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MINUTES FROM THE 4 JUNE 2013 RESTORATION ADVISORY BOARD MEETING NSY
PORTSMOUTH ME
6/4/2013
RESOLUTION CONSULTANTS

**Portsmouth Naval Shipyard
Restoration Advisory Board Meeting
Kittery Town Hall, Kittery, Maine
June 4, 2013**

Attendees

Restoration Advisory Board (RAB) members at the meeting included the following:

- RAB Community Members:
 - Doug Bogen
 - Peter Britz
 - Mary Marshall
- Navy Representatives:
 - Lisa Joy, Portsmouth Naval Shipyard (PNS)
 - Elizabeth Middleton, Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic Remedial Project Manager (RPM)
 - Matt Thyng, NAVFAC, Public Works Department – Maine Environmental Division
- Regulatory Representatives:
 - Matt Audet, United States Environmental Protection Agency (USEPA)
 - David Wright, Maine Department of Environmental Protection (MEDEP)
- Other Participants:
 - Carolyn Lepage, Technical Assistance Grant (TAG) technical advisor to Seacoast Anti-Pollution League (SAPL)
 - Paul Dombrowski (Resolution Consultants)
 - Sandy Amborn (Resolution Consultants)
 - Deborah Cohen (Tetra Tech)

The following RAB members were not in attendance:

- RAB Community Members:
 - Jack McKenna
 - Diana McNabb
 - Roger Wells
- Navy Representatives:
 - Bryan Peed, NAVFAC Mid-Atlantic RPM
- Regulatory Representatives:
 - Iver McLeod, MEDEP
- Natural Resource Trustees:
 - Doug Grout, New Hampshire Fish and Game Department;
 - Denis-Marc Nault, Maine Department of Marine Resources
 - Ken Finkelstein, National Oceanic and Atmospheric Administration (NOAA)
 - Ken Munney, United States Fish and Wildlife Service (US FWS)

Opening Statements:

Lisa Joy, Navy RAB Co-Chair, opened the meeting by welcoming all attendees and led introductions of all attendees. Ms. Joy invited community members to raise questions and provide feedback and noted the Navy looks forward to the open dialogue of previous meetings. Additionally, the Navy noted its excitement for the milestones of upcoming Record of Decision (ROD) documents and is planning for public meetings later in the summer of 2013.

Doug Bogen, Community Co-Chair, offered no further opening comments.

Environmental Restoration Program Status and Updates:

Liz Middleton, Navy RPM, presented the status and updates for the Environmental Restoration (ER) Program at the Shipyard. Ms. Middleton and Mr. Bryan Peed are serving as temporary RPMs; both RPMs are available to assist on all aspects of the ER Program for the Shipyard. Ms. Middleton is primarily focused on activities through the Record of Decision stage (OU4, OU7, OU8, and OU9) and long-term management (OU3, Land Use Controls or LUCs). Mr. Peed's primary focus is Remedial Design (RD)/Remedial Action (RA) activities (OU2, OU4) and Construction Completion Reports (CCRs) (OU1 and Site 30).

Status updates were presented for the ER Program for each Operable Unit (OU) or Site, with the following update highlights:

- OU1 (Site 10: Former Battery Acid Tank No. 24). Regulatory comments on the CCR were received in May 2013, and the Navy is currently resolving those comments. The results from the second round of post-RA groundwater sampling were presented in a groundwater sampling report, which was submitted in March 2013. Regulatory comments were received in May 2013 on this document, and the Navy is currently resolving those comments. A LUC inspection is scheduled for OU1 in early June 2013.
- OU2 (Site 6: Defense Reutilization and Marketing Office (DRMO) Storage Yard and Site 29: Former Teepee Incinerator Site). The upcoming Remedial Action for OU2 will be conducted by two separate contractors for two different areas, which has required substantial coordination between the contractors and the Shipyard. The draft Remedial Action Work Plan (RAWP) for the Waste Disposal Area was submitted in April 2013, regulatory comments were received in May, and the Navy is currently resolving those comments. The draft RAWP for the DRMO Area was submitted in early May 2013 and is currently under regulatory review. Regulatory comments on both RAWPs are expected to be resolved in summer 2013. Remedial work is expected to begin in late summer 2013, with most construction activities anticipated to be completed by fall 2013. The Shipyard has already removed equipment and moved contractor parking from the DRMO Area. Additional excavation details were presented for each of the two areas with Excavation Areas 1 through 7 located in the DRMO Area and Excavation Areas 8 through 11 located in the Waste Disposal Area. Excavation will be performed to the depth of contaminated soil or top of rock fill/bedrock and backfilled with clean material for Excavation Areas 1 through 7. Excavation in Area 8 will extend to two feet below

ground surface (bgs) with backfill with a two-foot-thick soil cover. Excavation will advance to the top of bedrock (approximately 1 foot bgs), and no backfill will be required for Areas 9 through 11. A LUC inspection is scheduled for OU2 in early June 2013.

- OU3 (Site 8: Jamaica Island Landfill (JILF), Site 9: Former Mercury Burial Sites, and Site 11: Former Waste Oil Tanks Nos. 6 and 7). Annual landfill and LUC inspections were performed in late May 2013. A plan to abandon and remove the off-gas sampling probes outside of the landfill is being prepared by the Navy. The Navy would like to complete this removal during 2013.
- OU4 (Site 5: Former Industrial Waste Outfalls and Off-shore Areas Potentially Impacted by PNS Onshore ER Program Sites). The public comment period was completed during late March 2013 for the Proposed Remedial Action Plan (PRAP). A draft ROD was submitted April 29, 2013, and the Navy is working to resolve regulatory comments that were received in May 2013. The final ROD is anticipated to be signed during summer 2013. A Sampling and Analysis Plan to further delineate areas for sediment removal is anticipated to be submitted for regulatory review in early June 2013.
- OU7 (Site 32: Topeka Pier Site): Regulatory comments were received April/May 2013 on the draft final Feasibility Study (FS), and the Navy is preparing the final document. The remaining comments on the FS are minor and do not impact the proposed remedy, and the Navy submitted the draft PRAP for regulatory review in May 2013. A public meeting and public comment period is anticipated for the summer 2013 after the PRAP is finalized. A draft ROD will be submitted for regulatory review during summer 2013, and the final ROD is anticipated to be signed during fall 2013.
- OU9 (Site 34: Former Oil Gasification Plant, Building 62). The draft final FS was submitted in March 2013, and after resolving regulatory comments the Final FS was submitted May 31, 2013 along with the draft PRAP, which is currently undergoing regulatory review. A public meeting and public comment period is anticipated this summer after the PRAP is finalized. Similar to OU7, a draft ROD will be submitted for regulatory review during summer 2013, and the final ROD is anticipated to be signed during fall 2013.
- Site 30: (Former Galvanizing Plant, Building 184). The No Further Action (NFA) Decision Document was submitted for regulatory review in May 2013. A draft CCR will be submitted in June 2013. The draft NFA document was submitted prior to the CCR due to impending contract expiration; however, the CCR will be finalized before the final NFA is submitted.

Regulator Updates:

Matthew Audet, USEPA RPM, indicated that there are many reports being prepared and other activities, and that the Navy has been effective at completing various tasks in parallel. It was

highlighted that 2013 will be a landmark year for the ER Program, and USEPA stated its commitment to prioritizing efforts to complete key path items prior to the end of this fiscal year (September 30, 2013).

David Wright, Remediation Program Director for MEDEP, attended on behalf of Iver McLeod. Mr. Wright noted that MEDEP will provide the needed resources to complete reviews for the numerous documents.

In response to questions from RAB Community Members on sequestration, Mr. Audet stated that USEPA staff are required to take eight unpaid furlough days prior to the end of this fiscal year. These furlough days are not anticipated to impact ER schedule for the Shipyard. Further it was stated that USEPA contracts with NOAA and US FWS have been ended and no funds will be available from USEPA to those agencies for technical support. The Navy confirmed that NOAA and US FWS have indicated they will not be able to participate in the RAB due to funding cuts. NAVFAC staff also are faced with furlough days prior to the end of the fiscal year, but this is not expected to delay ER Program activities.

Proposed Remedial Action Plan OU7 (Site 32: Topeka Pier Site)

Deborah Cohen, Tetra Tech, presented a summary of the draft PRAP for OU7. An introduction to the PRAP included background and site characteristics and how the PRAP facilitates public participation. OU7 is located in the northern portion of PNS along the back channel of the Piscataqua River. It is approximately 19 acres in size including the filled area and shoreline. The primary sources of contamination at OU7 are past industrial uses such as at the timber basin and from historic fill material from the early 1900s to 1945. Current and future anticipated use includes industrial with recreational use at the boat pier. The groundwater is tidally influenced and the majority of fill material at OU7 is saturated at high tide.

Chemicals of concern (COCs) in soil are metals (antimony, copper, iron, and lead), dioxins/furans, polychlorinated biphenyls (PCBs), and carcinogenic polycyclic aromatic hydrocarbons (PAHs). Low concentrations of COCs were found in an area filled before 1910 (vicinity of former Building 237). For surface soil, only lead concentrations in a portion of the Former Timber Basin area were elevated. Elevated PCBs and dioxins/furans concentrations were found only in the subsurface in a portion of the Former Timber Basin area. PCB concentrations are below threshold levels identified within the Toxic Substances Control Act (TSCA). Chemical concentrations in groundwater, intertidal surface water (including seep) and sediment were low. Controls were implemented through a removal action in 2006 to prevent erosion of fill material from the shoreline into the offshore area. The human health risk assessment for OU7 concluded that the only unacceptable risks are for construction and occupational (industrial) worker exposure to subsurface soil and hypothetical future residential exposure to surface and subsurface soils. Remedial action objectives for OU7 are to prevent residential exposure to surface and/or subsurface soil with contaminants that exceed residential cleanup levels, prevent industrial worker exposure to dioxins/furans and PCBs in subsurface soil exceeding industrial cleanup levels, and protect the offshore environment from erosion of

contaminated soil from the OU7 shoreline. Cleanup levels were developed for industrial worker exposure and hypothetical future residential exposure.

Three remedial alternatives were evaluated within the OU7 FS: no action, LUCs with long-term management of shoreline controls, and limited excavation with residential LUCs and long-term management of shoreline controls. No alternative was developed in the FS to remove all contaminated material, because it was determined to be cost prohibitive and overly disruptive to the utilities and operations of PNS. After evaluating remedy selection criteria, Alternative 3 (limited excavation with residential LUCs and long-term management of shoreline controls) was identified as the proposed remedial alternative. The Navy proposes excavating contaminated soil from two areas within the Former Timber Basin area to reduce dioxins/furans and PCBs concentrations to acceptable industrial levels allowing for no restrictions for current user exposure to subsurface soil. The excavation would also reduce lead concentrations in surface soil to acceptable levels allowing for no restrictions for surface soil at OU7. LUCs would be implemented to prevent residential land use. Long-term management of the existing shoreline erosion controls would continue to protect the offshore from potential future erosion of contaminated soil at OU7. Five-year reviews would be required. A figure depicting the approximate excavation limits, LUC boundary, and shoreline erosion control area was presented to RAB (see presentation slides attached to minutes). The proposed alternative is consistent with current and planned land use by PNS, would remove contamination to prevent potential current user risk exposure, and would result in no restrictions for exposure to surface soil. A LUC RD and long-term management plan would be prepared and inspections and five-year reviews would be conducted for OU7.

A 30-day public comment period and a public hearing are to be scheduled late summer 2013 or fall 2013. The PRAP and supporting documents will be available at the Rice Public Library, Portsmouth Library, and on the Navy public website.

A question was asked whether utilities in the excavation area would need to be re-routed, and it was discussed that this would need to be determined in the RAWP.

Proposed Remedial Action Plan OU9 (Site 34: Former Oil Gasification Plant, Building 62)

Deborah Cohen, Tetra Tech, presented the draft PRAP for OU9. OU9 is located along the along the Piscataqua River on the northwestern portion of PNS and is approximately 1 acre in size including Building 62 and Building 62 Annex. The primary source of contamination is ash from past industrial activities at Building 62, including oil gasification and blacksmith operations. The majority of ash was removed in 2007 by a Removal Action, but a few pockets of residual ash remain in subsurface. Current and future anticipated use is industrial. The area is relatively flat, with a gentle slope from the south of the site toward the north of Building 62.

Chemicals of concern (COCs) in soil are carcinogenic PAHs, including benzo(a)pyrene and related compounds associated with ash from past operations. The majority of residual ash is located in the subsurface within an approximate 175-square foot area. Past sampling efforts indicated that ash does not exist beneath the floor of Building 62; however, ash is presumed to

be present beneath the floor of Building 62 Annex, because ash was discovered at the former location of Building 63, which is adjacent to Building 62, and surrounding Building 62 Annex.

In response to a question from a community RAB member, it was noted that the remaining ash is located above mean high tide and exists four to eight feet bgs. It was also noted that impacts to bedrock groundwater has not been investigated, because PAHs at this site are highly immobile. Vapor intrusion was evaluated for naphthalene, the most volatile PAH detected, and levels were not high enough to pose an unacceptable human health risk. Results from the human health risk assessment indicated that the only potentially unacceptable risk at OU9 is for hypothetical future residential exposure to carcinogenic PAHs in subsurface soil. Ash presumed to be present under Building 62 Annex may pose an unacceptable risk to people at the site if the building foundation was removed exposing ash that may be present.

The remedial action objectives are to prevent hypothetical future residential exposure to subsurface soil containing carcinogenic PAH concentrations exceeding the residential cleanup level and prevent potential future exposure to carcinogenic PAHs in ash that may be present under the floor of Building 62 Annex. Cleanup levels for carcinogenic PAHs were established for hypothetical future residential exposure. PAH contamination was found in the subsurface north of Building 62 ("elevated PAH area").

Four remedial alternatives were evaluated within the OU9 FS: no action, LUCs for elevated PAH area and Building 62 Annex, excavation of elevated PAH area and Building 62 Annex LUCs, and in-situ chemical oxidation (ISCO) treatment of elevated PAH area and Building 62 Annex LUCs. No alternative was presented in the FS to remove potential contamination under Building 62 Annex, because the building is currently in use. After evaluating remedy selection criteria, Alternative 2 (LUCs for elevated PAH area and Building 62 Annex) was identified as the proposed remedial alternative. The Navy proposes LUCs to prevent residential land use for the area north of Building 62, prevent residential land use of Building 62 Annex, and prevent unrestricted exposure for current industrial users to the subsurface beneath the floor of Building 62 Annex. A LUC RD would be prepared, and inspections and five-year reviews would be conducted for OU9. A figure depicting the proposed LUC boundaries was presented (see presentation slides attached to minutes). The proposed remedy is consistent with current and planned industrial land use by PNS, and LUCs provide the same protectiveness with less short-term effectiveness and implementability concerns at lesser cost than excavation and treatment alternatives.

A 30-day public comment period and a public hearing are to be scheduled for late summer 2013 or fall 2013. The PRAP and supporting documents will be available at the Rice Public Library, Portsmouth Library, and on the Navy public website.

Results from the RAB Membership Survey:

Lisa Joy presented the results from the RAB membership survey that was created and distributed prior to the March 2013 RAB meeting. The survey collected 11 responses, which was considered a high response rate for the number of RAB members. RAB members were asked seven questions related to continuing participation in the RAB, RAB meeting frequency,

alternative meeting locations, and seeking recommendations to increase attendance and membership in the RAB. Most respondents (9 of 11) expressed interest in continuing their participation on the RAB. Based on responses to questions on meeting times and locations, it was concluded to maintain quarterly meetings on Tuesday evenings at the Kittery Town Hall. No respondents had recommendations for new RAB members. Recommendations made for increasing attendance and membership in the RAB included presenting more photographs of site progress and activities, more media interaction with local newspapers, reaching out to existing RAB members, and more internet and social media notifications.

Community Remarks:

Community RAB members had questions regarding the availability of recent documents online. Representatives from the Navy remarked that pre-ROD finalized documents are uploaded to the website: <http://go.usa.gov/vvb> and on NIRIS (acronym for Naval Installation Restoration Information Solution). The Navy noted that a new version of NIRIS is currently in the design phase (NIRIS 2.0). Additionally, it was noted there is a community outreach page on the public website where announcements about upcoming meetings and new publications.

Additional discussion occurred on increasing community participation at public hearings and increasing membership on the RAB, including issuing press releases or advertisements in local newspapers prior to RAB meetings to attract more public attendance and media coverage, which could lead to increased membership in the RAB. In response to a question from a Community RAB member, any Shipyard employee can participate in the RAB; if representing private interests.

Future Meetings:

No specific date was proposed for the next RAB meeting. All parties agreed to coordinate the next RAB meeting with upcoming public hearings for OU7 and/or OU9, if feasible.

Portsmouth Naval Shipyard
Restoration Advisory Board Meeting
June 4, 2013

Agenda

- Introductions
- Opening Statements
 - Navy Co-Chair [Lisa Joy, NAVFAC]
 - Community Co-Chair [Doug Bogen]
- Installation Restoration Program Status and Updates [Liz Middleton, NAVFAC]
- Regulator Updates [USEPA and MEDEP]
- Proposed Remedial Action Plan for OU7 (Site 32, Topeka Pier Site) [Deborah Cohen, Tetra Tech]
- Proposed Remedial Action Plan for OU9 (Site 34, Former Oil Gasification Plant) [Deborah Cohen, Tetra Tech]
- Summary of RAB Membership Survey [Lisa Joy, NAVFAC]
- Community Remarks
- Open Discussion and Questions



Portsmouth Naval Shipyard Environmental Restoration Program Status and Updates

June 2013

Remedial Project Managers



- **Liz Middleton** – primarily focus on activities through RODs (OU4, OU7, OU8, OU9) and long term management (OU3, LUCs)
- **Bryan Peed** – focus on RD/RA activities (OU2, OU4) and Construction Completion Reports (OU1, DRMO Impact Area, Site 30)



OPERABLE UNIT 1
Site 10 (Former Battery Acid Tank No. 24)



- **Remedial Action (RA)**
 - RA completed
- **Construction Completion Report (CCR)**
 - Draft submitted March 7, 2013
 - Regulatory comments received in May
 - Resolving regulatory comments
- **Groundwater Monitoring Plan Component of Long Term Management Plan**
 - First round of groundwater collected on 16 February 2012
 - Second round of groundwater collected 6-7 November 2012
 - Draft Groundwater Summary Report submitted March 15, 2013
 - Regulatory comments received in May
 - Resolving regulatory comments
- **Land Use Control inspections scheduled for June 2013**



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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 2
Site 6 (DRMO Storage Yard) & Site 29 (Former Teepee Incinerator Site)



- **Remedial Action**
 - Final Remedial Design submitted November 2012
 - Draft Remedial Action Work Plan for Waste Disposal Area submitted April 19
 - Regulatory comments received in May
 - Resolving regulatory comments
 - Draft Remedial Action Work Plan for DRMO Area submitted May 10
 - Currently under regulatory review

- **Land Use Control inspections scheduled for June 2013**



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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 2

Site 6 (DRMO Storage Yard) & Site 29 (Former Teepee Incinerator Site)



- **Excavation Areas 1 through 7 are in the DRMO Area**
 - Excavation will go to the depth of soil contamination or top of rock fill/bedrock.
 - Areas will be backfilled with clean material and restored for continued industrial use

- **Excavation Areas 8 through 11 are in the Waste Disposal Area**
 - Excavation in Area 8 will dig to 2 feet below ground surface (bgs), and the area will be covered with a two (2) foot thick soil cover that will be maintained
 - Areas 9 through 11 are located on a bedrock outcrop, and excavation will dig to bedrock (approximately 1 foot bgs) with no backfilling required

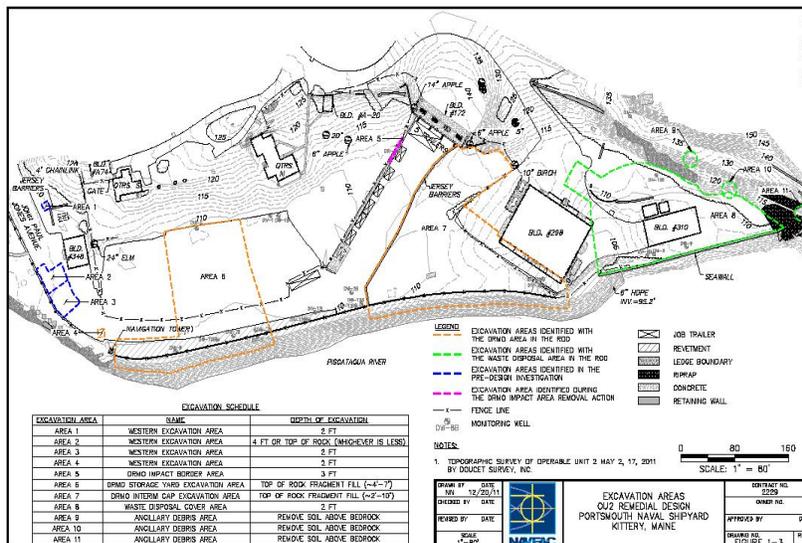
- **Schedule**
 - Shipyard removed equipment and moved contractor parking from DRMO Area
 - Resolve regulatory comments and finalize RAWPs in Summer 2013
 - Start remediation work in Summer 2013
 - Anticipate completion of construction activities by Fall 2013

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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 2

Site 6 (DRMO Storage Yard) & Site 29 (Former Teepee Incinerator Site)



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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 3
Site 8 (Jamaica Island Landfill)



• **OM&M Activities**

- Landfill and LUCs inspection performed in May 2013
- Round 12 to be completed in 2016 to support Five-Year Review

• **Removal of landfill gas sampling points**

- Abandonment plan being prepared



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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 4
Site 5 (Former Industrial Waste Outfalls) and Offshore Areas of Concern



• **Proposed Remedial Action Plan**

- Final submitted February 26, 2013
- Public meeting March 13, 2013
- Public comment period ended March 28, 2013

• **Record of Decision**

- Draft submitted April 29, 2013
- Regulatory comments received May 2013
- Resolving regulatory comments
- Final anticipated Summer 2013

• **Additional sampling to further delineate areas for removal proposed for Summer 2013**

- Navy preparing Sampling and Analysis Plan



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Portsmouth Naval Shipyard Environmental Restoration Program, June 2013

OPERABLE UNIT 7
Site 32 (Topeka Pier Site)



- **FS Report**
 - Draft submitted May 18, 2012
 - Draft final submitted February 26, 2013
 - Regulatory comments received in April/May
 - Final to be submitted June 2013
- **Proposed Remedial Action Plan**
 - Draft submitted May 23, 2013
 - Currently under regulatory review
 - Public meeting and public comment period in Summer 2013
- **Record of Decision**
 - Draft anticipated for submittal Summer 2013
 - Final anticipated Fall 2013



OPERABLE UNIT 9
Site 34 (Former Oil Gasification Plant, Building 62)



- **RI Report**
 - Report finalized June 8, 2012
- **FS Report**
 - Draft submitted October 26, 2012
 - Draft final submitted March 18, 2013
 - Regulatory comments received in April/May
 - Final submitted May 31, 2013
- **Proposed Remedial Action Plan**
 - Draft submitted May 31, 2013
 - Currently under regulatory review
- **Record of Decision**
 - Draft anticipated for submittal Summer 2013
 - Final anticipated Fall 2013

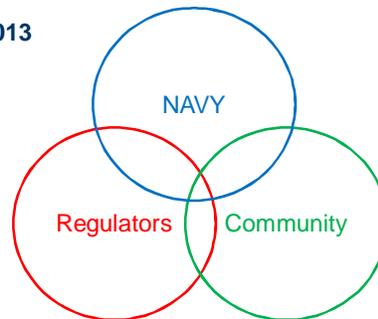




- **Removal Activities completed**
- **Construction Completion Report**
 - Draft report submitted June 2013
 - Currently under regulatory review
- **No Further Action Decision Document**
 - Draft report submitted May 16, 2013
 - Currently under regulatory review



- **Community Involvement Plan**
 - Final CIP issued 27 June 2012
- **Updates to RAB Charter issued in September 2012**
- **RAB Participation Survey in Spring 2013**





**Draft Proposed Plan for
Operable Unit 7**

Portsmouth Naval Shipyard
Date: June 4, 2013

Presenter:
Deborah Cohen, Tetra Tech



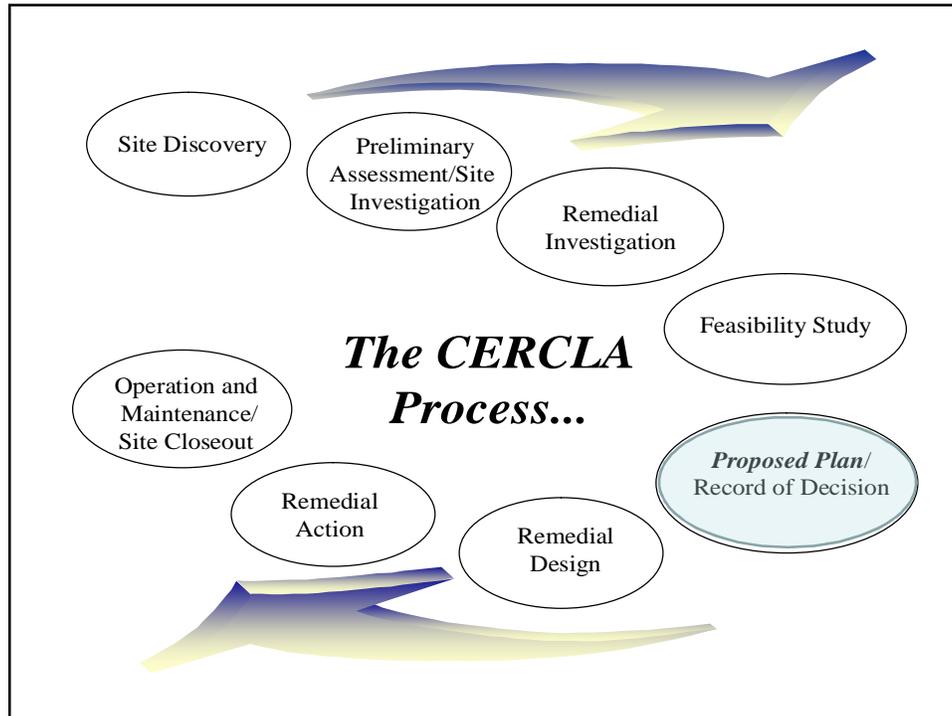
Presentation Objectives

- Discuss the general contents of the Navy's Proposed Plan for Operable Unit (OU) 7.
- Present the Navy's recommendations for remediation of OU7.
- Provide the rationale supporting the Navy's recommendations.





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Proposed Plan

- Proposed Plans facilitate public involvement in the remedy selection process by:
 - Providing basic background information.
 - Describing cleanup options considered.
 - Explaining the reasons for the Navy's preliminary recommendations.
 - Providing information on how the public can be involved in the remedy selection process.
 - Soliciting and encouraging public review of the Proposed Plan.

- Major sections include:

<ul style="list-style-type: none"> • Introduction • Site Background • Site Characteristics • Scope and Role • Summary of Risks 	<ul style="list-style-type: none"> • Remedial Action Objectives • Summary of Remedial Alternatives • Evaluation of Alternative • Preferred Alternative • Community Participation
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Site Background and Characteristics

- OU7 consists of Site 32 - Topeka Pier Site.
- Located along the northern portion of PNS, along the Back Channel of the Piscataqua River.
- Approximately 19 acres - including filled area and shoreline.
- Area filled from 1900 to 1945.
- Filling of site and past industrial uses (i.e., timber basin, saw mill) primary source of contamination.
- Current and future anticipated use is industrial with recreational use of the boat pier.

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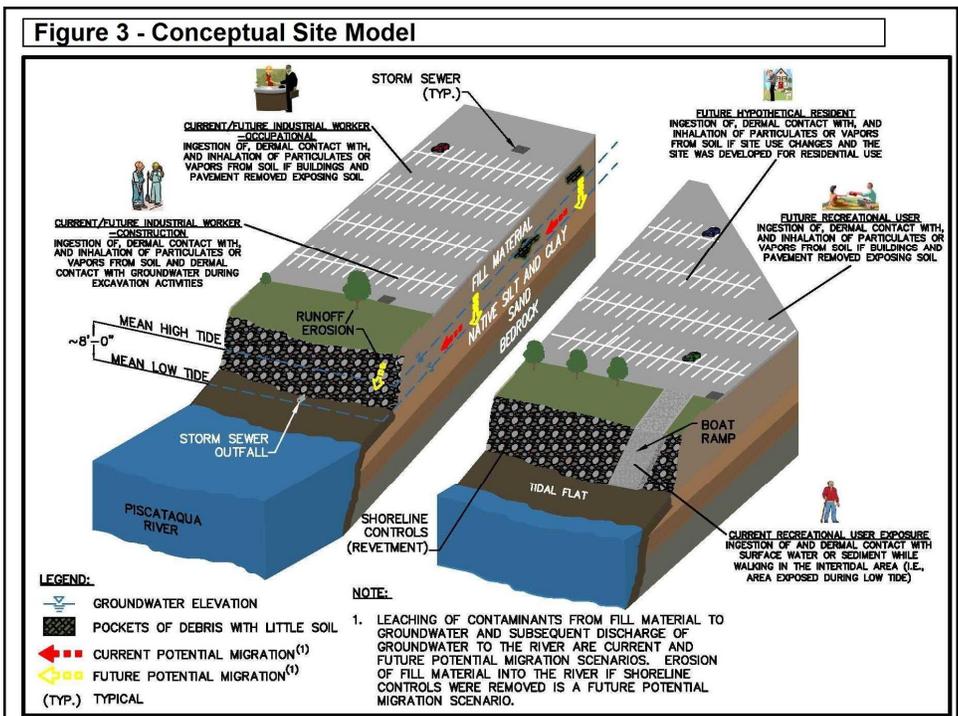
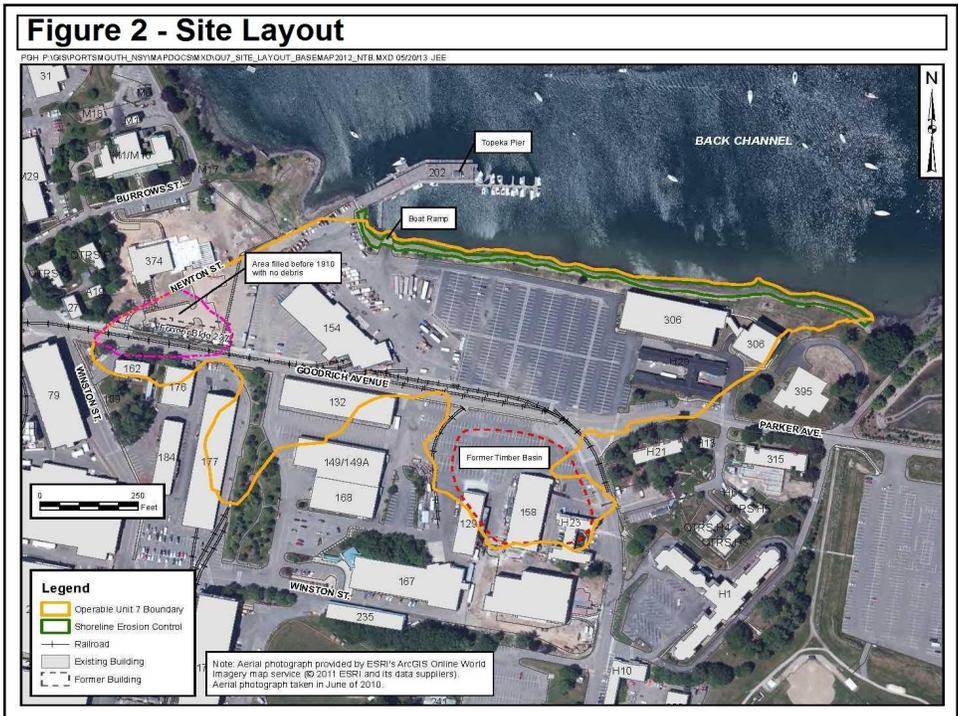


Site Background and Characteristics

- Groundwater is brackish/saline and tidally influenced. The majority of fill material at OU7 is saturated at high tide.
- Chemicals of concern (COCs) in soil are metals (antimony, copper, iron, and lead), dioxins/furans, polychlorinated biphenyls (PCBs), and carcinogenic polycyclic aromatic hydrocarbons (PAHs).
 - Low concentrations of COCs were found in the area filled before 1910 (vicinity of former Building 237).
 - For surface soil, only lead concentrations in a portion of the Former Timber Basin area were elevated.
 - Elevated PCBs and dioxins/furans concentrations were found only in the subsurface in a portion of the Former Timber Basin area.
- Chemical concentrations in groundwater, intertidal surface water (including seep) and sediment were low.

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Summary of OU7 Site Risks

- Risks acceptable for:
 - Exposure to soil in the area filled before 1910 (all receptors).
 - Current user exposure to surface soil.
 - Recreational user exposure to intertidal water and sediment, and surface and subsurface soil.
 - Construction worker exposure to groundwater.
 - Contaminant transport through groundwater movement through fill material and then to the offshore area.
- Potential unacceptable human health risks identified for:
 - Hypothetical future residential exposure to surface and subsurface soil.
 - Construction and occupational worker (industrial worker) exposure to subsurface soil.
- Current conditions indicate no further shoreline erosion is occurring; however, existing shoreline erosion controls need to be maintained to ensure future erosion does not occur.

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Remedial Action Objectives for OU7

- Prevent residential exposure to lead in surface soil and antimony, copper, dioxins/furans, iron, lead, carcinogenic PAHs, and PCBs in subsurface soil exceeding residential cleanup levels.
- Prevent industrial worker exposure to dioxins/furans and PCBs in subsurface soil exceeding industrial cleanup levels
- Protect the offshore environment from erosion of contaminated soil from the OU7 shoreline.

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Proposed Cleanup Levels for OU7

TABLE 1

RECEPTOR	MEDIUM	COC	CLEANUP LEVEL (PPM)
INDUSTRIAL WORKER	SUBSURFACE SOIL	DIOXINS/FURANS	0.0006
		TOTAL PCBs	7.4
RESIDENTIAL	SURFACE SOIL	LEAD	400
	SUBSURFACE SOIL	CARCINOGENIC PAHS	0.5
		DIOXINS/FURANS	0.000051
		TOTAL PCBs	7.3
		ANTIMONY	31
		COPPER	1,500
		IRON	27,000
		LEAD	400

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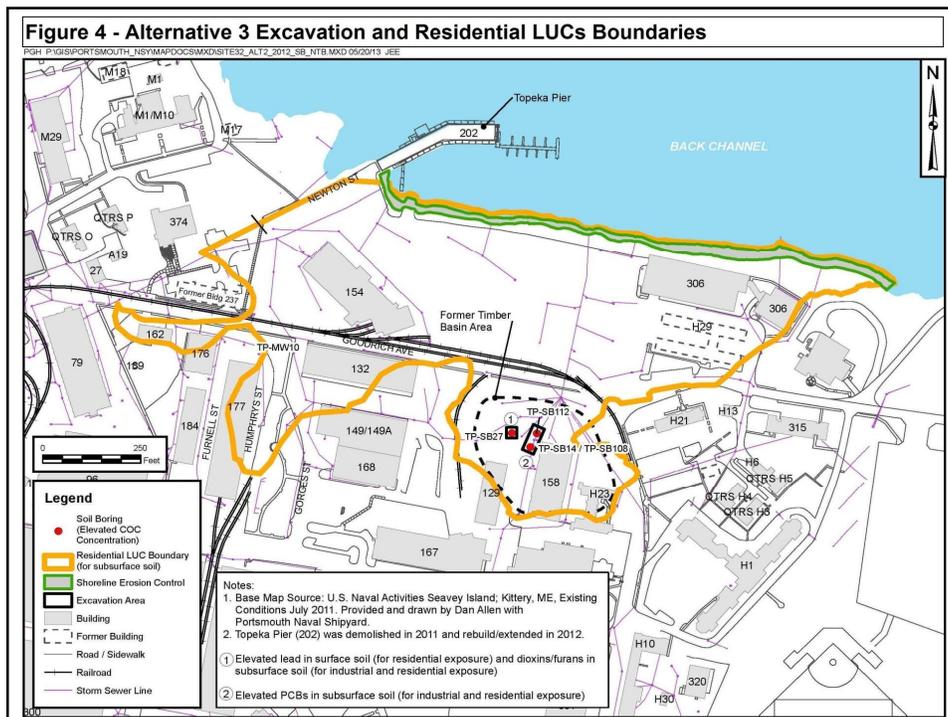


- Summary of Remedial Alternatives For OU7**
- Alt 1: No Action, included as required by regulations.
 - Alt 2: Land use controls (LUCs) with long-term management of shoreline controls.
 - LUCs to prevent residential land use and LUCs to restrict industrial exposure to contaminated subsurface soil in the Former Timber Basin area.
 - Inspection and maintenance, as needed to maintain the shoreline controls.
 - Alt 3: Limited excavation, residential LUCs with long-term management of shoreline controls.
 - Instead of LUCs, contaminated subsurface in the Former Timber Basin area would be excavated for offsite disposal.
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TABLE 2 COMPARISON OF OU7 REMEDIAL ALTERNATIVES			
CRITERION	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Estimated Time Frame (months)			
Designing and Constructing the Alternative	NA	12	12
Achieving the Cleanup Objectives	NA	12	14
Criteria Analysis			
Threshold Criteria			
Protects Human Health and the Environment			
➤ Will it protect you and the animal life on and near the site?	○	●	●
Meets federal and state regulations			
➤ Does the alternative meet federal and state environmental statutes, regulations, and requirements?	NA	●	●
Primary Balancing Criteria			
Provides long-term effectiveness and is permanent			
➤ Will the effects of the cleanup last?	○	●	●
Reduces mobility, toxicity, and volume of contaminants through treatment			
➤ Are the harmful effects of the contaminants, their ability to spread, and the amount of contaminated material present reduced?	○	○	○
Provides short-term protection			
➤ How soon will the site risks be reduced?	NA	●	●
➤ Are there hazards to workers, residents, or the environment that could occur during cleanup?			
Can it be implemented			
➤ Is the alternative technically feasible?	NA	●	●
➤ Are the goods and services necessary to implement the alternative readily available?			
Cost (\$)			
➤ Upfront costs to design and construct the alternative (capital costs)		\$15,000 capital	\$760,000 capital
➤ Operating and maintaining any system associated with the alternative (O&M costs)	\$0	30-year NPW: \$381,000	30-year NPW: \$1,127,000
➤ Periodic costs associated with the alternative			
➤ Total cost in today's dollars (Net Present Worth [NPW] cost)			
Modifying Criteria			
State Agency Acceptance	To be determined after the public comment period on the Proposed Plan		
➤ Does MEDEP agree with the Navy's recommendation?			
Community Acceptance	To be determined after the public comment period on the Proposed Plan		
➤ What objections, suggestions, or modifications does the public offer during the comment period?			
Relative comparison of the nine balancing criteria and each alternative: ● – Good, ● – Average, ○ – Poor, NA – Not applicable			

OU7 Preferred Alternative – Alternative 3

- The Navy proposes removing contaminated soil from two areas within the Former Timber Basin area.
 - Excavation of contaminated soil would reduce dioxins/furans and PCBs concentrations to acceptable industrial levels allowing for no restrictions for current user exposure to subsurface soil.
 - Excavation of contaminated soil would reduce lead concentrations in surface soil to acceptable levels allowing for no restrictions or use for surface soil at OU7.
- LUCs would be implemented to prevent residential land use.
- Long-term management of the shoreline controls would continue to protect the offshore from potential future erosion of contaminated soil at OU7.
- Five-year reviews would be required.



OU7 Preferred Alternative – End Result

- Is consistent with current and planned land use.
- Removes contamination to prevent potential current user exposure rather than relying only on institutional or administrative controls, as provided under Alternative 2.
- Results in unlimited use and unrestricted exposure for surface soil.
- Includes LUCs to prevent hypothetical future residential use.
- Requires long-term management of existing shoreline erosion controls to prevent future erosion.

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Community Participation

- A 30-day public comment period will be held.
- During the public comment period,
 - An informational open house will be held to discuss the Plan and answer questions.
 - A public hearing will be held to accept oral comments.
- Written formal comments can be provided at anytime during the public comment period.
- The Proposed Plan and supporting documents will be available at the Rice Public Library, Portsmouth Library and at <http://go.usa.gov/vvb>.

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Questions?

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**Draft Proposed Plan for
Operable Unit 9**

Portsmouth Naval Shipyard
Date: June 4, 2013

Presenter:
Deborah Cohen, Tetra Tech



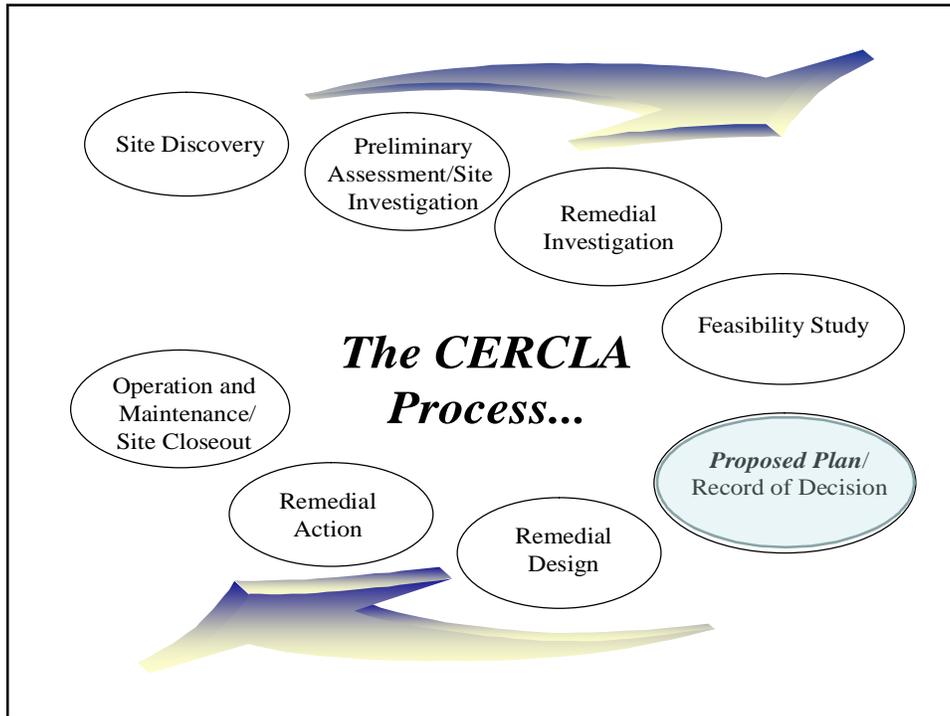
Presentation Objectives

- Discuss the general contents of the Navy's Proposed Plan for Operable Unit (OU) 9.
- Present the Navy's recommendations for remediation of OU9.
- Provide the rationale supporting the Navy's recommendations.





2



Proposed Plan

- Proposed Plans facilitate public involvement in the remedy selection process by:
 - Providing basic background information.
 - Describing cleanup options considered.
 - Explaining the reasons for the Navy's preliminary recommendations.
 - Providing information on how the public can be involved in the remedy selection process.
 - Soliciting and encouraging public review of the Proposed Plan.

- Major sections include:

<ul style="list-style-type: none"> • Introduction • Site Background • Site Characteristics • Scope and Role • Summary of Risks 	<ul style="list-style-type: none"> • Remedial Action Objectives • Summary of Remedial Alternatives • Evaluation of Alternative • Preferred Alternative • Community Participation
---	---



4

Site Background and Characteristics

- OU9 consists of Site 34 – Former Oil Gasification Plant (Building 62).
- Located along the northwestern portion of PNS, and along the Piscataqua River.
- Approximately 1 acre in size.
- The primary source of contamination is ash from past industrial activities at Building 62.
 - The majority of ash was removed in 2007.
 - A few pockets of residual ash remain in subsurface.
- Current and future anticipated use is industrial.

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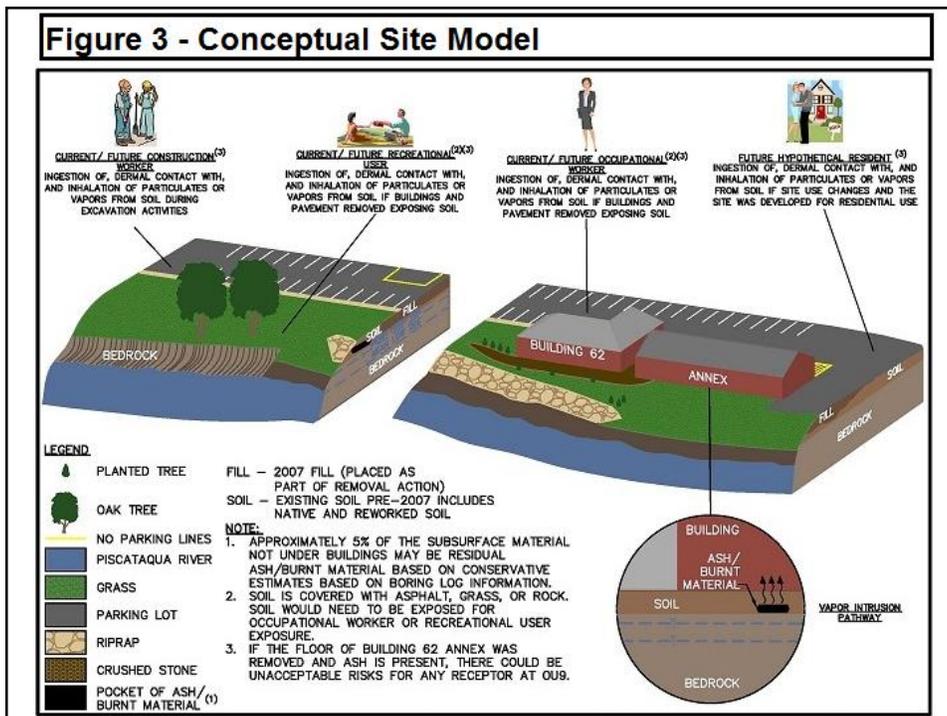


Site Background and Characteristics

- Includes Building 62 and Building 62 Annex.
- Relatively flat, with a gentle slope from the south of the site toward the north of Building 62.
- OU9 chemicals of concern (COCs) in soil are carcinogenic polycyclic aromatic hydrocarbons (PAHs) including benzo(a)pyrene and related compounds.
 - Associated with ash from past operations
 - An estimated 5 percent of the soil not under buildings contains ash/burnt material with the majority of this in an approximate 175-square foot area.
 - No contamination present beneath the floor of Building 62.
 - Ash is presumed to be present beneath the floor of Building 62 Annex.

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Summary of OU9 Site Risks

- Risks acceptable for:
 - Exposure to surface soil.
 - Current user exposure to subsurface soil.
- Potentially unacceptable risks for hypothetical future residential exposure to carcinogenic PAHs in subsurface soil.
- Ash presumed to be present under Building 62 Annex may pose an unacceptable risk to people if the floor of the building was removed exposing the ash.

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Remedial Action Objectives for OU9

- Prevent hypothetical future residential exposure through ingestion of, dust inhalation of, and dermal contact with subsurface soil containing carcinogenic PAH concentrations exceeding the residential cleanup level.
- Prevent potential future exposure to carcinogenic PAHs in ash that may be present under the floor of Building 62 Annex.

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Proposed Cleanup Level for OU9

RECEPTOR	MEDIUM	COC	CLEANUP LEVEL (PPM)
Hypothetical Future Resident	Subsurface Soil	Carcinogenic PAHs	1.5

COC = Chemical of Concern
 PAHs = Polycyclic Aromatic Hydrocarbons
 PPM = Parts per million

The cleanup level is based on the benzo(a)pyrene toxicity equivalency quotient.

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Summary of Remedial Alternatives for OU9

- Alt 1: No Action, included as required by regulations.
- Alt 2: Land Use Controls (LUCs) for Elevated PAH Area and Building 62 Annex.
- Alt 3: Excavation of Elevated PAH Area and Building 62 Annex LUCs.
- Alt 4: In-Situ Chemical Oxidation (ISCO) Treatment of Elevated PAH Area and Building 62 Annex LUCs.

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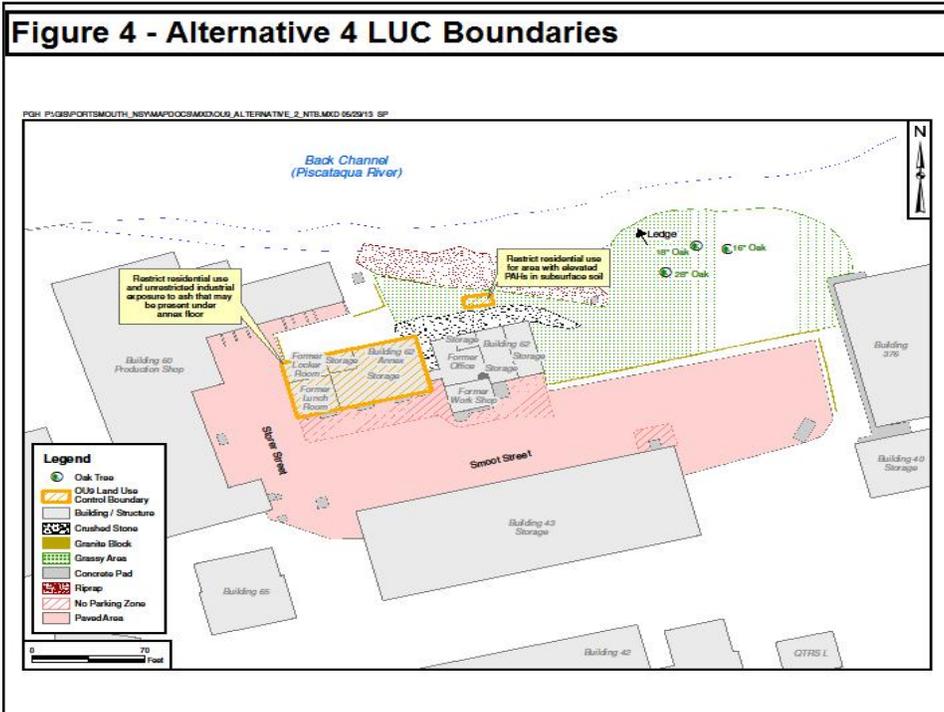
TABLE 1: COMPARISON OF OU9 REMEDIAL ALTERNATIVES

CRITERION	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
<i>Estimated Time Frame (months)</i>				
Designing and Constructing the Alternative	NA	12	12	12 to 18
Achieving the Cleanup Objectives	NA	12	13	13 to 19
<i>Criteria Analysis</i>				
<i>Threshold Criteria</i>				
Protects Human Health and the Environment				
➤ Will it protect you and plant and animal life on and near the site?	○	●	●	●
Meets federal and state regulations				
➤ Does the alternative meet federal and state environmental statutes, regulations and requirements?	NA	●	●	●
<i>Primary Balancing Criteria</i>				
Provides long-term effectiveness and is permanent				
➤ Will the effects of the cleanup last?	○	○	○	○
Reduces mobility, toxicity, and volume of contaminants through treatment				
➤ Are the harmful effects of the contaminants, their ability to spread, and the amount of contaminated material present reduced?	○	○	○	●
Provides short-term protection				
➤ How soon will the site risks be reduced?	NA	●	○	○
➤ Are there hazards to workers, residents, or the environment that could occur during cleanup?	NA	●	○	○
Can it be implemented				
➤ Is the alternative technically feasible?	NA	●	○	○
➤ Are the goods and services necessary to implement the alternative readily available?	NA	●	○	○
Cost (\$)				
➤ Upfront costs to design and construct the alternative (capital costs)		\$15,000 capital	\$423,000 capital	\$336,000 capital
➤ Operating and maintaining any system associated with the alternative (O&M costs)	\$0			
➤ Periodic costs associated with the alternative (periodic costs)		30-year NPW: \$197,000	30-year NPW: \$605,000	30-year NPW: \$518,000
➤ Total cost in today's dollars [30-year Net Present Worth (NPW) cost]				
<i>Modifying Criteria</i>				
State Agency Acceptance	To be determined after the public comment period on the Proposed Plan.			
➤ Does MEDEP agree with the Navy's recommendation?				
Community Acceptance	To be determined after the public comment period on the Proposed Plan.			
➤ What objections, suggestions, or modifications does the public offer during the comment period?				
Relative comparison of the nine balancing criteria and each alternative: ● - Good, ○ - Average, ○ - Poor, NA - Not applicable				

OU9 Preferred Alternative – Alternative 2

- The Navy proposes Alternative 2 as the preferred alternative.
 - LUCs would prevent residential land use for the area north of Building 62, where elevated PAH concentrations in subsurface soil are associated with potentially unacceptable risk based on residential exposure.
 - LUCs would prevent residential land use of Building 62 Annex and prevent unrestricted exposure for current industrial users to the subsurface beneath the floor of Building 62 Annex.
 - LUCs would also specify requirements for management of excavated soil as part of any future construction activities within the LUCs boundary.
- Five-year reviews would be required.





OU9 Preferred Alternative – End Result

- Is consistent with current and planned land use.
- Provides LUCs to prevent future exposure to contamination at OU9.
- More readily implementable at a lower cost than excavation and treatment alternatives.
 - Excavation or treatment would only address contamination north of Building 62.
 - LUCs would still be required for Building 62 Annex under all three alternatives.

Community Participation

- A 30-day public comment period will be held.
- During the public comment period,
 - An informational open house will be held to discuss the Plan and answer questions.
 - A public hearing will be held to accept oral comments.
- Written formal comments can be provided at anytime during the public comment period.
- The Proposed Plan and supporting documents will be available at the Rice Public Library, Portsmouth Library and at <http://go.usa.gov/vvb>.

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Questions?

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**Portsmouth Naval Shipyard
Restoration Advisory Board**

RAB Membership Survey

June 2013

Restoration Advisory Board Survey



• **Prepared by Resolution Consultants prior to March 2013 RAB**

• **7 questions**

1. Are you interested in continuing to participate in the RAB?
2. If yes, are there any factors that are limiting your RAB meeting attendance or RAB participation?
3. How frequently do you feel that the RAB should meet?
4. What days and/or times are not convenient to attend RAB meetings?
5. Are there alternative meeting locations that would be more convenient (to you or general public) that you would recommend for RAB meetings?
6. Do you know of others who may be interested in becoming a RAB member and/or in attending RAB meetings?
7. What recommendations do you have for increasing attendance and membership in the RAB?

• **11 responses (anonymous)**



1. Are you interested in continuing to participate in the RAB? (11 responses)

YES = 9 NO = 2

2. If yes, are there any factors that are limiting your RAB meeting attendance or RAB participation? (8 responses)

NO = 4 YES = 4

- Work
- Staffing levels
- Unavoidable night meeting conflicts
- Meeting times/dates if they conflict with family events



3. How frequently do you feel that the RAB should meet? (11 responses)

Quarterly = 7
Every 6 Months = 2
Only as Needed = 2 (1 respondent who answered "No" to continued participation)

4. What days and/or times are not convenient to attend RAB meetings? (6 responses)

- Evenings / 7 PM are most convenient (2 responses)
- Monday evenings
- Wednesday and Thursday evenings
- 3rd and 4th Thursday of each month

5. Are there alternative meeting locations that would be more convenient (to you or general public) that you would recommend for RAB meetings? (5 responses)

- Kittery Town Hall (current location) = 4 "convenient" and "adequate"
- 5th Response = "Open"

Conclusion: Maintain quarterly meetings on Tuesday evenings at Kittery Town Hall



6. Do you know of others who may be interested in becoming a RAB member and/or in attending RAB meetings? (10 responses)

YES = 0 NO = 10

7. What recommendations do you have for increasing attendance and membership in the RAB? (6 responses)

- More “photo” tours (2 respondents)
- Story in local newspaper(s) (2 respondents)
 - Online views as well
- More media interaction
- More timely presentations (as reports come out)
- Better accessibility to documents
- Contact and encourage existing RAB members to attend
- Additional communication lines in addition to the ad in the local newspaper
 - social media (Shipyards Facebook page), public website, public TV station

