Explanation of Significant Differences

Naval Magazine Indian Island, (formerly Port Hadlock Detachment-Indian Island) Washington

I. Introduction

This document presents an Explanation of Significant Differences (ESD) for the Record of Decision (ROD) for Sites 10, 11, 12, 15, 18, 19, 20, 21, and 22 at the Naval Magazine Indian Island located on Indian Island, Washington. The U.S. Navy, the United States Environmental Protection Agency (EPA), and the Washington State Department of Ecology signed the ROD in August 1995.

This ESD, prepared in accordance with Section 117(c) of CERCLA and 40 CFR 300.435(c)(2)(I), documents significant differences to the selected remedies in the ROD. In summary, this ESD clarifies the institutional control requirements for Site 10 within this ROD as well as establishes the general requirements Naval Magazine Indian Island will undertake to ensure effective institutional controls for this site. The Washington State Department of Ecology supports the need for this ESD.

This ESD will become part of the Administrative Record for the Naval Magazine Indian Island NPL site. The Administrative Record is located at:

Engineering Field Activity, Northwest
19917 Seventh Avenue N.E.
Poulsbo, Washington 98370
(360) 396-0298

This ESD and primary documents pertaining to the investigation and cleanup of the site will also be available at the Information Repository at:

Jefferson County Library
Ness Corner Road and Cedar Avenue
Port Hadlock, Washington 98339
(360) 385-6544

II. Summary of Site History, Contamination Problems and Selected Remedy

Naval Magazine Indian Island is on Indian Island in Jefferson County, Washington, southeast of the city of Port Townsend and east of the town of Port Hadlock. The island is bordered by Kilisut Harbor to the east, Port Townsend Bay to the west and north, and Oak Bay and Portage Canal to the south. The U.S. Government holds title to the island. The U.S. Government purchased Indian Island in 1939 to store explosives and seaplanes, and manufacture antisubmarine cable nets. Naval Magazine Indian Island currently receives, stores, maintains, and issues Naval ordnance.

The Navy conducted an Initial Assessment Study (IAS) in 1984 to investigate the possibility of contamination at operable units or sites on Indian Island. The Navy initiated a Remedial Investigation and Feasibility Study (RI/FS) in 1989. Naval Magazine Indian Island was proposed for the National Priorities List (NPL) in 1993 and then added to the NPL in June 1994. In March of 1995, the RI/FS was completed and a Proposed Plan for site cleanup was published for public comment. The Navy, EPA, and Ecology signed the Record of Decision in August 1995. An Inter-agency Agreement pursuant to CERCLA was negotiated and signed by the Navy, EPA, and Ecology in 1996.

Although the ROD addressed a number of individual sites at Naval Magazine Indian Island (Sites 10, 11, 12, 15, 18, 19, 20, 21, and 22), only Site 10 requires institutional controls as part of the remedy. The ROD did require additional confirmatory sampling at Sites 11, 12, 18 and 21. The results of that sampling confirmed that no further action was necessary at those sites.

Site 10, the North End Landfill, is located in a former tidal lagoon adjoining Boggy Spit on the northeastern side of Indian Island. The remedial action selected in the August 1995 ROD for site 10 required installation of a cap and erosion controls which were completed in 1997 and a preliminary closeout report was issued in September 1997. The remedial action objectives and major components of the remedy selected in the ROD for site 10 are summarized in Attachment A, particularly as they relate to institutional controls and the need for institutional controls. The ROD should be consulted for a full description.

The reasonably expected future use of Site 10 is continued non-residential/agricultural use. Risks to current on site workers, future on site residents and recreational visitors were assessed. This included an assessment of risk from ingestion of shellfish at beaches adjacent to Site 10 at a subsistence level by Native Americans. An unacceptable non cancer risk results from ingestion of undepurated shellfish at a subsistence level. Ingestion of shellfish from beaches adjacent to the Site 10 also resulted in an unacceptable cancer risk. Uses prohibited under the Record of Decision are residential and agricultural use, and a temporary ban on shellfish harvesting at beaches around Boggy Spit until monitoring confirms that shellfish are safe to eat. These restrictions are necessary because such uses would result in unacceptable human risk from exposure to site contaminants.

III. Description of the Significant Difference and the Basis for those Differences

Institutional controls are being relied upon to protect human health and the environment at Site 10, the North End Landfill, at the Naval Magazine Indian Island. Although the ROD requires institutional controls at Site 10, the ROD lacks detail on site-specific institutional controls, including the geographic locations where ICs are required, the objectives of the control or restriction, and a description of the types of restrictions that need to be in place. The ROD is also silent on how these institutional controls (ICs) will be implemented, maintained and monitored, both while the Navy has control of the property as well as what will happen if the property is transferred to other federal ownership or private ownership. This ESD clarifies both the site-specific IC requirements and establishes the requirement for how the Navy will implement, maintain and monitor these site-specific requirements. The Navy is responsible for implementing, maintaining, reporting on, and enforcing the land use controls.

Also this ESD is being prepared for the purpose of implementing EPA Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities dated May 3, 1999.

IV. Institutional Control requirements

Attachment B contains the revised site-specific IC requirements for Site 10. These revised requirements clarify the geographic location where each IC is required, the objective of the control or restriction, implementation work plan requirements, and, as appropriate, a description of the types of restrictions that need to be in place.

The Naval Magazine Indian Island will notify EPA and Ecology immediately upon discovery of any activity that is inconsistent with the Site-specific IC requirements for Site 10, or of any change in the land use or land use designation of Site10.

The Naval Magazine Indian Island will notify EPA and Ecology at least six (6) months prior to any transfer, sale or lease of any property subject to ICs required by an EPA decision document so that EPA and the state can be involved in discussions to ensure that appropriate provisions are included in the conveyance documents to maintain effective ICs. In advance of a transfer of ownership or control of the property, the Naval Magazine shall take action within the limitations of their authority to insure that the controls and restrictions identified in Attachment B will continue after the transfer and any successive transfers pursuant to agreement between Navy, EPA and Ecology. If it is not possible for the facility to notify EPA and Ecology at least six months prior to any transfer, sale or lease, then the facility will notify EPA and Ecology as soon as possible but no later than 60 days prior to the transfer, sale or lease of any property subject to ICs.

The remedial requirements described in Attachment B should result in institutional controls that improve the short-term and long-term protectiveness to human health and the environment.

Within 180 days of issuance of this ESD, the U.S. Navy will submit a revised Operations

and Maintenance Work Plan for review and approval under the Inter-Agency Agreement. The revised O&M Plan must identify actions to be taken to implement and maintain institutional controls. Such actions must include periodic inspections and facility-wide requirements to implement, maintain, monitor, enforce and report on the site-specific institutional control requirements described in Attachment B that are consistent with the Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities.

The ARARs established in the ROD are not modified by this ESD. The IC requirements established by this ESD are consistent with the EPA Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities.

V. State Agency Comments

The Washington State Department of Ecology has reviewed this ESD and supports this clarification to the selected remedy.

VI. Public Participation Activities

Naval Magazine Indian Island will publish a notice of availability and a brief description of this ESD in the local newspaper, Port Townsend and Jefferson County Leader. A Restoration Advisory Board (RAB) is no longer active for Naval Magazine Indian Island. A combined mailing list has been used to reach interested parties. That list includes former RAB members as well as other community members. A fact sheet summarizing the ESD will be mailed to that mailing list.

Please contact Larry Tucker at Engineering Field Activity Northwest (360) 396-0053, if you would like more information about this ESD.

VII. Affirmation of the Statutory Determinations

The Navy, EPA, and Ecology believe that the remedies, as modified by this ESD, remain protective of human health and the environment, comply with federal and state requirements that were identified in the ROD as applicable or relevant and appropriate to these remedial actions at the time of the original ROD, and are cost-effective. In addition, the remedies continue to utilize permanent solutions and alternative treatment technologies to the maximum extent practicable for these sites.

Signature page for the Explanation of Significant Differences for the Naval Magazine Indian Island, (formerly Port Hadlock Detachment-Indian Island) Washington

For the United States Navy, Naval Magazine Indian Island

Jon D. Kurtz, CAPT.
Commanding Officer Naval Magazine
Indian Island

11-18-04
Date

Signature page for the Explanation of Significant Differences for the Naval Magazine Indian Island, (formerly Port Hadlock Detachment-Indian Island) Washington

For the United States Environmental Protection Agency

Daniel D. Oplaski
Director, Environmental Cleanup Office
EPA, Region 10

11/19/04
Date

Signature page for the Explanation of Significant Differences for the Naval Magazine Indian Island, (formerly Port Hadlock Detachment-Indian Island) Washington

For the Washington State Department of Ecology

James Pendowski
Program Manager, Toxics Cleanup Program
Washington Department of Ecology

11/23/04
Date

Attachment A

A Summary of the Remedial Action Objectives and Major Components of the Remedy for Site 10 at Naval Magazine Indian Island

Record of Decision - August 1995
Site 10 - North end Landfill

Remedial Action Objectives:

* Reduce contaminants in shellfish to levels protective of human health. In the interim, prevent human consumption of shellfish near Site 10.
* Reduce the transport of chemicals to groundwater or to the marine environment.
* Prevent people from coming in contact with soil containing contaminants that are above MTCA standards.
* Protect marine life and other animals that may prey on marine life from site contaminants.

Major Components of the Remedy:

* Placing a landfill cap over approximately 3.7 acres.
* Placing erosion protection along approximately 900 lineal feet of the landfill perimeter and shoreline.
* Possibly removing eroded landfill debris that is currently located in the intertidal area; excavating landfill contents from the water edge of the landfill in order to construct the erosion protection; and-based on the waste characterization to be conducted-disposing of debris at the Site 10 landfill, a Subtitle D (sanitary) landfill, and a Subtitle C (hazardous waste) landfill, if necessary, or, if possible, recycling material.
* Implementing institutional controls, which include a temporary prohibition on shellfish harvesting at beaches around Boggy Spit and land use restrictions for residential use and farming. Residential and farming restrictions and controls and requirements for the operation and maintenance of the landfill cap and erosion will be issued by the commanding officer and included in the base master plan upon completion of construction. Upon base closure, land use restrictions, deed restrictions on activities destructive to the cap and erosion protection will be attached to any property transfer, and requirements for continued operation and maintenance of the landfill cap and erosion protection will be addressed.
* Conducting a monitoring program that will involve sampling and analyzing groundwater, sediment, and shellfish. The results of the shellfish monitoring will be used to determine when the shellfish are safe to eat.
* Reviewing the results of the monitoring program in detail at the conclusion of the monitoring period to determine whether additional remedial action or monitoring is necessary.
* Conducting regular maintenance and inspection of the landfill cap and the erosion protection, particularly after storm events.
* Conducting periodic reviews.

Attachment B

Site-specific IC Requirements

Port Hadlock (currently Naval Magazine Indian Island) ROD, August 1995

Site 10, North End Landfill Geographic location where ICs are required:

1) The IC objectives listed below must be met throughout the 3. 7-acre site formerly called the North End Landfill situated on the northeast side of Indian Island adjacent to Boggy Spit Road and Kilisut Harbor and identified on the map attached as Figure 1. The IC objectives 1.1 to 1.4 listed below shall be maintained until the concentration of hazardous substances in soil and groundwater are at such levels to allow for unrestricted use and exposure.

Objectives of the control or restrictions:

1.1 Allow no activities that would impact the integrity of the landfill cap or erosion protection features.

1.2 Continue operation and maintenance of the landfill cap and erosion protection features.

1.3 No residential or farming use, or use as a school, childcare facility or playground.

1.4 Maintain the long-term efficacy of the institutional controls and the land use controls. Upon base closure, Navy and the US land disposal agent must address in the conveyance documents, land use restrictions, restrictions prohibiting activities destructive to the cap and requirements for erosion protection features, and requirements for continued operation and maintenance of the landfill cap and erosion protection features.

2) The IC objective below must be met throughout the intertidal areas adjacent to the North end Landfill, identified as beaches 19, 1, and 2 on Figure 4-1 of the Site 10 North end Landfill Final Monitoring Plan dated March 29, 2000, attached as Figure 2.

Objective of the control or restrictions:

A prohibition on shell fishing on beaches 19, 1, and 2 until the Navy, with concurrence of EPA, Washington Department of Ecology, Department of Health, and the tribes who have treaty rights to harvest shellfish in this area, has determined through shellfish and sediment monitoring data that the shellfish have met the requirements of the ROD.