



***EXPLANATION OF SIGNIFICANT DIFFERENCE FOR THE  
RECORD OF DECISION FOR OPERABLE UNIT 3  
Portsmouth Naval Shipyard  
Kittery, ME***

**SUMMARY OF EXPLANATION OF SIGNIFICANT  
DIFFERENCE (ESD)**

The Navy will change the remedy for Operable Unit 3 (OU3) as documented in the Record of Decision (ROD) for OU3. Based on recent construction activities at OU3 and the incorporation of decisions regarding groundwater migration as part of the OU3 Post-Remedial Operation, Maintenance, and Monitoring (OM&M) Plan, the OU3 remedy will now include the following:

- > Management of migration (OU6) will no longer be a separate operable unit from the source control operable unit (OU3).
- > Applicable and Relevant and Appropriate Requirements (ARARs) and a remedial action objective (RAO) to address groundwater migration will be added.

The construction activities associated with the OU3 remedy, including wetlands construction and placement of geotextile and riprap along the OU3 shoreline, have addressed the Maine Department of Environmental Protection (MEDEP) issue regarding the seeps in the offshore area. The groundwater monitoring program as part of the OU3 OM&M Plan includes components to address offshore migration of groundwater; therefore, the Navy believes that OU6 can efficiently be addressed as part of OU3.

The altered remedy remains protective of human health and the environment, complies with federal and State requirements, and remains cost-effective.

Documents finalized after signature of this ESD will include source control and management of groundwater migration as part of OU3. The OU3 OM&M Plan will be updated to reflect this ESD.

**INTRODUCTION**

In 1994, Portsmouth Naval Shipyard (PNS) was placed on the National Priorities List. Currently, there are 12 areas within PNS that have been, or are being, investigated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The cleanup of these sites is being conducted under the Department of Defense (DOD) Installation Restoration Program (IRP) and meets the requirements of CERCLA and the Superfund Amendments and Reauthorization Act. The Navy is the lead agency for performing cleanup with oversight by United States Environmental Protection Agency (USEPA) and Maine Department of Environmental Protection (MEDEP).

In August 2001, the Navy and USEPA, with concurrence from MEDEP, signed a Record of Decision (ROD) (Navy, August 2001) that presented the selected final remedial action for Operable Unit 3 (OU3), soil and groundwater within the boundary of the Jamaica Island Landfill (JILF). An Explanation of Significant Difference (ESD) for the OU3 remedy was signed in September 2003 that documents a significant change to the remedy related to construction activities. The ESD provided herein documents a significant change to the remedy related to recombining source control (OU3) and management of groundwater migration (OU6).

**STATUTORY BASIS FOR ISSUANCE OF THE  
EXPLANATION OF SIGNIFICANT DIFFERENCE**

The lead agency for a Superfund site may determine that a significant change to the selected remedy, as described in a ROD, is necessary after the ROD has been issued. A change to the ROD can be made under CERCLA Section 117(a), the National

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Contingency Plan (NCP) Section 300.435(c), and USEPA guidance (Office of Solid Waste and Emergency Response Directive 9355.3-02).

USEPA guidance (July 1999) categorizes a post-ROD change as a *non-significant* or *minor change*, a *significant change* to a component of the remedy, or a *fundamental change* to the overall remedy. The Navy, as lead agency for PNS, has determined that a *significant change* to a component of the remedy (incorporation of OU6 back into OU3) will be made. A *significant change* involves a change to a component of the remedy that does not fundamentally alter the overall cleanup approach. Where changes represent a significant but not a fundamental change to the ROD, the Navy, as lead agency, must publish an Explanation of Significant Differences (ESD) as set forth in NCP Section 300.435(c)(2)(i). The Navy is also required to publish a notice of availability and a brief description of the ESD in a major local newspaper.

In accordance with Section 300.435(c) of the NCP, this ESD and supporting information will be placed in the Administrative Record File for PNS and will also be included in the PNS Information Repository. The PNS Information Repository is available for public review at the Kittery Town Hall, 200 Rogers Road Ext., Kittery, Maine and the Portsmouth Public Library, 8 Islington Street, Portsmouth, New Hampshire.

#### **PORTSMOUTH NAVAL SHIPYARD DESCRIPTION**

PNS is located in Kittery, Maine on a 276-acre island in the Piscataqua River at the mouth of the Great Bay Estuary (commonly referred to as Portsmouth Harbor). The Piscataqua River is a tidal estuary that forms the southern boundary between Maine and New Hampshire. PNS is engaged in the conversion, overhaul, and repair of submarines for the Navy. The long history of shipbuilding in Portsmouth Harbor dates back to 1690. PNS was first established as a government facility in 1800. Service of submarines has been the primary military focus at PNS from 1917 to present.

#### **SITE DESCRIPTION AND HISTORY**

OU3 is approximately 22 acres in size and is located in the eastern portion of the Shipyard. OU3 consists of soil (including landfill material) and groundwater within the following three sites:

- Site 8 – the JILF. The Navy used the JILF, previously tidal mudflats, as a disposal area from 1945 to 1978 for general refuse, trash, construction rubble, dredged sediment, and various industrial wastes. The boundary of OU3 is defined by the boundary of this landfill.
- Site 9 – the Former Mercury Burial Sites (MBI and MBII). Mercury burial vaults were placed in two locations within the landfill in the 1970s and then removed (intact) and disposed off site in the 1990s/early 2000.
- Site 11 – the Former Waste Oil Tanks Nos. 6 and 7. The two underground tanks at Site 11 were used from 1943 to 1989 and were removed (intact) in 1989. Spills during filling of the tanks appeared to have occurred.

OU6, which was separated from OU3 in October 2000, was created to address the migration of groundwater from the JILF to the offshore.

The locations of Sites 8, 9, and 11 at PNS are shown on Figure 1, and the layout of the sites and the OU3 shoreline is shown on Figure 2. A more detailed description of the sites can be found in Section 1.0 of the Feasibility Study (FS) Report for Operable Unit 3 (TtNUS, November 2000). (The FS was finalized without reflecting the separation of source control and management of migration.)

#### **ENFORCEMENT AND REMEDIAL ACTION HISTORY**

Investigations of hazardous waste contamination at PNS began in 1983. Investigations under the authority of the Resource Conservation and Recovery Act (RCRA) began in 1985. With the inclusion of PNS on the National Priorities List in 1994, subsequent studies have been conducted

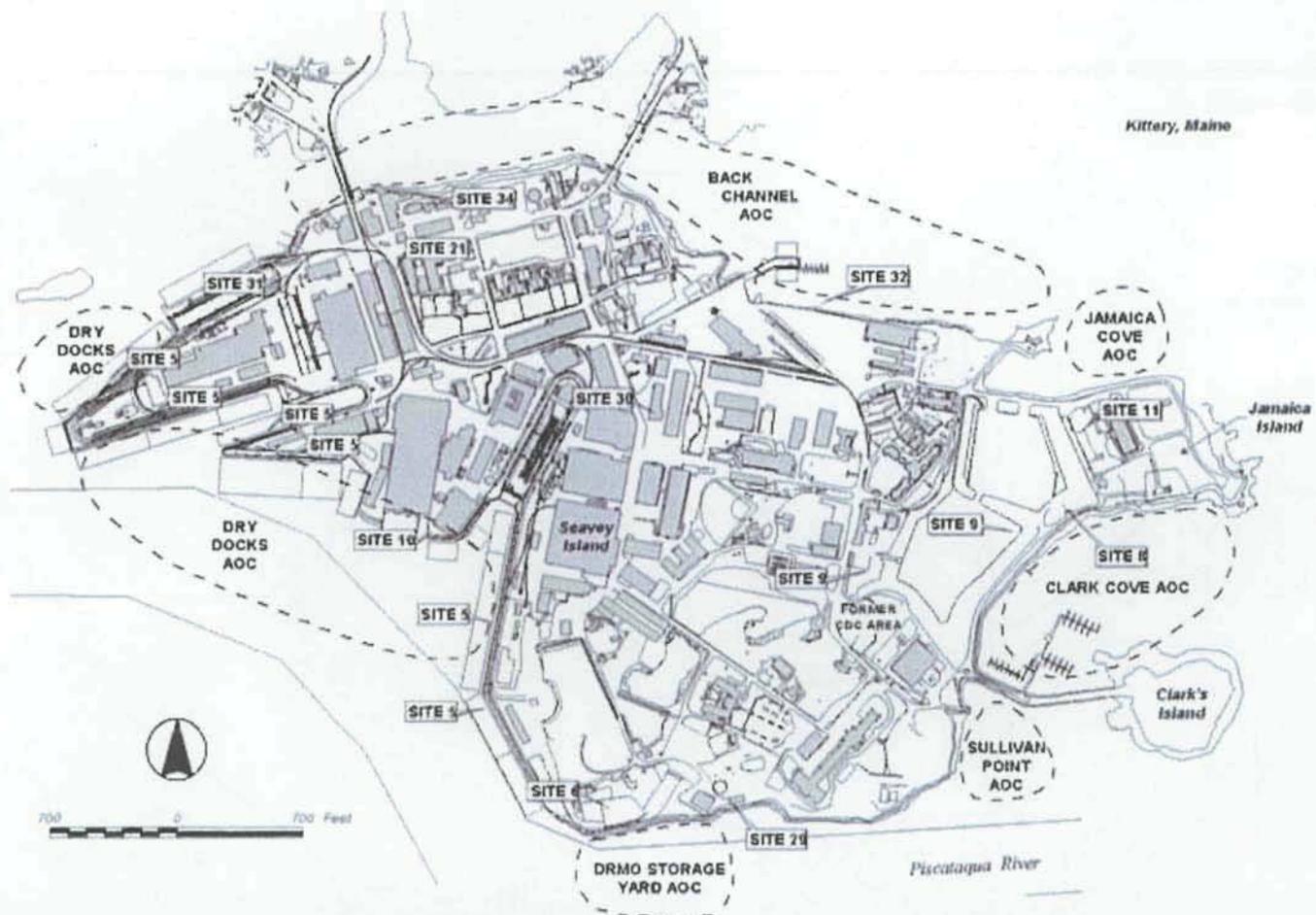


Figure 1: PNS Site Locations

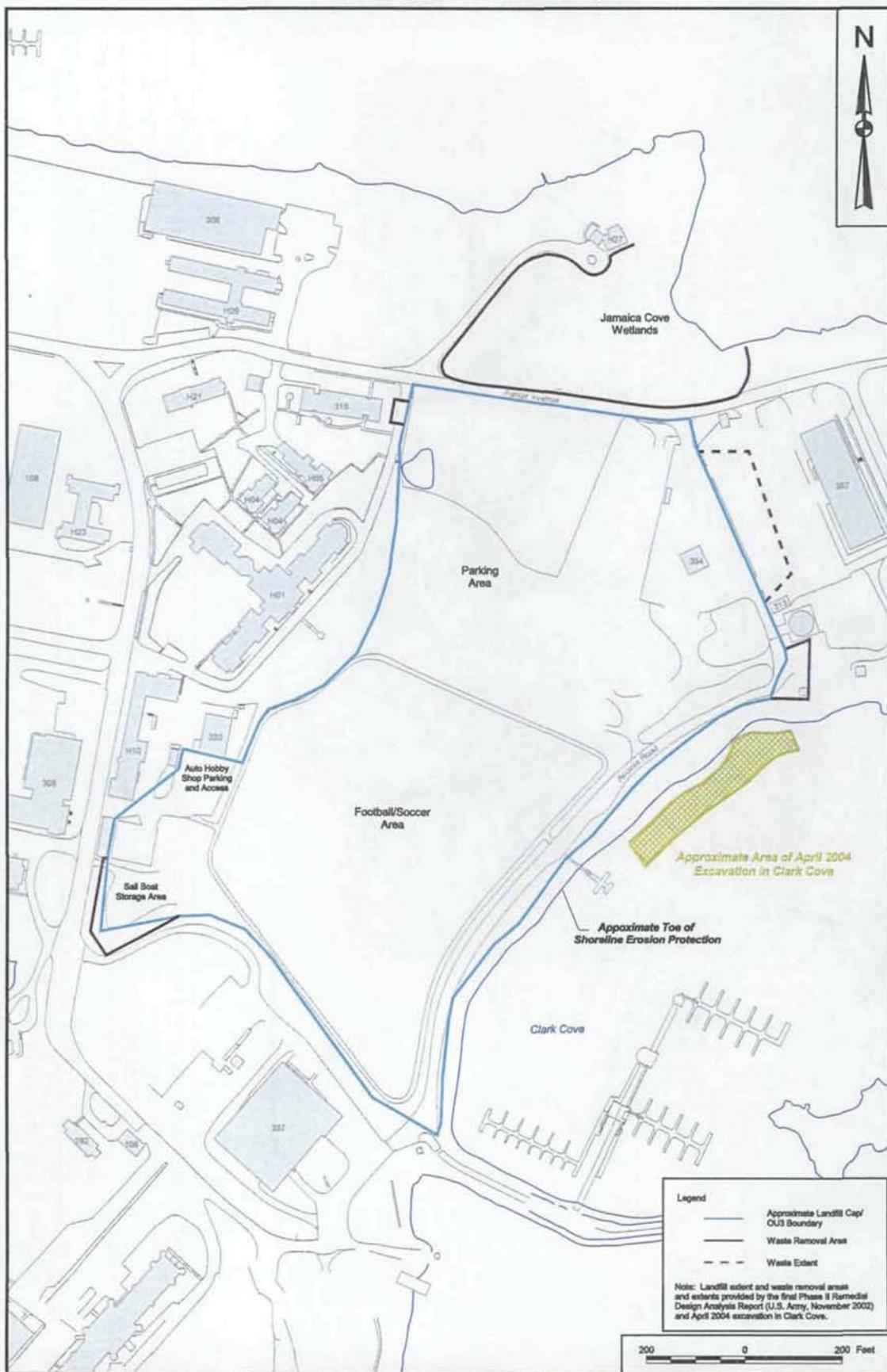
**Operable Units and Site Screening Locations at PNS**

|                                     |  |
|-------------------------------------|--|
| Operable Unit 1:                    | Site 10-Former Battery Acid Tank No. 24<br>Site 21-Acid/Alkaline Drain Tank (groundwater)  |
| Operable Unit 2:                    | Site 6-Defense Reutilization and Marketing Office (DRMO) Storage Yard<br>Site 29-Incinerator Site                                      |
| Operable Unit 3:                    | Site 8-Jamaica Island Landfill (JILF)<br>Site 9-Former Mercury Burial Sites<br>Site 11-Former Waste Oil Tanks Nos. 6 & 7.              |
| Operable Unit 4:<br>(Offshore Area) | Site 5-Former Industrial Waste Outfalls<br>Offshore Areas potentially impacted by onshore IRP sites<br>(Six AOCs have been delineated) |

**Operable Units and Site Screening Locations at PNS**

|                      |   |
|----------------------|---|
| Operable Unit 6:     | Management of groundwater migration from the JILF |
| Operable Unit 7:     | Site 32-Topeka Pier Site                          |
| Operable Unit 8:     | Site 31-West Timber Basin Landfill                |
| Operable Unit 9:     | Site 34-Former Oil Gasification Plant             |
| Site Screening Area: | Site 30-Galvanizing Plant Building 184            |

Figure 2: OU3 Layout



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under the authority of CERCLA, commonly known as Superfund. The sites at PNS have been grouped into OUs based on similar characteristics or proximity. Currently six OUs (OU1, OU2, OU3, OU7, OU8, and OU9) and one site screening area (Site 30) address onshore contamination from IRP sites, whereas OU4 addresses offshore contamination from the IRP sites. OU6, separated from OU3 in October 2000, addresses management of migration of groundwater from the JILF (OU3). An Interim ROD has been signed for OU4 (Navy, May 1999), and a ROD has been signed for OU3 (Navy, August 2001). The first ESD for the OU3 ROD was signed in September 2003 (Navy, September 2003).

For OU3, the Navy investigated site hydrogeology, assessed the nature and extent of contamination, and performed risk assessments during the RCRA Facility Investigation (RFI) that began in 1989. Remedial action objectives (RAOs) and alternatives were developed and screened in the OU3 FS. The preferred remedy was a combination of a hazardous waste landfill cover, institutional controls, erosion controls, and monitoring and was formally documented in the ROD for OU3. The selected remedial action addresses source control for the JILF (i.e., soil/landfill material and groundwater within the boundary of the JILF). Management of migration of groundwater from within the JILF boundary to the offshore was separated as OU6 during the development of the OU3 FS. A more detailed description of investigations and evaluations and of the selected remedy for OU3 can be found in the OU3 FS (TtNUS, November 2000) and OU3 ROD (Navy, August 2001), respectively. The OU3 FS and investigations conducted before November 2000 did not address source control and management of migration separately (Navy, November 2000).

The Navy completed the remedial design for the construction activities as part of the OU3 remedy in 2002 (Phase I in June and Phase II in November). The following construction activities were completed:

- Excavation and consolidation of the Jamaica Cove area was completed in September 2002, and wetlands construction was completed in June 2003.
- Shoreline erosion controls were completed in the 2003 construction season and included placement of riprap and geotextile along the shoreline.
- The landfill cover was completed in the 2004 construction season. The final cover layer over the landfill cap is either asphalt or vegetation. Areas with asphalt are generally used for vehicle parking. There is a running track and a softball field within the vegetated portion of OU3.
- Additionally in 2004, an area of waste was identified in Clark Cove outside the shoreline revetment. The area was excavated, the waste was placed in the landfill (under the cover), and the excavated area was backfilled with stone and silty sand.

The Navy began preparation of the Post-Remedial Operation, Maintenance, and Monitoring (OM&M) Plan for OU3 in 2004. The OM&M Plan (TtNUS, March 2005) describes the activities that will be conducted to assess the continued effectiveness of the remedy. The monitoring program focuses on evaluating the contribution of landfill contamination to groundwater concentrations. Decision trees (flow charts) for groundwater data were developed, and these decisions consider the potential for groundwater within the landfill to migrate offshore and cause a potential unacceptable risk to receptors in the offshore. The receptors of concern in the decision logic are people and organisms potentially exposed to seep water (OU6) and organisms potentially exposed to surface water (OU4). Based on evaluation of the OU3 groundwater data, the decision logic indicates when additional evaluation and/or investigation for each receptor of concern is needed. Monitoring and inspection activities are scheduled to begin in 2006.

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The Navy prepared a draft Remedial Design for Land Use Controls of OU3 Site Remedy (LUC Plan) that describes the necessary institutional controls for the OU3 remedy to prevent use of the landfill other than for uses consistent with the selected design. The LUC Plan will be included in the final OM&M Plan, which includes the inspection and maintenance activities for these institutional controls.

Other significant response actions taken at or near OU3 include the following:

- At Site 8, JILF. Forty-one drums containing non-hazardous material were located, 40 of which were removed from one location and disposed off site. The remaining drum, containing a Portland cement-type material from another location, was replaced in the landfill (TtNUS, October 2000).
- At Site 9, MBI and MBII. The concrete vaults were removed (portions of MBI in 1994 and the remainder in 1997 and MBII in 2000) (TtNUS, November 2000).
- At Site 11, Waste Oil Tanks. In 1989, the tanks and 332 tons of contaminated soil were removed (TtNUS, November 2000).
- In August 1999, Interim Offshore Monitoring for OU4 began, which includes four monitoring stations adjacent to the JILF (TtNUS, July 2002).
- In July 2002, the Baseline Report for Interim Offshore Monitoring was completed, which includes the evaluation of the first four rounds of data for the four monitoring stations adjacent to the JILF (TtNUS, July 2002).
- In November 2004, the Rounds 1 through 7 Report for Interim Offshore Monitoring was completed, which includes the evaluation of the first seven rounds of data for the four monitoring stations adjacent to the JILF (TtNUS, November 2004).

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#### **SUMMARY OF THE NAVY'S RECORD OF DECISION AND SEPTEMBER 2003 ESD**

The selected remedy as detailed in the ROD addresses source control for the JILF (i.e., OU3) and indicates that the management of migration of groundwater from within the JILF boundary to the offshore will be addressed as part of OU6. In addition, the offshore areas potentially impacted by PNS onshore sites, which include the area adjacent to OU3 in the estuary, are being addressed as part of OU4. The ROD for OU3 required components to address soil/landfill material and groundwater within the JILF. The components included construction of a landfill cover, implementation of institutional controls, construction of shoreline erosion controls, implementation of monitoring, operations and maintenance, and preparation of five-year site reviews. To address concerns raised by MEDEP and the community related to OU6, the Navy, in consultation with the USEPA and MEDEP, agreed to incorporate activities related to OU6 into the ROD for OU3. These activities included discussions for additional investigation for OU6 and evaluation of wetlands construction along the landfill shoreline.

The September 2003 ESD discusses the significant changes made to the OU3 remedy based on re-evaluation of the feasibility of constructing wetlands in the Jamaica Cove area and construction activities as part of the OU3 remedy. In accordance with the OU3 ROD, the Navy re-evaluated the feasibility of consolidating waste material removed from the Jamaica Cove area and the vicinity of the former location of MBII into the existing landfill. The report entitled Evaluation of Jamaica Cove Options (US Army, June 2002a) recommended the consolidation of landfill material and construction of wetlands in the Jamaica Cove area. This approach meets the goals of establishing wetlands and removing waste from groundwater contact without disturbing a significant area of existing wetlands. The disturbance of approximately 400 square feet of wetlands was necessary to allow the new wetland area to drain fully during each tidal cycle. The area disturbed

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was less than the minimum area that requires a permit under State of Maine and federal regulations. Consolidation of waste from MBII area was not recommended (US Army, June 2002b). Based on the design for the wetlands construction the following was conducted:

- Excavation of the contaminated soil/waste from an approximately 2.6-acre area bounded by Parker Avenue, Stephenson Road, and Jamaica Cove.
- Consolidation of the excavated material within the limits of the JILF south of Parker Avenue.
- Construction of wetlands within the excavated area.

Other minor changes to the remedy as documented in the ROD for OU3 are as follows:

Minor Changes Related to OU3: The Remedial Design (US Army, June 2002c and November 2002) provided for shoreline erosion controls within the boundary of the existing landfill instead of outside the boundary of the landfill as originally proposed to minimize impact to existing natural resources. Also, the landfill waste material in the area of Building 320 (Automotive Hobby Shop) was excavated to the depth of the water table, backfilled with clean material, and paved with asphalt. This area was not included under the landfill cover.

Minor Change Related to OU6: During development of the OU6 Data Quality Objectives (DQOs), the Navy (November 2002), with the agreement of USEPA (December 2002) and MEDEP (January 2003), decided to prepare a decision tree that would be followed to initiate preparation of a work plan for OU6. The rationale for the preparation of a decision tree in lieu of a work plan was as follows:

- Excavation of the waste north of Parker Avenue and backfilling with clean fill had already significantly reduced flow from the seeps of concern.
- Construction of the OU3 landfill cap was expected to also affect (reduce) flow rates in the OU6 seeps.

- Preparation of a decision tree to initiate generation of the OU6 work plan to ensure sample collection methods, laboratory analysis methods, and other current information available at the time of generation of the work plan would be taken into account.

Table 1 provides a summary of the OU3 ROD components and the changes based on the September 2003 ESD components and the current ESD.

**BASIS FOR THIS EXPLANATION OF SIGNIFICANT DIFFERENCE**

The basis for this ESD is that activities as part of the OU3 remedy have changed the conditions such that separation is no longer required to efficiently address groundwater migration (OU6) separate from source control (OU3). As discussed in the September 2003 ESD, the OU3 construction activities addressed current concerns regarding seeps, and a decision tree was required to initiate additional investigation of the seeps. During the development of the OU3 OM&M Plan, the Navy developed decision trees that take into account the migration of groundwater to the offshore, including through seeps, and presented decision rules to determine when additional investigation and/or evaluation for the offshore area is necessary to provide protection of human health and the environment. The decision process in the OM&M program meets the intent of a decision tree for OU6 as described in the September 2003 ESD.

As part of assessing the effectiveness of the OU3 remedy, the monitoring program focuses on evaluating the contribution of landfill contamination to groundwater concentrations. To the extent practicable, the scope of the OU3 monitoring program also includes identification of potential impacts to OU4 (offshore) and OU6 (intertidal area) receptors by including action levels to initiate additional evaluation or investigation under either OU.

Therefore, migration of groundwater is addressed by the OM&M program. Currently

**Table 1: Summary of the ROD for OU3**

| <b>ROD FOR OU3</b>  | <b>SEPTEMBER 2003 ESD</b>  | <b>CURRENT ESD</b>  |
|---|--|---|
| The ROD for OU3 provides components for source control as well as activities related to management of migration (OU6).  | The September 2003 ESD documents several significant and minor changes to the remedy for OU3 as documented in the ROD for OU3.   | This ESD provides for modification of the OU3 remedy to include management of migration (OU6) as part of OU3.   |
| <p>A multiple-layer cover to prevent receptors on the surface from coming in contact with and to minimize infiltration of water through the landfill material.</p> <p>The ROD indicates that the Navy will re-evaluate the feasibility of consolidation of portions of the landfill (in the Jamaica Cove area and the vicinity of the former location of Mercury Burial Site II) into the existing landfill.</p>  | <p>The significant change related to the reduction in the area on which to install the landfill cover because of the excavation of landfill material adjacent to Jamaica Cove, consolidation of excavated material in another part of the JILF, and the construction of wetlands in the excavated area.</p> <p>Minor changes to the remedy as documented in the ROD for OU3 are related to minor removal and consolidation of landfill material above the water table in the area of Building 320 (Automotive Hobby Shop).</p> | No change.  |
| Institutional controls to restrict land and fresh water groundwater uses and to prevent unrestricted disturbance of the landfill cover, shoreline erosion controls, and buildings and structures within the boundary of the landfill.   | The area for which the institutional controls apply (i.e., landfill boundary) was reduced based on the consolidation activities.   | No change.  |
| Shoreline erosion controls, including riprap and/or wetlands placed along the shoreline, to minimize the potential for washing away of soil and/or waste materials from the edge of the landfill into the river.  | One minor change to the remedy was for the shoreline erosion controls to be within the boundary of the existing landfill instead of outside the boundary of the landfill as originally proposed to minimize impact to existing natural resources.  | No change   |
| Long-term monitoring of site media to assess the effectiveness of the remedy.   | No change.   | The monitoring component of the OU3 remedy is affected by the addition of the ARARs and RAO for management of migration.  |
| Routine inspections and maintenance of the cover, shoreline erosion controls, and institutional controls.   | The area for which these activities will be conducted was reduced based on the consolidation activities.   | No change.  |
| Five-year site reviews to confirm continued effectiveness of the remedy.  | No change.   | No change.  |
| <p>The ROD also included the following activities related to OU6:</p> <ul style="list-style-type: none"> <li>➤ Initiate development of a work plan for the additional investigation for OU6 by holding a DQO meeting within 60 days of signing of the ROD for OU3.</li> <li>➤ Complete the work plan for the additional investigation for OU6 by the time the JILF cap construction is complete.</li> <li>➤ Evaluate the possibility of wetlands construction specifically for water quality improvement to address groundwater migration from the JILF.</li> </ul> | <p>The September 2003 ESD provided for minor changes related to OU6.</p> <ul style="list-style-type: none"> <li>➤ During development of the OU6 DQOs, there was agreement among the Navy, USEPA, and MEDEP to prepare a decision tree that would be followed to initiate preparation of a work plan.</li> </ul>  | The post-remedial monitoring program for OU3 includes a decision tree (based on evaluation of OU3 groundwater) to determine whether additional evaluation of the seeps would be required, and this decision tree satisfies the requirements for an OU6 decision tree. |

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sediment monitoring for the area offshore of OU3 is included in the Interim Offshore Monitoring for OU4.

### **Description of the Significant Difference**

This ESD documents a modification to the OU3 ROD that significantly changes, but does not fundamentally alter, the selected remedy. The change to the remedy for the OU3 does not alter the decision to install a hazardous waste landfill cover or implement institutional controls, erosion controls, and monitoring. The OU3 remedy is modified to include management of migration as part of OU3. The remedy for OU3 with modifications based on the September 2003 ESD will meet the Applicable and Relevant and Appropriate Requirements (ARARs) and the RAO for groundwater migration from the JILF. The monitoring component of the OU3 remedy is affected by the addition of the ARARs and RAO for groundwater migration from the JILF.

The following ARARs are included in the OU3 remedy based on the addition of management of migration:

- Clean Water Act, Section 304(a), National Recommended Water Quality Criteria (33 USC 1251 et seq; 40 CFR 122.44; 40 CFR 131) (Relevant and Appropriate). These are non-enforceable guidelines developed for pollutants in surface water. States must develop water quality standards based on Ambient Water Quality Criteria (AWQC) to protect existing and attainable uses of surface waters that receive discharges of pollutants. These are health-based criteria developed for carcinogenic and noncarcinogenic compounds and water quality parameters. AWQC are set at levels that are guidelines for pollutants in surface water. AWQC are available for the protection of human health from exposure to contaminants in drinking water, ingestion of aquatic biota, and for protection of freshwater and saltwater aquatic life. These criteria are used as guidance for developing action levels for the monitoring program as part of the OU3 OM&M Plan.

- Maine Environmental Evaluation: Surface Water Toxics Control Program, Chapter 530.5 (38 MRSA 420 and 464, 06-096 CMR 530) (Applicable). This rule promulgates chemical standards for surface water, referred to as Maine Statewide Water Quality Criteria (SWQC) and procedures necessary to control levels of toxic pollutants in surface water. Maine SWQC are set at federal AWQC levels. The criteria are used for developing action levels for the monitoring program as part of the OU3 OM&M Plan.

The following RAO is added to the OU3 remedy based on the addition of management of migration:

- Ensure that the migration of groundwater contaminants does not adversely impact the offshore environment.

The post-remedial monitoring program for OU3 addresses the ARARs and RAO for groundwater migration and provides for the collection and evaluation of groundwater data to determine whether additional investigation and/or evaluation is needed to ensure that human health and the environment are protected from migration of groundwater from the JILF. As provided in the OU3 OM&M Plan, chemicals in the landfill may enter the groundwater and subsequently discharge offshore at levels that may pose unacceptable risks to human and ecological receptors. To maintain the effectiveness of the OU3 remedy, the Navy needs to ensure that chemicals from the landfill are not in the groundwater at concentrations that will adversely impact human health and the environment after the groundwater discharges to the offshore. Action levels to initiate additional evaluation or investigation are based on protection of offshore and intertidal receptors. The decisions for monitoring were developed to meet the RAOs for source control and for migration of OU3 groundwater offshore.

The OM&M Plan provides decision trees that consider whether chemical concentrations in groundwater are greater than action levels and provide for evaluation of risks to determine

whether additional evaluation and/or investigation is needed. The OU3 monitoring program action levels are based on the ARARs identified for migration. The validated downgradient groundwater data will be compared to the OU3 monitoring program action levels (i.e., greater of upgradient monitoring well concentrations or site-specific, risk-based criteria/appropriate regulatory criteria/guidance levels). The action levels are as follows:

| <b>RISK TYPE</b> | <b>ACTION LEVEL<sup>(1)</sup></b>   |
|------------------|---|
| Human Health     | Facility-wide recreational intertidal screening value (i.e., risk-based level) or upgradient concentration, whichever is greater. |
| Ecological       | Chronic AWQC x Dilution Factor (for evaluating impacts to surface water) or upgradient concentration, whichever is greater.       |
|                  | Acute AWQC (for evaluating impacts to seeps) or upgradient concentration, whichever is greater. <sup>(2)</sup>                    |

<sup>1</sup>Where an AWQC does not exist, other values from peer-reviewed scientific literature will be used. Facility-wide recreational intertidal water screening levels are based on a cancer risk of 10<sup>-6</sup> and a hazard quotient of 0.1 (TtNUS, December 2002).

<sup>2</sup>This action level will only be used if a seep is identified that originates from OU3 and forms a furrow above mid-tide level.

The decision logic in the OM&M plan shows that if the groundwater monitoring data indicate a potential concern based on comparison to the action levels, the Navy will conduct a risk evaluation to determine the potential for unacceptable risks. Data for OU3 and the offshore area (collected as part of OU4) would be considered as necessary as part of the risk evaluation. If the risk evaluation indicates there is a potential for unacceptable risk, additional investigation and/or evaluation would be conducted to address the concern. Modifications to components of the

OU3 monitoring program, such as sampling frequency, analyte list, and/or media or sampling location would be considered as part of the additional evaluation and/or investigation.

Documents finalized after signature of this ESD will include source control and management of migration as part of OU3. The OU3 OM&M Plan will be updated to reflect this ESD.

#### **UPDATED COST ESTIMATE**

Addressing management of migration (OU6) as part of the OU3 remedy does not affect the cost estimate to implement the OU3 ROD because the activities for OU6 were already addressed by the OU3 remedy (as discussed under the Description of the Significant Difference). Based on evaluation of the monitoring results, additional investigation and/or evaluation may be necessary in addition to what is required to maintain the components of the source control remedy; however, the Navy cannot anticipate what these would be and therefore cannot anticipate future changes in the costs for the remedy. At the time of the additional investigation and/or evaluation, the impact to the cost of the remedy would need to be determined.

#### **SUPPORT AGENCY COMMENTS**

USEPA and MEDEP indicated support to recombine OU3 and OU6 in letters dated March 24, 2005 and August 10, 2004, respectively. USEPA and MEDEP reviewed the monitoring program (including the decision trees) provided in the OU3 OM&M Plan and provided comments that the Navy incorporated into the document. USEPA and MEDEP reviewed the fact sheet that was prepared discussing the Navy's plans to significantly change the remedy for OU3 and the ESD and provided comments that the Navy has incorporated into this document. An MEDEP letter of concurrence on the ESD was issued on September 16, 2005.

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**AFFIRMATION OF THE STATUTORY DETERMINATIONS**

The proposed changes to the selected remedy described in the August 2001 ROD for OU3 and the September 2003 ESD for the ROD will continue to satisfy all statutory requirements of CERCLA and the NCP. The altered remedy remains protective of human health and the environment, complies with federal and State ARARs, and remains cost-effective.

**PUBLIC PARTICIPATION**

The Navy, USEPA, and MEDEP meet regularly with site stakeholders to keep the community up to date on the site's cleanup status, including the issues described in this ESD. For example, the Navy, USEPA, and MEDEP meet approximately every 2 months with the PNS Restoration Advisory Board (RAB). Additional meetings occur as necessary to successfully implement the cleanup program. The technical information related to this ESD was presented at the PNS RAB meeting on June 14, 2005. Also, the correspondence, technical memoranda, reports and design documents and drawings referenced in this ESD were provided to USEPA, MEDEP, and PNS RAB members for review and comment.

In addition, the Navy prepared a fact sheet discussing the plans to change the OU3 remedy. The fact sheet was provided to the PNS mailing list, and a public comment period was held to elicit public comment on the Navy's planned change. A notice of the public comment period was provided in the Portsmouth Herald and Foster's Daily Democrat. The public comment period was held from July 28, 2005 to August 26, 2005. No comments on the Navy's planned change were received during the public comment period.

**FOR MORE INFORMATION**

If you have questions about the ESD for the PNS OU3 ROD, or if you would like further information, please contact:

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**REFERENCES**

The following documents supporting the ESD are available in the Information Repositories located at the Kittery Town Hall and Portsmouth Public Library:

MEDEP (Maine Department of Environmental Protection), October 2000. Correspondence from I. McLeod, MEDEP to F. Evans, Navy, related to seeps at Portsmouth Naval Shipyard, Kittery, Maine. October 10, 2000.

MEDEP, January 2003. Correspondence from I. McLeod, MEDEP to F. Evans, Navy, related to the OU6 decision tree. January 6, 2003.

MEDEP, August 2004. Correspondence from I. McLeod, MEDEP to F. Evans, Navy, related to addressing OU6 as part of OU3. August 10, 2004.

Navy (Department of Navy), May 1999. Interim Record of Decision for Operable Unit 4, Portsmouth Naval Shipyard, Kittery, Maine.

Navy, November 2000. Operable Unit (OU3) Feasibility Study (FS) Clarification Memorandum, Navy correspondence dated November 21, 2000 for Portsmouth Naval Shipyard, Kittery, Maine.

Navy, August 2001. Record of Decision for Operable Unit 3, Portsmouth Naval Shipyard, Kittery, Maine.

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DECLARATION

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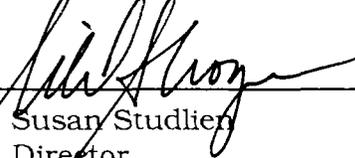
The issuance of this Explanation of Significant Difference for the Operable Unit 3 Record of Decision at Portsmouth Naval Shipyard, Kittery, Maine is concurred with and recommended for immediate implementation:



U.S. Department of the Navy:

  
\_\_\_\_\_  
CAPT, USN      10/11/05  
Date  
J. C. Iverson  
Captain, USN  
Commander  
Portsmouth Naval Shipyard  
Kittery, Maine

U.S. Environmental Protection Agency:

  
\_\_\_\_\_  
10-27-05  
Date  
Susan Studien  
Director  
Office of Site Remediation and Restoration  
USEPA New England  
Boston, Massachusetts





**TETRA TECH NUS, INC.**

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Superfund Records Center

SITE: Portsmouth Naval

BREAK: 5-4

OTHER: \_\_\_\_\_

PITT-11-5-039

November 16, 2005

Project Number 1292

Mr. Matthew Audet  
Environmental Protection Agency  
Region I (Mail Code: HBT)  
1 Congress Street, Suite 1100  
Boston, Massachusetts 02114-2023

Mr. Iver McLeod  
Maine Department of Environmental Protection  
State House Station 17  
Augusta, Maine 04333-0017

Reference: Contract No. N62472-03-D-0057 (CLEAN)  
Contract Task Order No. 023

Subject: Final Explanation of Significant Difference for the Record of Decision  
for Operable Unit 3  
Portsmouth Naval Shipyard (PNS), Kittery, Maine

Dear Mr. Audet/Mr. McLeod:

On behalf of the U.S. Navy, Tetra Tech NUS, Inc. is pleased to provide to the U.S. Environmental Protection Agency Region I (USEPA) and to the Maine Department of Environmental Protection (MEDEP) 2 and 3 copies, respectively, of the final ESD for the OU3 ROD, which was signed by the Navy and USEPA in October 2005. The Navy will publish a notice of availability and the ESD will be available in the PNS Information Repositories.

If you have any comments or questions, or if additional information is required, please contact Mr. Fred Evans at 610-595-0567, extension 159.

For the Community Restoration Advisory Board (RAB) members; if you have any comments or questions on these issues, they can be provided to the Navy at a RAB meeting, by calling the Public Affairs office at (207) 438-1140 or by writing to:

Portsmouth Naval Shipyard  
Code 106.3R Bldg. 44  
Attn: Marty Raymond  
Portsmouth, NH 03804-5000

Sincerely,

  
for  
Aaron Bernhardt  
Project Manager

AMB/kf  
Enclosure



**TETRA TECH NUS, INC.**

Mr. Matthew Audet  
Environmental Protection Agency  
Mr. Iver McLeod  
Maine Department of Environmental Protection  
November 16, 2005 – Page 2

**Electronic Copy via E-mail**

ME Dept. of Marine Resources (D. Card)  
Mr. Doug Bogen  
Ms. Michele Dionne  
Ms. Mary Marshall  
Mr. Peter Britz  
Ms. Diane McNabb  
Mr. Alan Davis  
NH Fish & Game (C. McBane)  
Mr. James Horrigan (SAPL)  
Mr. Jon Carter

**Without Enclosure**

Dr. Roger Wells  
Mr. Onil Roy  
PNS Code 100PAO  
Y. Walker, NEHC  
ATSDR (DOD-EJ/Carole Hossom)  
COMSUBGRU TWO (A. Stackpole)  
NOAA (K. Finkelstein)  
U.S. Fish and Wildlife (K. Munney)

**Hard Copy**

EFANE, (Code 1823/FE, F. Evans) (4 copies)  
PNS (Code 106.3R, M. Raymond) (10 copies)  
Mr. Jack McKenna  
Mr. Jeff Clifford  
Ms. Carolyn Lepage  
D. Cohen, TtNUS, Pittsburgh