal Action for Taylor Boulevard Bridge (Site 30), Naval Weapons Station Seal Beach, Detachment Concord.*" [This Engineering Evaluation/ Cost Analysis, or EE/CA, analyzes three alternative removal actions for Site 30 and recommends an alternative that can serve as the final remedy for this debris disposal site. It is a draft document with comments due to the Navy by 25 January 2005, and is the topic of tonight's technical presentation.]
 - **29 November-** At EPA's request, the Navy hosted a site visit to the Litigation Area for the regulatory agencies. [This visit accommodated those who could not attend on the 10th. On this date, representatives from EPA, the California Department of Toxic Substances Control (DTSC), NOAA, California Department of Fish and Game, and the Contra Costa Mosquito and Vector Control District were in attendance.]
 - **7 December-** The Navy met with the project managers from EPA, DTSC, and the SFBRWQCB. [This was our regular monthly meeting.]
 - **13 December-** The Navy issued a letter submitting the Final Meeting Minutes of the 28 October 2004 monthly Remedial Project Managers' meeting. [These minutes are for the regular monthly project managers' meeting that is held between the Navy, EPA, DTSC (CA Dept. of Toxic Substances), and SFBRWQCB (CA San Francisco Bay Region Water Quality Control Board.)]



- **21 December-** The Navy issued a letter submitting the document entitled “*Draft Final Sampling and Analysis Plan (Field Sampling Plan/ Quality Assurance Project Plan) Additional Groundwater Investigation at Tidal Area Landfill, Site 1, Naval Weapons Station Seal Beach, Detachment Concord.*” [This is a draft final document and therefore, under the Federal Facility Agreement (FFA) with EPA, will become the final version of this plan unless EPA disputes it by 21 January 2005. This investigation is being conducted as promised in the Landfill cover Record of Decision (ROD).]
- **24 December-** The Navy issued a letter submitting the Pre-Final (95%) Remedial Design for the Site 1 Landfill Cover. [The design submission included construction specifications and contract drawings. Comments are due to the Navy by 10 February 2005.]
- **24 December-** The Navy issued a letter submitting the “*Draft Feasibility Study, Solid Waste Management Units 2, 5, 7, and 18; Naval Weapons Station Seal Beach, Detachment Concord.*” [This is the draft feasibility study (FS) for the SWMUs sites and focuses on the addressing the groundwater contaminant source and groundwater contamination at these sites. Comments are due to the Navy by 25 February 2005. Current plans are for the Navy to give a technical presentation on this report during the February 2005 RAB meeting.]

RAB Meeting Update January 5th 2015

Laurent Meillier RWQCB
Happy New Year!

I Meetings Attended

11/30/04: UST RPM Meeting

- Discussed IA-17 workplan to excavate the contaminated soils which might be affecting groundwater quality.
- Discussed the pipeline removal work to be performed at the Christenbury Rd. site. Waterboard staff recommended expedient removal of contaminated soils.
- The Navy provided preliminary groundwater and soils contamination data collected at the Port Chicago Gas Main Street Gas Station.

12/7/04: CNWS RPM Meeting

- Waterboard staff recommended the sampling of water and sediments for Arsenic downgradient and upgradient of Site 22 within the riparian system.
- Waterboard recommended the sampling for TPH and identified CoCs (Chemical of Concern) within the former leachline and discharge area at Seal Creek to enable WB approval of the NFA Site 17 ROD.

1/4/05: A-3A UST Site Closure

- Waterboard staff discussed with the Navy the closure of UST Site A-3A in the Tidal area.
- Waterboard staff recommended that the groundwater be qualified as potable at the site due to TDS < 3,000 mg/L.
- The UST database file was recommended for further refinements.
- Overall, Waterboard staff is planning to award closure at the site.

II Documents Reviewed/Correspondence Outputted

-  Comments on the Draft Landfill Gas Sampling and Analysis Plan Site 1 Tidal Area Landfill.
-  Sampling and Analysis Plan Additional Groundwater Investigation at Tidal Area Landfill Site 1.
-  Sampling and Analysis Site 31 RI.
-  Groundwater Monitoring Summary and Closure Report UST Site A3A.

ATTACHMENT E

**SITE 30 TAYLOR BOULEVARD BRIDGE ENGINEERING EVALUATION AND COST
ANALYSIS FOR A NON-TIME CRITICAL REMOVAL ACTION PRESENTION
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 5, 2004
(12 Pages)

Focus Test



SulTech



**November 24, 2004 Draft Engineering
Evaluation/Cost Analysis for a
Non-Time Critical Removal Action
at Site 30**

January 5, 2005



- 1. What's an Engineering Evaluation/Cost Analysis and a Non-Time Critical Removal Action?**
- 2. Site Location, History, and Description**
- 3. Previous Investigations and Risk Evaluation**
- 4. Identification of Removal Action Objectives (RAOs) and Alternatives**
- 5. Comparative Analysis and Identification of the Recommended Removal Action Alternative**

Removal Action as Defined by CERCLA and NCP



- Cleanup or removal of released hazardous substances from the environment**
- Actions to monitor the release or threat of release of hazardous substances**
- Actions to mitigate or prevent damage to the public health or welfare or to the environment**



Emergency Removal Action

Initiated within hours after a release or threat of release has been verified



Time Critical Removal Action (TCRA)

A period of 6 months or less exists before on-site removal activities must be initiated



Non-Time Critical Removal Action (NTCRA)

Onsite action can be taken more than 6 months after the planning period begins

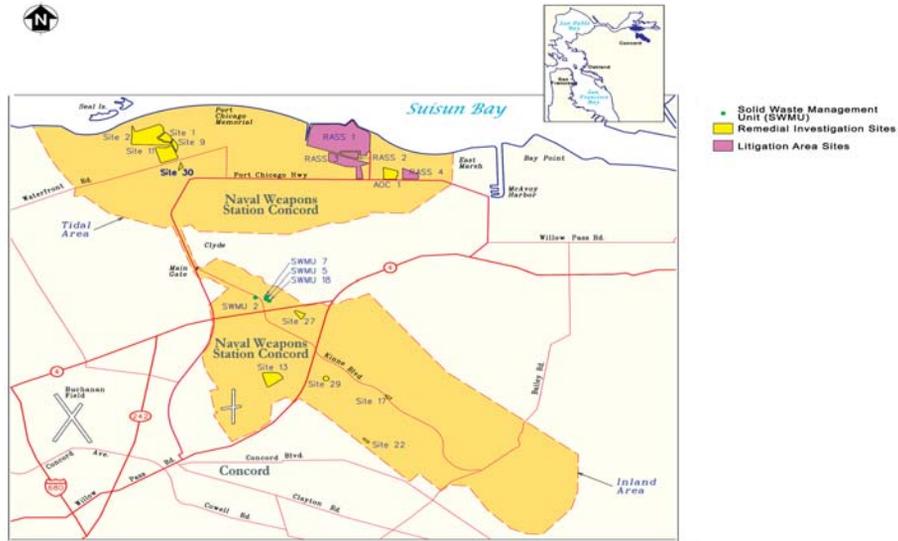
Components of the Engineering Evaluation / Cost Analysis



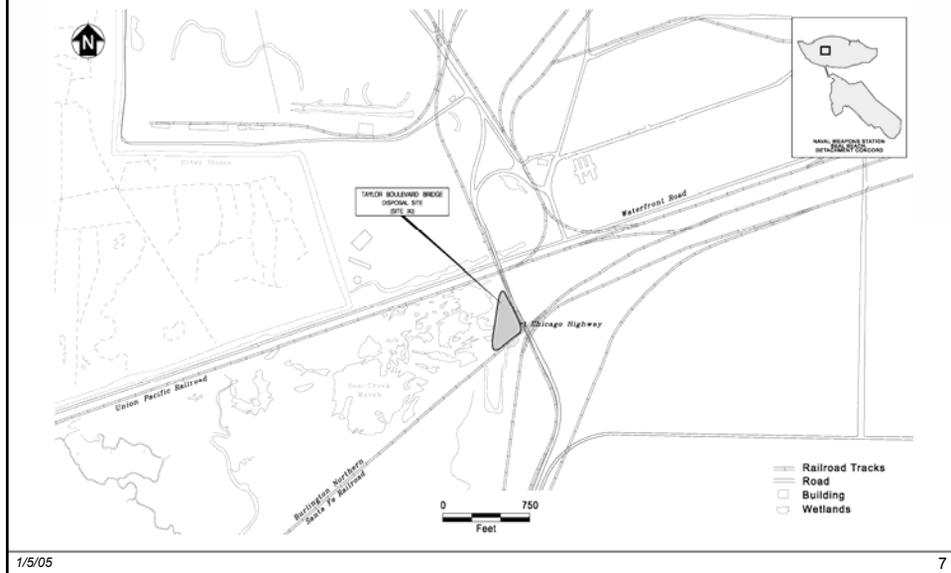
Section 300.415 (b) (4) (i) of the NCP requires an EE/CA for all non-time critical removal actions. The components of an EE/CA as defined by EPA guidance include:

- **Site characterization**
- **Identification of Removal Action Objectives**
- **Identification and Comprehensive analysis of Removal Action Alternatives**
- **Recommended Removal Action Alternative**

Site Location



Site Location (Cont'd)



- **Very small wetland (<1 acre)**
- **Historic non-Navy municipal landfill; date and source of debris unknown**
- **Designated as an IR site in 1996**
- **Remedial investigation completed in June 2004**



- **Site 30 is triangular and is bordered by wetlands (referred to as Seal Creek Marsh) to the south and west**
- **Debris consisting of broken glass and ceramic fragments litters the ground surface at much of the site**
- **Surface vegetation covers the debris in most areas**



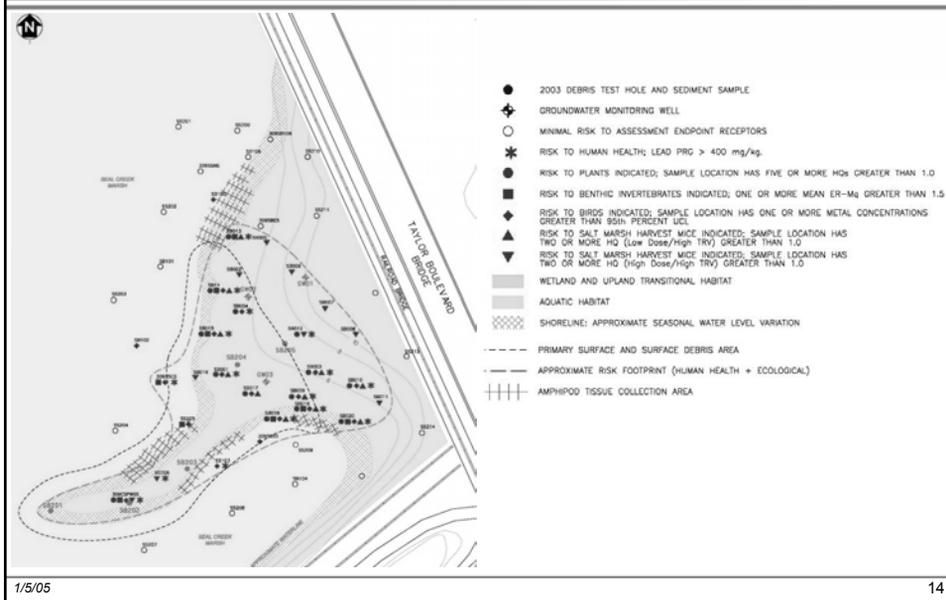
- **60 sediment samples were collected across the site to characterize contamination**
 - 48 surface samples between 0-0.5 ft and 12 subsurface samples between 1-2.5 feet were collected
- **22 test pits were dug across the site to determine depth and lateral extent of debris**
- **Bioassays and tissue residue samples were collected to evaluate ecological risk**
- **Three groundwater monitoring wells installed and samples collected**



- **Human Health Risk Evaluation (HHRA)**
 - Lead identified as a risk driver
 - Site divided into two areas:
 - Lead concentrations greater than 400 mg/kg (based on EPA 9 residential PRG)
 - Lead Concentrations less than 400 mg/kg
 - A risk footprint was devised to include sample locations where lead concentrations exceeded 400 mg/kg



- **Ecological Risk Evaluation (ERA)**
 - Five assessment endpoints were considered (wetland and upland transitional plants, benthic invertebrates, waterfowl, shore birds and the Salt Marsh Harvest Mouse)
 - Concentrations of copper, lead, selenium, and zinc detected at concentrations that may pose a risk to invertebrate receptors
 - Risk to aquatic birds, as represented by the black-necked stilt and mallard, from exposure to arsenic, cadmium, copper, lead, mercury, selenium, and zinc exists in debris areas
 - Risk to the Salt Marsh Harvest Mouse from exposure to arsenic, copper, lead, mercury, selenium, and zinc in debris areas



Removal Action Objectives (RAOs) and Action Levels

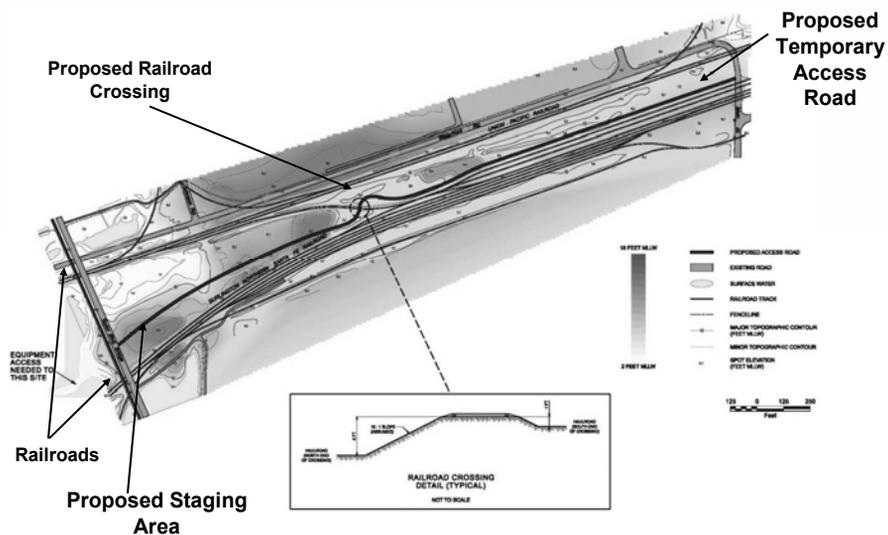
- **The RAOs for the site are:**
 - To promote overall protection of human health and the environment
 - Restrict the potential for humans and other ecological receptors to contact debris contaminated soil near the ground surface
- **The Remedial Action Levels**
 - Lead (268 mg/kg)
 - Removal of debris

Removal Action Alternatives

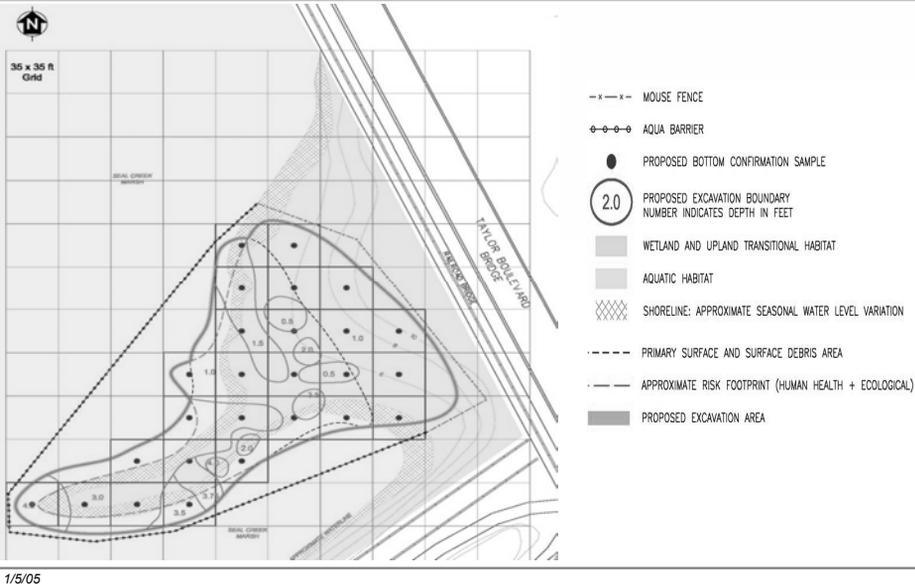


- As required for an EE/CA, removal action alternatives were developed:
 - Alternative 1: No action with monitoring.
 - Alternative 2: Excavation, stabilization, confirmation sampling, on-site disposal, Long Term Monitoring, Land Use Controls (LUCs), and habitat restoration.
 - Alternative 3: Excavation, confirmation sampling, off-site disposal, and habitat restoration.
- As required for an EE/CA, each Alternative was evaluated based on:
 - Effectiveness
 - Implementability
 - Cost
- The draft engineering evaluation has not yet received full regulatory review – Comments due on January 25, 2005

Mobilization



Excavation Foot Print

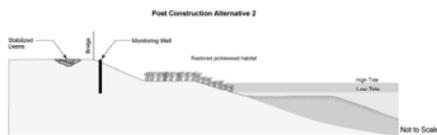
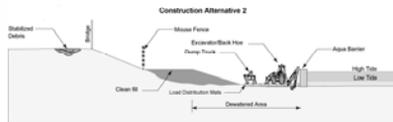


Alternative 1



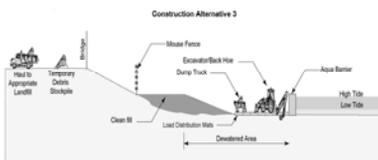
- **No Action with Monitoring**
- **Required by NCP to provide a comparative baseline to evaluate other alternatives**
- **Annual monitoring to evaluate the health of plant and animal populations**
- **Annual groundwater sampling**

Alternative 2



- Excavation of 2,500 and 4,400 yd³ of debris and soils according to the proposed excavation footprint identified, and confirmation sampling
- Installation of species and water control systems
- Stabilization of excavated waste
- On-site containment of stabilized waste
- Reestablishment of the Pickleweed habitat

Alternative 3



- Mechanical excavation of contaminated soil, sediments, and debris according to the proposed excavation footprint identified, and confirmation sampling.
- Off-site disposal of contaminated soil, sediments, and debris at appropriate landfill(s).
- The EE/CA assumed that 70 percent of the waste will be disposed of in a Class I facility and 30 percent in a Class II facility.

Comparative Analysis and Identification of the Recommended Removal Action Alternative



Evaluation Criteria	Alternative 1	Alternative 2	Alternative 3
Overall Protection of Human Health and the Environment	5	2	1
Compliance with ARARs	5	3	1
Long-Term Effectiveness	5	3	1
Reduction of Toxicity Mobility, Volume	5	3	5
Short-Term Effectiveness	1	2	3
Implementability	1	3	2
State Acceptance (estimated)	5	2	1
Community Acceptance (estimated)	5	2	1
Sum	33	23	18
Cost	\$323,022	\$1,641,966	\$1,611,350
Overall Rating	3	2	1

Ranking Scale:

- 1 Meets Criteria Best
- 5 Meets Criteria Least

Questions?



ATTACHMENT F

**TECHNICAL ASSISTANCE GRANT CLEARWATER REVIVIAL COMPANY
COMMENTS ON THE SITE 30 TAYLOR BOULEVARD BRIDGE ENGINEERING
EVALUATION AND COST ANALYSIS FOR A NON-TIME
CRITICAL REMOVAL ACTION
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**JANUARY 5, 2004
(6 Pages)**

Comments
Non-Time Critical Removal Action
Engineering Evaluation/Cost Analysis
Taylor Bridge Disposal Site (Site 30)
Concord Naval Weapons Station Superfund Site

On behalf of the Concord Naval Weapons Station – Local Reuse Association (LRA), Clearwater Revival Company (CRC) completed a review of the following document:

SulTech, 2004, Engineering Evaluation/Cost Analysis, Non-Time Critical Removal Action for Taylor Boulevard Bridge Site (Site 30), Naval Weapons Station Seal Beach Detachment Concord, Concord California, Draft,” November 24.

The Engineering Evaluation/Cost Analysis (EE/CA) proposes a Non-time Critical Removal Action for soil contamination at the Taylor Boulevard Bridge Disposal Site (Site 30), an area of approximately 0.70 acres that extends into the Seal Creek Marsh. Lead is the most widespread contaminant, though arsenic, copper, chromium, polynuclear aromatic hydrocarbons (PAHs) and dioxins have been found to a limited extent. The Removal Action would excavate 2,500 to 4,400 cubic yards of contaminated soil and debris, followed by backfilling and wetlands restoration. Site 30 is inaccessible and will require construction of a rail crossing and haul road. A source of soil suitable for wetlands backfill has not been identified.

Two alternatives were evaluated for the soil removal in addition to the no action alternative:

Alternative No. 2 – Excavation, Stabilization, and On-site Disposal
Alternative No. 3 – Excavation and Off-site Disposal

Alternative No. 3 was selected as the preferred alternative. The Executive Summary has proposed using the Site 1 Tidal Area Landfill as a disposal site to save \$652,000 over the cost of an off-site facility.

Based on CRC’s review the following comments were generated concerning the proposed Non-Time Critical Removal Action for Site 30.

GENERAL COMMENTS

Comment No. 1: It is CRC’s opinion that the EE/CA was not competently prepared and that the Navy has wasted limited government and community resources by releasing a document of such poor quality. CRC believes that the Navy should prepare and circulate a new EE/CA for public review that addresses the concerns below.

Comment No. 2: The EE/CA does not include, as required, a comparison of a “few relevant and viable removal alternatives.”¹

Comment No. 3: The EE/CA should have been prepared as a joint EE/CA-Remedial Action Plan (RAP) to meet state requirements for removal actions.²

APPROPRIATENESS OF REMOVAL ACTION

Comment No. 4: In citing which factors³ demonstrate the appropriateness of a removal action at Site 30 the EE/CA did not correctly quote the regulation. The correct citation is:

Actual or potential exposure to nearby human populations, **animals, or the food chain** from hazardous substances or pollutants or contaminants. [40 CFR 300.415(b)(2)(i)] **(Omitted portion shown in bold)**

CRC believes the omitted portion of the cited regulation justifies the removal action. Animals and the food-chain are actually exposed to Site 30 and human exposure is largely prevented by institutional controls (guarded military installation). The EE/CA should be revised to accurately cite the regulation.

Comment No. 5: The following factor, not identified in the EE/CA, demonstrates the appropriateness of a removal action at Site 30:

Actual or potential contamination of drinking water supplies or sensitive ecosystems. [40 CFR 300.415(b)(2)(i)]

Site 30 should be identified as a sensitive ecosystem for purposes of this removal action. After all, the EE/CA states that permanently eliminating the 0.5 acres of pickleweed habitat at Site 30 would “...drastically reduce the amount of habitat available to the SMHM [salt marsh harvest mouse], a federally endangered species.”⁴

¹ U.S. EPA, 1993, “Conducting Non-Time-Critical Removal Actions Under CERCLA,” Office of Emergency and Remedial Response, EPA/5409/F-94/009, December.

² Health and Safety Code Section 25356.1

³ 40 CFR 300.315(b)(2) The following factors shall be considered in determining the appropriateness of a removal action pursuant to this section: (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; (ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems; (iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release; (iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; (vi) Threat of fire or explosion; (vii) The availability of other appropriate federal or state response mechanisms to respond to the release; and (viii) Other situations or factors that may pose threats to public health or welfare of the United States or the environment.

⁴ EE/CA, page 25.



Comment No. 6: The EE/CA also sites this factor as demonstrating the appropriateness of a removal action:

High levels of hazardous substances or pollutants or contaminants in soil largely at or near the surface that may migrate. [(40 CFR 300.415(b)(2)(iv)]

The EE/CA implies that human health may be adversely affected if the removal action is not conducted. Since the conditions at Site 30 have apparently existed for over 60 years, the Final EE/CA should provide further information on the migration pathways of concern.

CLEANUP GOALS

Comment No. 7: The EE/CA refers to two different cleanup levels for lead, so it is not clear which cleanup goal confirmation samples will be compared with to determine if additional soil excavation is required.

One lead cleanup level is the Region IX Preliminary Remediation Goal of 400 mg/kg for residential land-use. The EE/CA indicates that achieving this cleanup level would result in no land-use restrictions being placed on the site. California however, has established a standard for lead in soil of 130 mg/kg for residential land-use. Unless the limits of the proposed excavation are extended to encompass soils containing lead above 130 mg/kg, future land-use restrictions would still be required.

In addition to the 400 mg/kg PRG, the EE/CA sites a lead cleanup value of 268 mg/kg. This is the highest detection of lead outside the limits of the proposed excavation.

Comment No. 8: The limited investigation of groundwater contamination at Site 30 shows significant arsenic contamination. Despite this the EE/CA indicates:

This action is intended to serve as the final remedial action for residential human health and ecological risks associated with the known contamination within Site 30.⁵

Groundwater contamination at Site 30 should be adequately investigated to determine if future remedial action is necessary.

Comment No. 9: A PAH concentration of 0.62 mg/kg benzo(a)pyrene equivalents is a removal action objective. The Sampling and Analysis Plan for the Removal Action should ensure that PAH soil analysis has low enough detection limits in order to evaluate the confirmation samples. EPA Method 8310 provides lower detection limits, than the method used during previous RI sampling.

⁵ EE/CA, page 17



Comment No. 10: The Sampling and Analysis Plan should describe monitoring activities that ensure that pickleweed vegetation is established at the restored site. The monitoring should include “triggers” so that actions will be taken if vegetation restoration is not fully successful.

ON-SITE DISPOSAL COMMENTS

Comment No. 11: The EE/CA’s analysis of Applicable or Relevant and Appropriate Requirements (ARARs) for on-site waste disposal states in its entirety:

“There are no ARARs for the on-site disposal other than the RCRA land disposal restrictions described in Section 4.2.1 and in the chemical specific discussion” (Appendix A, Section 4.2.3)

The EE/CA fails to identify a number of waste disposal requirements including Corrective Action Management Units (CAMU) regulations that govern on-site disposal. Placing wastes in a CAMU is not considered land disposal. Therefore, RCRA land disposal restrictions would not apply.

The placement of wastes in a CAMU is at the discretion of the state. California’s CAMU regulations require treatment of RCRA wastes. Treatment must reduce the TCLP result by 90 percent or remove 90 percent of the total metal from the waste.⁶

Please correct the ARAR discussion in the EE/CA so the restrictions for on-site waste disposal are not ignored.

RCRA WASTE CHARACTERIZATION

Excavated soil is considered a waste that requires characterization to determine restrictions on land disposal. For example, excavated soil would be prohibited from land disposal if it contains “free liquids.”

Excavated soil would be characterized as a RCRA Hazardous waste, that must be treated prior to land disposal, if results from the Toxicity Characteristic Leaching Potential (TCLP) test contain greater than 5 mg/L leachable lead. Soil would be characterized as a non-RCRA (California only) Hazardous Waste if it contains total lead concentrations above 1,000 mg/kg and a TCLP test result less than 5 mg/L. California regulations also require that wastes containing greater than 350 ppm total lead to be placed in a hazardous waste landfill.⁷

⁶ Title 22 California Code of Regulations, 66264.552, Corrective Action Management Units (CAMU) for RCRA Hazardous Waste

⁷ California Health and Safety Code “25157.8 (a) Except as provided in subdivision (c), on and after January 1, 1999, **no person shall dispose waste that contains total lead in excess of 350 parts per million**, copper in excess



RCRA waste characterization guidance uses the 95 percent upper confidence limit (UCL) value to determine waste characteristics. For the soils to be excavated the 95 percent UCL for total lead in soil is 3,470 mg/kg.⁸

Comment No. 12: The soil to be excavated has not been characterized because according to the EE/CA:

“The current analytical results are not adequate to identify the disposal facility or the land disposal treatment requirements.” (EE/CA, p. 38)

It was an unacceptable oversight that the recently completed Site 30 Remedial Investigation did not collect samples to determine land disposal restrictions on excavated waste. According to EPA’s RI/FS Guidance Document⁹, the need for this data should have been identified during the scoping phase:

“The identification of potential technologies at this stage will help ensure that data needed to evaluate them (e.g. BTU value of waste to evaluate thermal destruction capabilities) can be collected as early as possible.”

The lack of TCLP data makes it impossible to evaluate land disposal alternatives for soil excavated from Site 30. This data inadequacy should be addressed at sites throughout CNWS where remedial alternatives may potentially include excavation and disposal.

Comment No. 13: Though the need to determine the waste classification is noted in both Alternatives No. 2 and Alternative No. 3 the detailed cost estimate includes no such costs for Alternative No 2, and only a single waste classification sample for Alternative No. 3. Similarly, Alternative No. 2 does not include any sample costs for determining if waste stabilization meets the treatment objectives.

ALTERNATIVE No. 2 –STABILIZATION, ON-SITE DISPOSAL

Comment No. 14: It is CRC’s opinion that Alternative No. 2 is not viable, and as a result no comparison of viable alternatives was made during the EE/CA. Alternative No. 2 proposes digging a pit near Site 30 to the depth of groundwater and using the pit to dispose of stabilized soil and debris from the removal action. According to the EE/CA:

“On-site disposal will be designed such that no new exposure pathways to disposed material are created.”

of 2500 parts per million, or nickel in excess of 2000 part per million, **to land at other than a class I hazardous waste disposal facility...**” (emphasis ours). This ARAR was not identified in the EE/CA.

⁸ EE/CA, page 14; 95 percent UCL for samples collected in Area A, the center of the site were lead concentrations in soil exceeded 400 mg/kg.

⁹ 1988, US EPA, “Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Interim Final,” Office of Emergency and Remedial Response, October.



Among the most important design criteria for landfills is location. A pit dug near Site 30 is an inappropriate location for a number of reasons, including a separation of 50 feet does not exist between the bottom of the landfilled wastes and groundwater.

Comment No. 15: The EE/CA incorrectly states that:

“Once stabilized the waste should no longer be hazardous.”

The stabilized wastes will still require management as RCRA wastes and the proposed on-site disposal cell will be subject to CAMU regulations requiring a composite liner and a leachate control system.

Comment No. 16: The cost details indicate 5,262 cubic yards of soil will be required to backfill Site 30 after the excavation of 2,500 to 4,400 cubic yards of contaminated soil and debris. These soil volumes contradict the Conceptual Grading Plan (Figure 8) and Site Reconstruction Limits (Figure 9), that indicate that more soil is to be excavated from Site 30, then will be used as back-fill.

Comment No. 17: No costs or equipment are proposed to screen soils to remove debris prior to the stabilization step. Is it the intention to place a railroad tie in a mixer with concrete?

Comment No. 18: CNWS is an RCRA-permitted facility and therefore temporary units for treatment of corrective action wastes, and stockpiling of corrective action wastes are subject to RCRA requirements. No costs or equipment are proposed to comply with RCRA facility requirements.

ALTERNATIVE No. 3 –STABILIZATION, OFF-SITE DISPOSAL

Comment No. 19: Similar to Alternative No. 2, the analysis of Alternative No. 3 proposed too much backfill, and lacked costs and equipment to comply with RCRA Facility requirements.

Comment No. 20: No costs or equipment are proposed to screen out debris or to de-water wastes prior to transportation off-site. The EE/CA has proposed using the Tidal Area Landfill to dispose of soil excavated from Site 30 citing a savings of \$652,000 in the cost of off-site disposal. This cost represents transportation, stabilization and disposal costs. Since stabilization is likely to be required the cost savings should be reduced by \$480,000, which is Alternative No. 2’s estimated cost to stabilize the excavated soil.