



TETRA TECH EM INC.

March 2, 2007

Dear RAB Members,

On behalf of the Navy, enclosed please find the January 10, 2007 final RAB meeting minutes for your information and records.

If there are any questions regarding the enclosed minutes, please contact Carolyn Hunter at (415) 222-8297 or Carolyn.hunter@ttemi.com.

Sincerely,

Carolyn Hunter
Community Relations Specialist
Tetra Tech EMI

FINAL
MEETING MINUTES
RESTORATION ADVISORY BOARD
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD
CONCORD, CALIFORNIA
JANUARY 10, 2007

These minutes reflect general issues raised, agreements reached, and action items identified at the Restoration Advisory Board (RAB) meeting for Naval Weapons Station Seal Beach Detachment Concord (NAVWPNSTA Seal Beach Det Concord), California. The meeting was held from 6:30 p.m. to 8:00 p.m. on January 10, 2007, at the Concord Police Department Community Meeting 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.

Roger Caswell (U.S. Army) introduced himself as the Environmental Coordinator for the Army. The Army will be taking over cleanup responsibility in the Tidal Area in the near future. Mr. Caswell is going to work with the U.S. Department of the Navy (Navy) to have a smooth transition of the cleanup activities in the Tidal Area.

Public Comments

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

February 2007 RAB Agenda Approval

Angela Lind (Navy RAB Co-Chair) reviewed the proposed agenda for the February 7, 2007 RAB meeting.

The Navy plans to provide the following presentations for the February 2007 RAB meeting:

- Munitions Response Program and Ordnance Safety
- Findings of the Draft Final Military Munitions Response Program (MMRP) Preliminary Assessment (PA)
- Inland Area Community Relations Plan Update

Ms. Lind asked the RAB to approve the February 2007 agenda. The RAB voted to approve the February 2007 meeting agenda.

II. NOVEMBER 2006 RAB MEETING MINUTES APPROVAL

Ms. Lind asked the RAB for comments on the minutes from the meeting held on November 1, 2006. No comments were received on the November 1, 2006 RAB meeting minutes. The Navy will finalize the minutes from the November 1, 2006 meeting and distribute them to the RAB.

Ms. Lind reviewed the action items from the November 1, 2006 RAB meeting. Ms. Lind provided a handout of the Tidal Area sites and their cleanup priority as requested by the RAB. Ms. Lind stated that there is a lot of information in the priority list handout. The columns to focus on are the site name and the ranking column.

Action Item

1. The Navy will finalize and distribute the November 1, 2006 RAB meeting minutes.

III. COMMITTEE REPORTS AND ANNOUNCEMENTS

Ms. Williams announced that Jessica Hamburger (Contra Costa Resource Conservation District [CCRCD]) has resigned from the RAB. Ms. Williams is going to talk to Ms. Hamburger and see if there is someone else within CCRCD that would be interested in taking her place on the RAB.

IV. REMEDIAL PROJECT MANAGER (RPM) UPDATE

Navy Update

Ms. Lind reviewed the Navy RPM update (Attachment C).

Ms. Lind stated that the Navy and agencies are currently working on the Litigation Area remedial goals, which will be discussed in the presentation under agenda item V. Once the remedial goals are determined, the Navy will conduct risk modeling for the Litigation Area which will be presented to the RAB at a future meeting.

Ms. Lind stated that the Navy is working on a redesign of the Site 1 Tidal Area Landfill cap. The Navy will provide the agencies the revised landfill cap design drawings later in January 2007 for review. Once the agencies have an opportunity to review the revised design drawings, the RPMs will schedule a meeting to review the revised drawings.

Ms. Lind stated that the Navy is expecting comments from the agencies on the MMRP PA by the end of January 2007.

The Navy is continuing work on the Underground Storage Tank (UST) Program and receiving closure letters from the San Francisco Bay Regional Water Quality Control Board (Water Board).

Environmental Protection Agency (EPA) Update

Phillip Ramsey (EPA) stated that EPA prepared comments on the Draft Work Plan for Treatability Study at Solid Waste Management Units (SWMUs) 2, 5, 7, and 18. EPA asked the Navy to conduct an additional air sparging soil vapor extraction pilot test at the SWMU sites. EPA is suggesting that the Navy conduct the pilot study in multiple areas to include the source.

Mr. Ramsey stated that EPA is currently reviewing the Site 29 Remedial Investigation Work Plan; Site 29 is a site in the Inland Area portion of the base.

Water Board Update

Alan Friedman (Water Board) stated that he attended a UST RPM meeting on November 6, 2006. The RPMs discussed the need to conduct more work at the former Port Chicago Gas Station site due to some upgradient hits of volatile organic compounds.

Mr. Friedman stated that the Water Board is reviewing the Site 1 Tidal Area Landfill groundwater data.

Mr. Friedman stated that he will participate in the upcoming Litigation Area Feasibility Study meeting, which will occur on January 25, 2007.

V. REMEDIAL GOALS FOR THE SUPPLEMENTAL FEASIBILITY STUDY (FS) AT THE LITIGATION AREA

Cindi Rose (Tetra Tech EM Inc.) provided a presentation on the remedial goals for the supplemental FS at the Litigation Area. The presentation is included as Attachment D.

Luis Garcia-Bakarich (EPA) asked what is the potential harm from the contaminants to the receptors in the Litigation Area. Ms. Rose stated that there is a mathematical equation used to model risk based on a toxicity reference value (TRV) that is considered to have no effects, and a TRV that is considered to have low effects. The studies that the TRVs are based on consider receptor growth and reproduction.

Mr. Caswell asked if the Navy used a worst case scenario when determining the factors that impact the site receptors. Ms. Rose stated that they did.

VI. OTHER TOPICS, NEXT MEETING, AND ACTION ITEMS

RAB Recruitment

Ms. Williams stated that the RAB needs to actively begin recruitment for new members due to the decline in member attendance at the monthly meetings. Ms. Williams is going to check with the RAB members to gauge their interest in participating and attending meetings.

The RAB discussed various places in the community to advertise the meetings to get more community interest. Ms. Williams stated that at the October 2006 City Council meeting they announced the RAB meetings and that we are looking for new members. Ric Notini (City of Concord) stated that he will work with the Navy to get more information about the RAB to the City Council, Supervisors, and local community.

Action Items:

2. Ms. Williams will check with the RAB members on their interest in participating in the meetings.
3. The Navy and City of Concord will look into getting more information to the community

representatives on the RAB.

The next RAB meeting is scheduled for 6:30 to 8:30 p.m. on Wednesday, February 7, 2007 at the Concord Police Station Community Room.

The following action items were generated during the RAB meeting on January 10, 2007

No.	Action Item	Target Date for Completion	Completion Date (or Status)
1	The Navy will finalize and distribute the November 1, 2006 RAB meeting minutes.	1/26/07	This action item is complete.
2	Ms. Williams will check in with the RAB members on their interest in participating in the meetings.	2/7/07	This action item is complete.
3.	The Navy and City of Concord will look into getting more information to the community representatives on the RAB.	2/7/07	This action item is complete.

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

JANUARY 10, 2007

(One Page)

**ATTENDEES AND AFFILIATIONS
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA
JANUARY 10, 2007**

<u>Name</u>	<u>Affiliation</u>	<u>Telephone</u>
Wayne Akiyama	Shaw Group	(925) 288-2003
Luis Garcia-Bakarich	EPA	(415) 972-3237
Beth Byrne	Concord Resident	(925) 686-4815
Harry Byrne	Concord Resident	(925) 686-4815
Joanna Canepa	TtEMI	(425) 877-2806
Roger Caswell	U.S. Army	(925) 246-4118
Lik-See Chung	TN & Associates	(650) 504-5122
Diana Davis	EMS	(925) 939-0120
Alan Friedman	Water Board	(510) 622-2347
Greg Glaser*	Danville Resident	(925) 363-5570
Carolyn Hunter	TtEMI	(415) 222-8297
John Kaiser	Water Board	(510) 622-2368
Sylwester Kosowski	U.S. Navy, NAVFAC Southwest	(619) 532-1027
Angie Lind	U.S. Navy, NAVFAC Southwest	(619) 532-4228
Rick Notini	City of Concord	(925) 671-3024
Phillip Ramsey	EPA	(415) 972-3006
Cindi Rose	TtEMI	(415) 222-8286
Mary Lou Williams*	Concord Resident	(925) 685-1415

Notes:

*	Community Restoration Advisory Board (RAB) Member
EPA	U.S. Environmental Protection Agency
NAVFAC	Naval Facilities Engineering Command
TtEMI	Tetra Tech EM Inc.
Water Board	San Francisco Bay Regional Water Quality Control Board

ATTACHMENT B

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

JANUARY 10, 2007
(One Page)

AGENDA

NAVAL WEAPONS STATION SEAL BEACH (NWSSB) DETACHMENT CONCORD RESTORATION ADVISORY BOARD (RAB) MEETING

Wednesday, January 10, 2007
6:30 p.m. – 8:30 p.m.

Location: Concord Police Department Community Meeting Room
1350 Galindo Street, Concord, CA 94520

- 6:30 – 6:45 Call to Order
- Welcome
 - Introductions
 - Public Comments
 - February 2007 Agenda Approval
- Lead: Community Co-chair
- 6:45 – 6:50 Approval of November 2006 Meeting Minutes
Review Unresolved Business
Lead: Navy Co-chair
- 6:50 – 7: 30 Committee Reports/Announcements
- RAB Announcements, Reports or other business
 - Remedial Project Managers' Update (Navy/EPA/DTSC/RWQCB)
- 7:30 – 7:40 Break
- 7:40 – 8:30 Presentation: Litigation Area Ecological Risk Assessment/Remedial Goals (Tidal Area)
Presenter: Navy
- 8:30 Adjourn

*NWSSB DETACHMENT CONCORD RAB Meetings are held the first Wednesday of every month, unless changed.
Information regarding the Environmental Restoration program at NWSSB Detachment Concord can be found at:*

- NWSSB DETACHMENT CONCORD program prior to December 2005 -

<http://www.sbeach.navy.mil/Programs/Environmental/IR/IR.htm>

- NWSSB DETACHMENT CONCORD program after December 2005 -

<http://www.navybracpmo.org/brac2005/bracbases/ca/concord/default.aspx>;

In addition, a public voicemail is available for questions at (925) 246-4020

NAVFAC Public Affairs Officer: Mr. Lee Saunders, (619) 532-3100, lee.saunders@navy.mil

Lead RPM Tidal Area and Navy RAB Co-Chair: Mrs. Angie Lind, (619) 532-4228, angela.lind@navy.mil

BRAC Environmental Coordinator: Mr. Rick Weissenborn (619) 532-0952, richard.weissenborn@navy.mil

Community RAB Co-Chair: Mary Lou Williams, Mlou1015@aol.com

ATTACHMENT C

**NAVY REMEDIAL PROJECT MANAGER'S UPDATE
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 10, 2007
(2 Pages)



***Navy RPM Update for 10 January 2007 Meeting of Naval Weapons Station,
Detachment Concord Restoration Advisory Board (RAB)***

Summary of Navy Remedial Project Manager (RPM) Activities since the last RAB Meeting held on Wednesday, 1 November 2006.

Tidal Area

- **Litigation IR Site:** Navy, U.S. EPA, DTSC, RWQCB, DF&G, and Navy Contractor Tetra Tech met on **December 12th** to discuss addition of the Virginia Rail as a receptor with a site use factor of 66% for the FS. All parties agreed to using a risk range between NOAEL and LOAEL to set remediation goals vice changing the site use factor. A follow-on meeting is scheduled for **January 25th** in San Diego to select the RGs based on modeling different risk ranges.
- **IR Site 1 Landfill:** Navy contractor Tetra Tech is currently working on redesigning Landfill cap in **December**. Completion of a draft redesign is scheduled for **January 07**. Navy received a draft Groundwater Investigation Data Submittal from Tetra Tech on **November 15, 2006**. Navy provided comments on the report on **November 22, 2006**. Sent to all on **December 21, 2006**.
- **MMRP:** Navy contractor Malcolm Pirnie sent out Draft Final PA to all the week of **December 11th**. Navy kickoff meeting and site visit for SI's at MMRP sites schedule the week of **January 15th**. Malcolm Pirnie along with NOSSA will be providing presentations in **February** on the MMRP program as well as a summary of the MMRP PA.
- **IR Sites 2, 9, and 11:** Tetra Tech is planning to collect sediment samples in **January 2007**. The data gaps sampling is anticipated to be completed by the end of **January 2007**. The revised draft final RI report is scheduled to be submitted to all in **April 2007**.
- **IR Site 30:** Navy received a draft work plan (including SAP and HASP) for a non-time critical removal action (NTCRA) from Geofon, Inc. for internal review in **December 2006**. Navy provided some comments on the work plan on **December 18, 2006**. Scheduled to be sent to all on or about **January 15, 2007**.

- **IR Site 31:** Navy received from Tetra Tech a first quarter 2006 Groundwater, Soil, and Plant monitoring Draft letter report for internal review. Navy provided comments on the report on **December 6, 2006**. Scheduled to be sent to all on or about **January 15, 2007**.
- **UST Program:** The next RPM meeting/teleconference call is scheduled on January 24, 2006.
- **UST Site E-108:** The groundwater monitoring and sampling activities for the fourth quarter are completed. The Navy received from the Regional Water Quality Control Board (Water Board) staff concurrence with the Third Quarter Groundwater Monitoring report, dated October 2006. The report is final. Tetra Tech is preparing the groundwater monitoring summary report, which will cover all four quarters of groundwater data. The report is scheduled to be sent to all during the first quarter of 2007.
- **UST Site Port Chicago Main Street Gas Station:** The Navy submitted to the Water Board for review and approval a site investigation summary and a closure request letter for UST TT-10 through TT-18 on December 12, 2006.
- **UST Site Port Chicago Main Street Gas Station Geophysical Anomaly at TT 21:** Engineering, Construction & Support Services (EAR) completed a utility survey and an exploratory potholing investigation to confirm the presence of a suspected UST in November 2006. Three USTs (TT 21, A, B, and C) were discovered.
- **UST Site Port Chicago Main Street Gas Station (UST Site TT 21 A, B, and C):** The Navy winterized the UST Site TT21, A, B, and C. The EAR is preparing a work plan for the removal of USTs TT21 A, B, and C. The work plan is scheduled to be sent to all during the first quarter of 2007.
- **UST Site A-16:** The Navy submitted the final technical memorandum in October 2006. The Navy will conduct a quarterly groundwater monitoring for one year to evaluate trends in contaminant concentrations above Environmental Screening Levels (ESLs).

ATTACHMENT D

**REMEDIAL GOALS FOR THE SUPPLEMENTAL FEASIBILITY STUDY AT THE
LITIGATION AREA PRESENTATION
RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

JANUARY 10, 2007

(10 Pages)



Remedial Goals for the Supplemental Feasibility Study at the Litigation Area

Naval Weapons Station Seal Beach Detachment Concord



by
Cindi Rose
Tetra Tech EMI
January 10, 2007

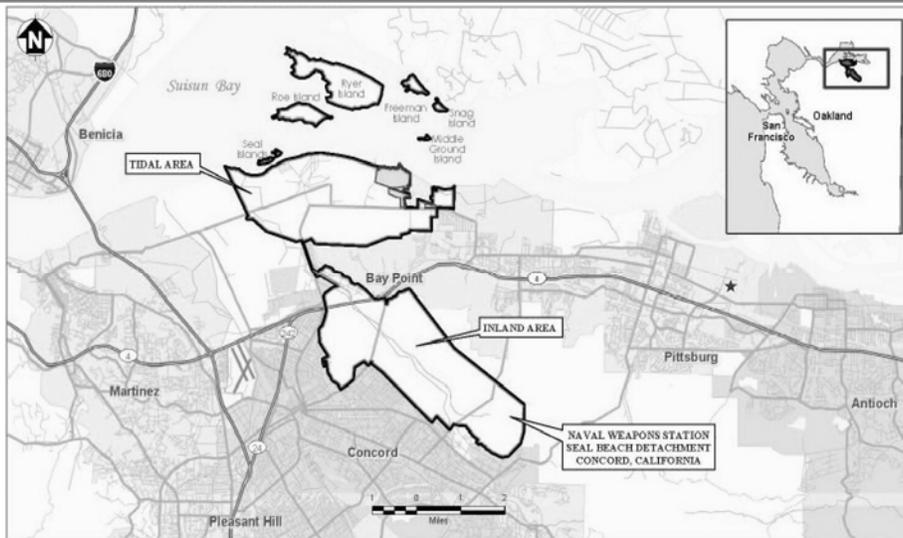


Overview



- **Definitions**
 - Preliminary Remediation Goals (PRG)
 - Remediation Goals (RG)
 - Remedial Action Objective (RAO)
- **PRGs, RGs, RAOs for the Concord Litigation Area draft final Supplemental Feasibility Study (FS)**
- **Refinement of RGs for revised draft final Supplemental FS**
- **Questions**

Site Vicinity



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January 10, 2007

Site Refresher Aerial Photo – USGS, February 2004



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January 10, 2007

Current Status



- **Navy and Agencies are currently working toward resolution of agency comments on the Draft Final Supplemental FS (submitted 5/29/06)**
- **A central issue to be resolved are the Remediation Goals (RG) for sediment**
- **Goal is for team to agree on achievable and ecologically protective RGs for sediment**

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January 10, 2007

Preliminary Remediation Goals



- **Preliminary Remediation Goals (PRG)**
 - **Initial or proposed clean-up goals developed to provide risk reduction targets**
 - **Refined into remediation goals (RG) during the Feasibility Study process based on cost, technical feasibility, community acceptance, uncertainty in the baseline risk assessment, schedule, and other risk management decisions**

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January 10, 2007

Remediation Goals



➤ Remediation Goals (RG)

- Media-specific cleanup goal for a selected remedial action
- Must be quantifiable and readily achievable
- Must be based on site-specific exposure pathways that are realistic, reasonable and complete
- Refined during the feasibility study process
- Final RGs are documented in the Record of Decision Document

A quantifiable clean up number for sediments

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January 10, 2007

Remedial Action Objectives



➤ Remedial Action Objectives (RAO)

- Provides a description of what the cleanup at the site is expected to accomplish
- Focuses the development of the remedial alternatives in the feasibility study

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January 10, 2007

PRGs in the Draft Final FS



- PRGs were calculated for combinations of seven metal COCs (arsenic, cadmium, copper, lead, mercury, selenium, and zinc) and the following wildlife receptors:
 - Mallard
 - California Black Rail
 - Great Blue Heron
 - Suisun Song Sparrow
 - River otter

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January 10, 2007

RGs in the Draft Final FS



- RGs were established based on a comparison of PRGs to Tidal Area ambient values. This is consistent with Navy policy which states that clean-up values will not be less than ambient.

	Arsenic (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Zinc (mg/kg)
PRG	46.2	0.55	9.13	0.07	0.14	0.05	116.0
Ambient	27	1.9	81	95	0.32	0.64*	264

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January 10, 2007

PRG in the Draft Final FS



- Based on the food-chain model calculation shown below, PRGs were selected based on the most conservative value for receptor/chemical pair. PRGs were based on the no-effect level toxicity reference value.

$$C_{\text{sed}} = \frac{(\text{TRV}_{\text{low}}/\text{SUF}) \times \text{BW}}{[\text{IR}_{\text{sed}} + (\text{IR}_{\text{prey}} \times \text{BAF})]}$$

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January 10, 2007

Remedial Action Objective in the Draft Final SFS



- RAO: Reduce exposure of fish and aquatic invertebrates and birds such as the black rail to acceptable levels of arsenic (46 mg/kg), cadmium (1.9 mg/kg), copper (81 mg/kg), mercury (0.32 mg/kg), lead (95 mg/kg), selenium (0.64 mg/kg), and zinc (264 mg/kg) in sediment in the Slough Area in RASS 1 (Units 9, 10, and 11).

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January 10, 2007

Nine Criteria Evaluation



- **During the nine-criteria evaluation in the draft final SFS, these RGs were determined not to be achievable. The following factors were considered:**
 - **The potential for recontamination**
 - **The ecological relationship of the affected area to the surrounding habitat**
 - **Whether the affected area is highly sensitive or ecologically unique**
 - **The recovery potential of the affected ecological receptors and the expected persistence of the chemicals of concern**

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January 10, 2007

Special Status Species



- **Salt Marsh Harvest Mouse - State and federally-listed Endangered**
- **California Black Rail – State Threatened**
- **Suisun Song Sparrow – State Species of Special Concern**



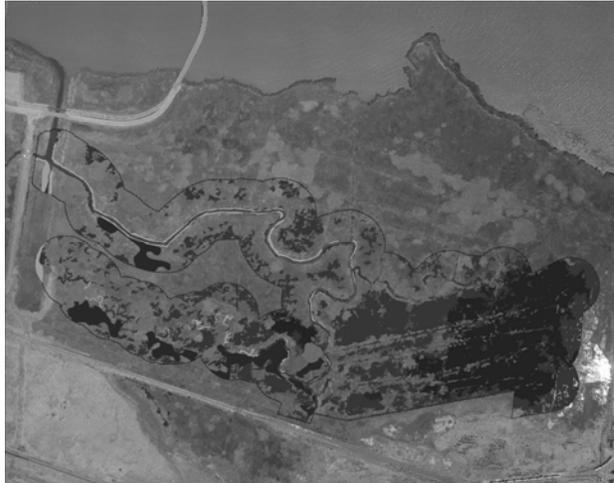
13

January 10, 2007

Vegetation Survey Results

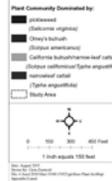


➤ Plant Communities Of Interest



Appendix E:
Plant Communities
of Interest Map

DRAFT



Olney's Bulrush (13.23 Ac.), California Bulrush (1.97 Ac.), Narrow-Leaf Cattail (4.34 Ac.), Pickleweed (22,58 Ac.)

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January 10, 2007

Reviewed Approaches for Refining the RGs



- Model receptors that forage only in the slough and ditch bottoms such as the Virginia rail. The Black rail feeds primarily on the marsh surface and is not as exposed to contaminated sediments



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January 10, 2007

Reviewed Approaches for Refining the RGs



- **Reduce the site use factors to account for uncertainty associated with time the receptors spend foraging in the sloughs and ditches**
 - **Insufficient data available to determine hours per day the slough and ditches are dry**

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January 10, 2007

Reviewed Approaches for Refining RGs



- **Determine RGs based on PRGs between the no-effect level and median-effect level for the most conservative receptor, the Virginia rail**
 - **RGs based on a risk range is consistent with Navy policy and EPA guidance**
 - **Allows for consideration of uncertainty regarding site use by the Virginia rail**
 - **Regulatory agencies agree with overall approach**
- **Remedial Project Manager meeting scheduled for January 25, 2007 to discuss further**

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January 10, 2007

Path Forward



- Reach agreement on RGs for sediment
- Prepare a revised Draft Final Supplemental FS that evaluates remedial alternatives
- Finalize Supplemental FS
- Prepare Proposed Plan (with Public Meeting)
- Prepare Record of Decision
- Implement Remedial Action

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January 10, 2007

Questions ?



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January 10, 2007