

# Adak Island **UPDATE**

## Third 5-Year Review Completion



December 2011

### Introduction

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as the “Superfund law,” requires reviews of cleanup actions to be conducted at least once every 5 years at Superfund sites where contaminants have been left above levels that allow for unlimited use and unrestricted exposure. The purpose of these 5-year reviews is to ensure that the remedial actions chosen for a site are functioning properly and continue to protect human health and the environment. If the 5-year review process identifies any problem related to the cleanup actions, recommendations for corrective measures are developed.

This fact sheet provides a summary of the findings of the third 5-year review at the former naval complex on Adak Island. The former complex is divided into three “operable units” (OUs): OUs A, B-1, and B-2. OU A addresses hazardous substances and petroleum releases to the environment, while OU B-1 and OU B-2 address unexploded ordnance hazards. OU B-2 addresses explosive hazards for sites within Parcel 4, which is currently the only portion of the former naval complex where the Navy has retained ownership of the land. The sites that comprise OU A and OU B-1 (with the exception of portions of the Mount Moffett area) are located on land where ownership has been transferred to various federal, state, and local entities. The approximate locations of the OU A sites (i.e., CERCLA and petroleum sites) and the OU B-1 areas are shown on Figure 1.

The Navy’s third 5-year review was completed in October 2011 and focused on an assessment of remedies at OU A and OU B-1. At this time, remedies have not been selected for the OU B-2 sites.

### What is the basis of the 5-year review process?

The 5-year review process evaluates whether the remedies selected in the Records of Decision (RODs) and Decision Documents remain protective and how well they have performed over the past 5 years. The RODs and Decision Documents are the legal documents describing the selected cleanup actions, and they provide a road map for petroleum, chemical, and ordnance cleanup in specific areas on the former military base.

An interim action ROD was signed in 1995 to address the Metals and Palisades Landfills. The RODs for OU A and OU B-1 were prepared and signed by the Navy, the U.S. Environmental Protection Agency (EPA), and the State of Alaska Department of Environmental Conservation (ADEC) during 2000 and 2001. The OU A ROD was

amended in 2003 to remove 62 petroleum sites from CERCLA authority. Fourteen of these sites had only interim remedies selected in the OU A ROD. Because these sites were removed from CERCLA authority, final remedies were selected in accordance with Alaska regulations. The five decision documents for these 14 sites were prepared and signed by the Navy and ADEC in 2005, 2006, and 2007. The ROD for OU B-2 has not yet been finalized.

### **Who participated in the third 5-Year review?**

The Navy was the lead agency for the 5-year review, working with EPA and ADEC. In addition, community members provided input to the 5-year review, including Restoration Advisory Board members, representatives of the Alaska Maritime National Wildlife Refuge, which is managed by the U.S. Fish and Wildlife Service, a Sierra Club volunteer, and several current and former citizens of Adak. The Navy also invited landowners to participate, including the City of Adak, The Aleut Corporation, and the Alaska Department of Transportation and Public Facilities. By including this diverse range of interests as part of the review team, the Navy expected to identify potential concerns regarding the protectiveness of the remedies at the former naval complex.

### **How was the review performed?**

As part of the 5-year review process, the Navy asked the following questions:

1. Are the remedies functioning as intended by the RODs and decision documents (Functionality)?
2. Are the assumptions used at the time the remedies were selected still valid (Validity of Assumptions)?
3. Has any new information come to light that could call into question the protectiveness of the remedies (New Information)?

To answer these questions, the Navy reviewed documents describing the construction and monitoring of the selected remedies, evaluated data collected at the sites during the 2006 through 2010 field seasons, conducted site inspections, interviewed persons familiar with the remedial actions at Adak, and reviewed any changes in relevant environmental regulations that may call into question the protectiveness of the remedy. The results of the third 5-year review are summarized in the remaining sections of this Fact Sheet.

### ***Functionality***

The remedy is functioning as intended by the OU A ROD and the Decision Documents for all but five of the original 178 OU A sites on Adak. Two of these five sites are now being addressed as a single site (Naval Marine Construction Battalion [NMCB] Building Area). All of the remedy components required by the OU A ROD have been implemented and are functioning as intended by the ROD for all of the OU A sites, except for the following:

- Former Power Plant, Building T-1451
- SWMU 60, Tank Farm A

- SWMU 61, Tank Farm B
- NMCB Building Area (formerly the two sites below)
  - NMCB Building, T-1416 Expanded Area
  - NMCB Building, UST T-1416-A

The OU B-1 remedy is functioning as intended by the OU B-1 ROD. The selected remedies have been implemented at all 50 action sites identified in the OU B-1 ROD, although the remedy cannot be considered complete at all of the sites until all after-action reports are complete, documentation of remedy implementation is complete, and concurrence from the regulatory agencies is received. This documentation will be assembled as part of preparing the Remedial Action Completion Report. Conditional closure has been achieved for 18 of the 50 sites. ADEC and EPA have not yet concurred with all of the remedial actions, and, therefore, the remedy cannot be considered complete at OU B-1.

### ***Validity of Assumptions***

The exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of remedy selection are still valid.

### ***New Information***

New information that came to light during the third 5-year review was evaluated and did not call into question the protectiveness of the remedy.

### ***Protectiveness Statement***

The third 5-year review grouped the OU A sites into categories of protectiveness. Nearly all of the OU A sites fell into the categories of either “remedy is complete and protective,” or “remedy is operating and is expected to be protective”. The following three SAERA sites fell into the category of “not protective, unless follow-up actions are taken to ensure protectiveness”:

- Former Power Plant, Building T-1451
- SWMU 60, Tank Farm A
- NMCB Building Area (formerly the two sites below)
  - NMCB Building, T-1416 Expanded Area
  - NMCB Building, UST T-1416-A

At these sites, trends in product thicknesses observed in surface water protection wells, or ongoing impacts to adjacent surface water, call into question the protectiveness of the remedy. Follow-up actions were recommended at these sites for the final remedy to be protective.

Although the 5-year review found the remedy is not functioning as intended for the one site listed below, the potential harm of any additional remedial action outweighs the potential benefit due to sensitive areas at the site, and the protectiveness was not called into question:

- SWMU 61, Tank Farm B

The remedy for OU B-1 is expected to be protective of human health and the environment upon completion. Although the remedy is in place at all OU B-1 sites, regulatory concurrence has not been achieved for all sites. Until concurrence is achieved and the remedies can be considered complete, institutional controls are in place to control exposure pathways that could result in unacceptable risks.

The remedy for OU B-2 has not been selected. In the interim, land use controls are in place to control exposure pathways that could result in unacceptable risks to human health and the environment.

## Issues and Recommendations

The following issues and recommendations were identified by the third 5-year review.

### Site-wide

- Update the Comprehensive Monitoring Plan, Institutional Control Management Plan, and Operation and Maintenance Plan to reflect changes in monitoring and product recovery requirements recommended in the third 5-year review. The five-year review anticipated that the revised Comprehensive Management Plan would be completed by December 31, 2011. Plan updates would accomplish the following:
  - Site-by-site monitoring requirements updated based on the latest evaluations of monitoring data
  - Institutional control requirements formalized for several petroleum sites where institutional controls are not currently documented or inspected
  - Inconsistencies removed between the source documents that establish institutional controls and the requirements listed in the Institutional Control Management Plan
  - Clear criteria driven by decision documents for free-product monitoring and recovery
  - Sufficiently detailed free-product monitoring and recovery documentation in remedial action summary reports
- Update the document repositories. Expected completion date is December 31, 2011. The document repositories on Adak and in Anchorage are incomplete, especially with regard to recent documents generated during the third 5-year review period.
- Address action items identified during the 2010 site inspections. Expected completion date is December 31, 2012. Examples of action items identified included the following:
  - Vegetation removal from drainage swales

- Reseeding bare areas
- Placement of excavation restriction and general munitions warning signs
- Removal of abandoned or unused remediation systems
- Create a munitions response desk guide for limited distribution. The five-year review anticipated that this guide would be completed by December 31, 2011. Organizations involved in responding to munitions and explosives of concern (MEC) finds have requested materials detailing the procedures for local officials to follow in the event of a MEC discovery, the organization responsible for responding based on the location of the MEC item found, and the historical MEC recoveries across the island.

### ***OU A Petroleum Sites***

- Complete the ongoing assessment of additional remedial action at Former Power Plant, Building T-1451. Expected completion date is December 31, 2013. Former Power Plant, Building T-1451, or a nearby source yet to be identified, is impacting surface water quality in East Canal.
- Complete the ongoing evaluation of potential additional action for SWMU 60, Tank Farm A, based on impacts to South Sweeper Creek. Expected completion date is December 31, 2012. Groundwater samples collected from SWMU 60, Tank Farm A, wells near South Sweeper Creek contained total aromatic hydrocarbon and total aqueous hydrocarbon concentrations that exceeded ADEC surface water criteria, and seeps and sheens have been observed along South Sweeper Creek and Sweeper Creek Lagoon.
- Evaluate additional actions to protect surface water at NMCB Building Area in accordance with the Decision Document. Expected completion date is December 31, 2012. Free-product thickness measurements in three surface water protection wells at NMCB Building Area appear to be increasing, indicating that the remedy may not be functioning as intended, and additional investigation is warranted.

## Point of Contact and Telephone Number for Additional Information

For More Information	
<p>If you have questions or need additional information, please contact:</p> <p>Aaron Vernik Project Manager Naval Facilities Engineering Command Northwest U.S. Navy 1101 Tautog Circle Silverdale, WA 98315 (360) 396-0143 aaron.vernik@navy.mil</p>	<p>Detailed site information, including the first, second, and third 5-year review reports, is available at the website <a href="http://www.adakupdate.com">http://www.adakupdate.com</a> and at the following information repositories:</p> <p>University of Alaska Anchorage Library Reserve Room 3211 Providence Dr. Anchorage, Alaska Contact: Librarian 907-786-1871</p> <p>Bob Reeves High School Mechanic Road Adak Island, Alaska 907-592-4500</p> <p>Administrative Record Naval Facilities Engineering Command Northwest 1101 Tautog Circle Silverdale, WA 98315</p>

FIGURE 1

