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ADAK NAVAL AIR STATION, ADAK, ALASKA
(AK 4170024323)

OPERABLE UNIT A RECORD OF DECISION
AMENDMENT NO. 1

Prepared by
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September 4, 2003

PART 1: THE DECLARATION
ADAK NAVAL AIR STATION, ADAK, ALASKA
RECORD OF DECISION, OPERABLE UNIT A
AMENDMENT NO. 1

SITE NAME AND LOCATION

Operable Unit (OU) A
Adak Naval Air Station (currently known as Former Adak Naval Complex)
Adak Island, Alaska

STATEMENT OF PURPOSE

This decision document is an amendment to the *Adak Naval Air Station, Operable Unit A, Record of Decision* (OU A ROD – April 2000). The purpose of this OU A ROD Amendment is twofold, to:

- Replace subsistence fish advisory signs along Kuluk Bay and Sweeper Cove with fish advisory fact sheets provided to Adak residents; and
- Remove sixty-two (62) petroleum sites from the OU A ROD, consistent with the *Naval Air Station Adak Federal Facility Agreement (FFA)* and the Naval Air Station Adak *State-Adak Environmental Restoration Agreement* (SAERA) as amended in March 2002.

The statutory authority for this Amendment is the Comprehensive Environmental Compensation, Response, and Liability Act (CERCLA) Section 117(c) and National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Section 300.435(c)(2)(ii). In accordance with the NCP, Section 300.825(a)(2), this OU A ROD Amendment will become part of the administrative record file located at Naval Engineering Field Activity, Northwest, 19917 Seventh Avenue NE, Poulsbo, WA 98370. This amended decision is based on the administrative record file for this site.

Navy is the lead agency and responsible party for the environmental investigations and cleanup of the Former Adak Naval Complex. The U.S. Environmental Protection Agency (EPA) Region 10 as the lead regulatory agency must concur with the remedy decisions for the Former Adak Naval Complex . The State of Alaska, through the Department of Environmental Conservation (ADEC), provides regulatory oversight and review of the investigation and cleanup efforts, and resulting documentation. EPA and ADEC concur with the selected remedy as amended.

ASSESSMENT OF THE SITE

Actual or threatened release of hazardous substances from the CERCLA sites, if not addressed by implementing the response actions selected in the original Record of Decision, as amended in this document, present an imminent and substantial endangerment to the environment. The release of petroleum products into the environment will be remediated in accordance with Alaska's Oil and Hazardous Substances Pollution Control regulations, 18 AAC 75.

DESCRIPTION OF THE SELECTED REMEDY

Navy, EPA, and ADEC signed the OU A ROD in October 1999, March 2000, and April 2000, respectively.

The major components of the selected remedy for the CERCLA sites (including the OU A water bodies and downtown groundwater) include the following:

- Excavation and treatment by thermal desorption of contaminated sediments and soils
- Recycling of treated sediments and soils as daily cover material at the on-island Roberts Landfill
- Institutional controls to prohibit unacceptable exposure to residual hazardous substances left on site
- Monitoring of groundwater for benzene, toluene, ethyl benzene, xylenes, diesel-range organics (DRO), gasoline-range organics (GRO), bis(2-ethylhexyl)phthalate, methylene chloride, tetrachloroethene, tricholoroethene, lead, and natural recovery parameters (pH, nitrates, dissolved oxygen, etc.)
- Monitoring of aquatic biota for polychlorinated biphenyl's (PCBs) and posting of an advisory concerning potential risks associated with consumption of fish and shellfish from Sweeper Cove and Kuluk Bay

The major components of the selected remedy for the petroleum sites include the following:

- Removal and treatment of petroleum-contaminated soils to meet 18 AAC 75 requirements
- Recycling of treated soils as daily cover material at the on-island Roberts Landfill
- Monitored natural attenuation of petroleum chemicals in soil and groundwater
- Free-product recovery to maximum extent practicable as an interim remedial measure, followed by an evaluation of remedial alternatives to achieve final cleanup per the focused feasibility study (FFS) to achieve final cleanup levels under 18 AAC 75 for soils and groundwater
- Institutional controls to minimize the potential for direct contact, to restrict groundwater use, and/or to restrict excavation until remedial objectives have been met

The OU A ROD included petroleum site remedies, consistent with the State/Adak Environmental Restoration Agreement (SAERA), an agreement between Navy and ADEC, and consistent with the Federal Facilities Agreement (FFA), a separate agreement among the Navy, EPA, and ADEC. Also according to the OU A ROD, Institutional Controls (ICs) would be implemented to protect future human health effects from exposure to impacted fish and shellfish tissue and to monitor fish and shellfish tissue in Sweeper Cove and Kuluk Bay. Fishing advisories would be issued for subsistence fishers regarding harvesting of marine fish and shellfish. Signs would be placed along the shorelines of the affected water bodies. As mentioned previously, this amendment modifies these two aspects of the OU A ROD.

Fish and shellfish monitoring of Sweeper Cove and Kuluk Bay performed since the completion of the RI/FS in 1997 demonstrates that PCB concentrations have decreased. Fish (rock sole) and shellfish (blue mussel) analyses for PCBs are available, and illustrate a generally declining trend in PCB concentrations throughout Adak. Due to the cleanup of the source areas, the trend is expected to continue to decline over time. Given the available data, the Agency for Toxic Substances and Disease Registry (ATSDR) concluded in the Final Adak Public Health Assessment (9/06/02) that seafood from Sweeper Cove, Sweeper Creek and Kuluk Bay do not pose a public health hazard. This assessment included both current and anticipated future exposure.

This Amendment modifies the requirements in the OU A ROD related to subsistence fish advisory signs along the shores of Sweeper Cove and Kuluk Bay. It requires, in place of the signs, fact sheets primarily for the residents of the City of Adak. The fact sheets will provide summary information about the past studies conducted, discuss the water bodies and fish/shellfish species that are monitored , and discuss the methods of seafood collection and preparation that reduce potential exposure and consumption to contaminants in the food chain. Since 1999, the Navy has conducted s a monitoring program for fish/shellfish from Sweeper Cove and Kuluk Bay. This monitoring effort has been executed by the Biological Resources Division (BRD) of the U.S. Geological Survey (USGS) and the Navy's contractor. The complete reports, based on fish/shellfish tissue samples collected as part of this monitoring program , will be available for review in the Adak information repository, located on the second floor of Adak High School. Distribution of the fact sheets will be accomplished by direct mailing and via web-based postings on the Adakupdate.com website.

Cancer risks for a subsistence use harvester included in the OU AROD were above the upper end of the target risk range of 1 x 10E-4 for both Sweeper Cove and Kuluk Bay Cancer risks for a recreational seafood harvester consuming fish and shellfish from Sweeper Cove and Kuluk Bay were below 1×10^{-5}. The fact sheets will provide a greater level of detail on the presence of PCBs in specific species, and will also discuss potential health risks and benefits associated with fish consumption.

This Amendment also removes sixty-two (62) petroleum sites from the OU A ROD. Due to the nature and source of petroleum released at the 62 sites, the petroleum is not considered a hazardous substance under CERCLA. The State of Alaska has Oil Pollution Control Laws and Oil and Hazardous Substances Pollution Control regulations (18 AAC 75), which requires remediation of releases of any petroleum. 18 AAC 75 will be the basis for regulatory procedures and requirements for future petroleum cleanup decisions. The petroleum sites are being taken out of the Adak CERCLA remediation process in order to streamline regulatory oversight of the petroleum cleanup, and to potentially expedite the partial delisting of the Downtown Area from the National Priorities List (NPL). The OU A ROD selected final decisions for forty-eight of the sixty-two petroleum sites and interim remedies for fourteen petroleum sites As a result of this amendment to the OU A ROD, the final cleanup decisions for the fourteen sites, as well as the implementation of all cleanup decisions and necessary monitoring for all 62 petroleum sites, will be conducted in accordance with 18 AAC 75 and pursuant to the SAERA between the Navy and ADEC.

AFFIRMATION OF THE STATUTORY DETERMINATIONS

The remedy, as modified by this OU A ROD amendment, will remain protective of human health and the environment, complies with applicable, or relevant and appropriate requirements related to the selected remedial actions as identified in the OU A ROD, and is cost-effective. The remedies will continue to utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. This amendment does not alter the original remedy selection with respect to preference for treatment of contamination as a principal element of remedy. Because the remedies for OU A will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial actions to ensure that the remedies are, or will be, protective of human health and the environment.

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Former Adak Naval Complex, Adak, Alaska
Operable Unit A Record of Decision
Amendment No. 1
Decision Summary

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ACRONYMS AND ABREVIATIONS

ADEC	Alaska Department of Environmental Conservation
ANILCA	Alaska National Interests Lands Conservation Act
ARAR	Applicable or Relevant and Appropriate Requirements
ARC	Adak Reuse Corporation
ATSDR	Agency for Toxic Substances and Disease Registry
BRAC	Base Realignment and Closure Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DOD	Department of Defense
DRO	Diesel-Range Organics
EPA	U.S. Environmental Protection Agency, Region 10
ESD	Explanation of Significant Differences
FFA	Federal Facility Agreement
FOST	Finding of Suitability for Transfer
GCI	General Communications, Inc.
GRO	Gasoline-Range Organics
ICMP	Institutional Control Management Plan
MNA	Monitored Natural Attenuation
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NMCB	Navy Mobile Construction Battalion
NPL	National Priorities List
NSGA	Naval Security Group Activity
OU	Operable Unit
PCB	Polychlorinated Biphenyl
POL	Petroleum, Oil and Lubricant
POP	Persistent Organic Pollutant
PSE	Preliminary Source Evaluation
RAB	Restoration Advisory Board
RI/FS	Remedial Investigation and Feasibility Study
ROICC	Resident Officer In Charge of Construction
ROD	Record of Decision
SA	Source Area
SAERA	State-Adak Environmental Restoration Agreement
SWMU	Solid Waste Management Unit
TAC	The Aleut Corporation
UST	Underground Storage Tank

PART 2: DECISION SUMMARY

This Decision Summary provides a description of the factors that led to the decision to modify the requirement for subsistence fish advisory signs, and to remove sixty-two (62) petroleum sites from the Operable Unit (OU) A Record of Decision (ROD). It also includes information about the site location, the rationale for the change, and it describes the public involvement throughout the process. The documents supporting this Decision Summary are in the Administrative Record.

1.0 SITE NAME AND LOCATION

The Former Naval Complex Adak is located approximately 1,200 air miles southwest of Anchorage, Alaska, in the Aleutian Island chain. It occupies 76,800 acres on the northern portion of Adak Island. Sweeper Cove and Kuluk Bay are located on the northeastern portions of Adak. Additional descriptions may be obtained in the OU A ROD.

This Amendment pertains to the following petroleum sites:

Table 1: Petroleum Sites

Site Name	OU A ROD Remedy
Amulet Housing, Well AMW 706 Area	Monitored natural attenuation
Amulet Housing, Well AMW 709 Area	Monitored natural attenuation
Antenna Field (USTs ANT 1, ANT 2, ANT 3, and ANT 4)	Monitored natural attenuation
ASR 8 Facility (UST 42007 B)	Limited soil removal
Boy Scout Camp, West Haven Lake (UST BS 1)	Limited groundwater monitoring
Contractors Camp Burn Pad	Limited soil removal
Finger Bay Quonset Hut	Limited soil removal
Former Power Plant Building (T 1451)	Monitored natural attenuation
GCI Compound (UST GCI 1)	Product recovery
Girl Scout Camp (UST GS 1)	Limited soil removal
Housing Area (Arctic Acres)	Monitored natural attenuation
MAUW Compound (UST 24000 A)	Limited groundwater monitoring
Mount Moffett Power Plant No. 5 (USTs 10574 through 10577)	Limited soil removal
NAVFAC Compound (USTs 20052 and 20053)	Limited groundwater monitoring
Navy Exchange Building (UST 30027 A)	Limited soil removal
New Roberts Housing (UST HST 7C)	Limited groundwater monitoring
NMCB Building Area (UST T-1416-A)	Located within a larger remedial action site
NMCB Building Area, T 1416 Expanded Area	Product recovery
NORPAC Hill Seep Area	Product recovery
Officer Hill and Amulet Housing (UST 31047 A)	Limited soil removal
Officer Hill and Amulet Housing (UST 31049 A)	Limited soil removal
Officer Hill and Amulet Housing (UST 31052 A)	Limited soil removal
Quarters A	Limited soil removal

Table 1: Petroleum Sites

Site Name	OU A ROD Remedy
ROICC Contractor's Area (UST ROICC 7)	Limited groundwater monitoring
ROICC Contractor's Area (UST ROICC 8)	Monitored natural attenuation
ROICC Warehouse (UST ROICC 2)	Limited groundwater monitoring
ROICC Warehouse (UST ROICC 3)	Limited groundwater monitoring
Runway 5-23 Avgas Valve Pit	Monitored natural attenuation
SA 73, Heating Plant No. 6	Product recovery
SA 77, Fuels Facility Refueling Dock, Small Drum Storage Area	Limited soil removal
SA 78, Old Transportation Building (USTs 10583, 10584, and ASTs)	Product recovery
SA 79, Main Road Pipeline	Limited groundwater monitoring
SA 80, Steam Plant No. 4 (USTs 27089 and 27090)	Product recovery
SA 81, Gun Turret Hill (USTs 10593 and 10595)	NFA Based upon AAC 75 Method Four Criteria
SA 82, P 80/P 81 Buildings (UST 10579)	Product recovery
SA 84, Sand Shed	NFA Based upon AAC 75 Method Four Criteria
SA 85, New Baler Building	NFA Based upon AAC 75 Method Four Criteria
SA 86, Old Happy Valley Child Care Center	NFA Based upon AAC 75 Method Four Criteria
SA 87, Old Zeto Point Wizard Station	NFA Based upon AAC 75 Method Four Criteria
SA 88, P 70 Energy Generator (UST 10578)	Product recovery
SA 89, Tank Farm C	NFA Based upon AAC 75 Method Four Criteria
South of Runway 18-36 Area	Product recovery
SWMU 14, Old Pesticide Storage and Disposal Area	Monitored natural attenuation
SWMU 15, Future Jobs/Defense Reutilization Marketing Office (Non-Petroleum Chemicals)	Monitored natural attenuation
SWMU 17, Power Plant No. 3	Product recovery
SWMU 22, Avgas Drum Storage Area South of Tank Farm A	Original NFA site listed in SAERA agreement
SWMU 31, Runway 18-36 Avgas Drum Disposal Area	Original NFA site listed in SAERA agreement
SWMU 34, Steam Plant #4, Used Oil AST	Original NFA site listed in SAERA agreement
SWMU 35 Ground Support Equipment (GSE) Used Oil AST	Original NFA site listed in SAERA agreement
SWMU 41, Ground Support Equipment (GSE) Used-Oil Storage Area	Original NFA site listed in SAERA agreement
SWMU 44, AIMD Used Oil Storage Area	Original NFA site listed in SAERA agreement
SWMU 45, Sewage Treatment Plant Petroleum Contamination	Original NFA site listed in SAERA agreement
SWMU 56, Public Works Transportation Department (UST T 1441 A)	NFA Based upon AAC 75 Method Four Criteria
SWMU 57, Fuels Facility Refueling Dock	NFA Based upon AAC 75 Method Four Criteria
SWMU 58, Heating Plant No. 6	Product recovery
SWMU 60, Tank Farm A	Monitored natural attenuation
SWMU 61, Tank Farm B	Monitored natural attenuation
SWMU 62, New Housing Fuel Leak	Product recovery
SWMU 64, Tank Farm D, Northern Area	NFA Based upon AAC 75 Method Four Criteria
Tanker Shed (UST 42494)	Product recovery
Yakutat Hangar, USTs T 2039 A	Product recovery

Table 1: Petroleum Sites	
Site Name	**OU A ROD Remedy**
Yakutat Hangar, USTs T-2039 B, and T-2039 C	Limited soil removal

The petroleum sites generally are located in the Downtown Area of Adak, the populated area of the island; the former Naval Security Group Activity (NSGA) complex, on the lower, southern slope of Mount Adagdak; or near the ROICC Contractor's Camp, approximately one mile north of the Downtown Area.

2.0 BACKGROUND AND AGENCY AGREEMENTS

2.1 Site History

Since August 1942, the northern portion of Adak Island has been used for military activities. Initially, the island was used as a base to prepare for offensive actions against the Japanese forces occupying Kiska and Attu during World War II. Navy presence at Adak was officially recognized by Public Land Order 1949, dated August 19, 1959, which withdrew the northern portion of Adak Island, comprising approximately 76,800 acres, for use by the Navy for military purposes. By 1993, over 5,000 military and civilians were stationed at the former Naval Air Station at Adak. In 1995, the base was listed for closure as part of the Base Realignment and Closure (BRAC) program and in March of 1997, the base was officially closed. As a result of the historical practices with regard to resource and waste management at military facilities on Adak Island, various hazardous substances and petroleum contaminated some areas on the island. A number of environmental restoration programs were initiated as early as 1986 to address contamination issues on Adak Island. Adak Island has been federal property since the United States acquired Alaska from Russia in 1867. Since 1913 it has been a federal wildlife refuge. In 1980, all of Adak Island was included within the Alaska Maritime National Wildlife Refuge, established by Congress in the Alaska National Interest Lands Conservation Act (ANILCA), and it remains part of that wildlife refuge.

The Naval Air Station Adak was proposed for the NPL in October 1992 and formally listed in May 1994. Navy, EPA and ADEC signed a Federal Facility Agreement (FFA) in 1993 to establish the process and schedule for the remedial investigation and feasibility study (RI/FS) and remedy decisions. The former base is divided into three OUs, OU A, OU B-1 and OU B-2. OU A addressed potential hazardous substances sites in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the petroleum sites in accordance with the State-Adak Environmental Restoration Agreement (SAERA). OU B-1 and OU B-2 address ordnance explosive safety hazards and potential risks associated ordnance chemical constituents

In October 1995, the closure of the Naval Air Station became law under the BRAC Act. Since that time, accelerated environmental cleanup has been undertaken to facilitate a land exchange of a large portion of the Naval Air Station between the Department of Interior and The Aleut Corporation (TAC). The Adak Reuse Corporation (ARC), a not for profit corporation,

representing a range of interests in the region, became the local redevelopment authority under the BRAC process. ARC has been planning reuse of the Adak property and initiating reuse activities under authority of a lease with the Navy.

The Navy, U.S. Department of the Interior, and TAC signed a land exchange agreement, *Agreement Concerning the Conveyance of Property at the Adak Naval Complex*, in September 2000, with ARC as a concurring party. Within that agreement, the Navy agreed to carry out all environmental remedial investigations and remedial actions required by the OU A and B RODs, and the FFA and SAERA; and those required under applicable law including, but not limited to, CERCLA. The Navy agreed to make its best efforts to complete all actions necessary for issuance of a Finding of Suitability for Transfer (FOST) as soon as possible, taking into account TAC's interest in implementing reasonable reuse.

2.2 Agency Agreements

The FFA originally specified the remedial action process for 84 potentially hazardous substance release sites and the associated down gradient water bodies to be completed under CERCLA. The 84 sites and down gradient water bodies were evaluated under preliminary source evaluations (PSE) and a RI/FS. The FFA stated that petroleum-related contaminated sites, such as those containing underground storage tanks (USTs) and leaking underground fuel lines, would be evaluated under a separate two-party agreement between the Navy and the State of Alaska. Navy and ADEC signed this agreement, SAERA, in April 1994. The purpose of SAERA is to execute the assessment, containment, monitoring, and remediation of affected soil and groundwater at sites with petroleum, oil and lubricants (POL) and leaking USTs. Section 5 of the SAERA document outlines the process of a combined ROD for final decisions for CERCLA and SAERA sites. In accordance with the ROD language, SAERA and the FFA were amended in March 2002, to clarify that future decisions regarding petroleum sites will be made by ADEC and Navy. This is consistent with provisions in the Adak FFA and the SAERA. Since that time, the Navy has proposed a partial deletion from the NPL of the Downtown Area of Adak. This includes most of the infrastructure for reuse and covers an area of approximately 2000 acres. By removing the sixty-two (62) petroleum sites from the CERCLA process, the NPL deletion process can be pursued several years earlier than if the sites remained under CERCLA.

2.3 Adak Naval Air Station Operable Unit A Record of Decision

The OU A ROD presents the selected remedial actions for the OU A CERCLA sites, and the selected response actions for petroleum releases associated with USTs and piping in accordance with SAERA.

Under the CERCLA RI/FS for OU A, the Navy evaluated 58 sites on land, as well as down gradient groundwater and aquatic sites. The major components of the selected remedy for the CERCLA sites (including the OU A water bodies and downtown groundwater) include the following:

- Excavation and treatment by thermal desorption of contaminated sediments and soils
- Recycling of treated sediment and soils as daily cover material at the on-island Roberts Landfill

- Placement of a soil cover over Solid Waste Management Unit (SWMU) 4
- Institutional controls to prohibit unacceptable exposure to hazardous substances remaining on site
- Monitoring of groundwater for benzene, toluene, ethylbenzene, xylenes, diesel-range organics (DRO), gasoline-range organics (GRO), bis(2-ethylhexyl)phthalate, methylene chloride, tetrachloroethene, trichloroethene, lead, and natural recovery parameters
- Monitoring of aquatic biota for polychlorinated biphenyls (PCBs)

The CERCLA sites remedial work has been completed, and the monitoring is ongoing. Pre transfer institutional controls are in place for those sites that have chemicals above residential cleanup levels. An Institutional Control Management Plan (ICMP) has been developed to implement these institutional controls. The ICMP describes the specific engineering and land use controls that are associated with the OU A ROD. In the case of the advisory for subsistence consumption of fish and shellfish from Sweeper Cove and Kuluk Bay, the initial ICMP required installation and maintenance of permanent signs along the shores of these water bodies.

Under the SAERA petroleum cleanup program, the Navy addressed 128 sites. As set forth in the OU A ROD, the major components of the selected remedy for the petroleum sites, in accordance with SAERA and applicable regulations, include the following:

- Removal and treatment of petroleum-contaminated soils to meet 18 AAC 75 requirements
- Recycling of treated soils as daily cover material at the on-island Roberts Landfill
- Monitored natural attenuation of petroleum chemicals in soil and groundwater
- Free-product recovery to the maximum extent practicable as an interim remedial measure.
- Institutional controls to minimize the potential for direct contact with contaminants, to restrict groundwater use, and/or to restrict soil excavation until remedial objectives have been met.

Limited soil removals were completed at ten petroleum sites. Limited soil removals were initiated at two sites, ASR-Facility (UST 42007-B) and SWMU 77, Small Drum Storage Area;, however, ongoing operations at these sites prevented completion. Other sites will continue to be monitored to evaluate the rate at which natural attenuation is occurring. Pre transfer institutional controls are in place at the monitored natural attenuation sites as delineated in the Adak Island ICMP. Final remedial decisions are required for 14 sites where petroleum product floats on top of the groundwater.

3.0 DESCRIPTION OF AND BASIS FOR THE CHANGES

3.1 Subsistence Fish Advisory Signs Replacement

Subsistence fish advisory signs were included as part of the institutional control remedy set forth in the OU A ROD for Sweeper Cove and Kuluk Bay. The intent of the subsistence fish advisory signs was to advise Adak residents about long-term potential health risks associated with subsistence consumption of rock sole and blue mussels due to the presence of polychlorinated

biphenyls (PCBs). The fish advisory signs are meant for long-term residents on the island who may subsist on rock sole and blue mussels as a significant portion of their daily diet for a long period of time (consuming 126 grams of rock sole and 26 grams of shellfish every day for 30 years). Lower levels of consumption of these fish and shellfish, such as would be expected of non-subsistence residents, were not found to pose an elevated risk (118 grams of rock sole and 1.1 grams of shellfish for 38 days per year during a 5 year period).

Cancer risks for a subsistence use harvester included in the OU AROD were above the upper end of the target risk range of 1 x 10E-4 for both Sweeper Cove and Kuluk Bay. Cancer risks for a recreational seafood harvester consuming fish and shellfish from Sweeper Cove and Kuluk Bay were below 1×10^{-5}. The Navy, EPA and ADEC agree to modify the institutional control portion of the remedy by replacing the subsistence fish advisory signs on the shores of Kuluk Bay and Sweeper Cove with distribution of fact sheets. Prior to removing the signs, the Navy agrees to distribute the fish advisory fact sheets. The fact sheets will be distributed by mail and posted on the Adakupdate.com website. The fact sheet will be revised as new relevant information is obtained from sampling data to more accurately reflect the trend in PCB levels in fish/shellfish tissue. Fact sheets will also be made available at public places (city hall, schools, public restaurants, etc.). Fact sheets allow the Navy to direct the message to the intended audience, the residents of Adak, who may be harvesting Adak fish and shellfish as part of a subsistence diet. The fact sheets will also provide a greater level of detail on the presence of PCBs in specific species, and they will also discuss potential health risks and benefits associated with fish consumption. Because the concentrations of PCBs in these fish/shellfish are below levels of concern for recreational consumption of these fish/shellfish, the educational material will not address recreational consumption.

3.2 Petroleum Sites Removal from the OU A ROD

The OU A ROD is a combined decision document for CERCLA site remedies and a portion of the SAERA petroleum site remedies. Although petroleum is not a hazardous substance under CERCLA, some petroleum sites were included in the OU A ROD in accordance with the SAERA and the FFA in place at the time. The OU A ROD and SAERA maintain that the primary regulatory authority for the petroleum sites is 18 AAC 75. At the time of the OU A ROD development, the 18 AAC 75 regulations were undergoing significant revisions to incorporate cleanup standards and to include a decision process for petroleum release sites. The revisions, grouped under Article 3 as 75.300 to 75.396, constituted a comprehensive reorganization and revision of the petroleum cleanup regulations. It is the intent of the OU A ROD to allow the petroleum sites to be cleaned up in accordance with these applicable regulations. For those petroleum sites with interim remedies, the OU A ROD states that the Navy will develop and select final remedies utilizing a focused feasibility study-like process. The cleanup and decision process is presented as guidance to ADEC project managers in the *Guidance on Decision Documentation Under the Site Cleanup Rules* (18 AAC 75.325 – 18 AAC 75.390). The OU A ROD selected final decisions for all but the fourteen free-product recovery sites. By removing the sixty-two petroleum sites from the OU A ROD, it simplifies regulatory authority to the State, and may accelerate the final remedy selection for these 14 petroleum sites while still providing protection of human health and the environment and establishing provisions for public involvement.

The language in the OU A ROD regarding decisions on future actions for petroleum free-product recovery sites, and the process to be followed regarding such sites, refers to the primary applicable requirement, 18 AAC 75, and to the SAERA. The OU A ROD further states that additional remedial actions will be done under terms mutually agreed to by the Navy and the State of Alaska. The OU A ROD is silent regarding the procedures for incorporating subsequent final decisions for the interim petroleum remedies.

This Amendment removes the petroleum free-product recovery sites from the OU A ROD and places them under the sole regulatory authority of the State of Alaska in accordance with18 AAC 75. In this manner, this Amendment removes any ambiguity regarding the process for future decision-making at these sites, and simplifies regulatory oversight. Petroleum site cleanup is regulated under 18 AAC 75.300 –75.396, and cleanup decisions will be in accordance with the process set forth in this regulation and associated guidance documents. At the time the OU A ROD was developed, 18 AAC 75 was considered the source for petroleum Applicable, or Relevant and Appropriate Requirements (ARAR) under the CERCLA process.

4.0 ALTERNATIVES ASSESSMENT

This section discusses the alternatives considered in this decision. There are two basic considerations for the fish advisory signs replacement, and the petroleum sites removed from the OU A ROD. Alternative 1 is No Action, which consists of the status quo, of leaving the remedies as they currently are stated in the OU A ROD. Alternative 2 is: 1) to remove the fish advisory signs along the shores of Kuluk Bay and Sweeper Cove and to replace them with a fact sheet, and 2) to remove the sixty-two (62) petroleum sites from the OU A ROD, establishing 18 AAC 75.300 – 75.396 as the regulatory framework for the petroleum cleanup.

5.0 EVALUATION OF THE ALTERNATIVES

Nine evaluation criteria contained in the NCP provide the basis for determining which alternative provides the best balance of tradeoffs. The nine criteria are grouped into three categories, based upon the role of each criterion during remedy selection.

- Threshold criteria:
  - Overall protection of human health and the environment
  - Compliance with ARARs

- Balancing criteria:
  - Long-term effectiveness and permanence
  - Reduction of toxicity, mobility , and volume through treatment
  - Short-term effectiveness
  - Implementability
  - Cost of implementation

- Modifying criteria:
  - State acceptance

- Community acceptance

The threshold criteria relate directly to statutory requirements that must ultimately be satisfied in a ROD. These criteria are categorized as threshold because any alternative selected must meet these basic criteria. The balancing criteria are grouped together because they represent the primary factors upon which the comparative analysis is based. These criteria are used to examine technical, cost, institutional, and risk concerns. The modifying criteria involve State, and community acceptance, which were evaluated following the receipt of agency and public comments on the Proposed Plan.

The alternatives considered under this Amendment differ primarily in the administration of the final remedies for the subsistence fish advisory signs and the petroleum sites. The primary process for developing final remedy documents for the fourteen petroleum free-product recovery sites will be in accordance with 18 AAC 75. Since final remedies for these sites have yet to be selected, there is no basis for performing a comparative analysis of the final remedies to be selected. Prior to selection of a final remedy under SAERA, an evaluation of the effectiveness of the remedial alternatives will be completed as required by18 AAC 75.

The following is a comparison of the fundamental change and the remedy selected in the OU A ROD with respect to EPA's nine criteria.

5.1 Overall Protection of Human Health and the Environment

This criterion addresses whether or not an alternative eliminates, reduces, or controls the risks posed to public health and the environment through institutional controls, engineering controls or treatment.

5.1.1 Subsistence Fish Advisory Sign Replacement

Alternatives 1 and 2 both use institutional controls to reduce human consumption of rock sole and blue mussels by subsistence users of these resources. While both alternatives are effective in providing subsistence users information regarding risk associated with consumption of rock sole and blue mussels, Alternative 2 is a preferred remedy because it targets this information specifically at the segment of the population that is exposed to this potential risk, without creating unwarranted concern among non-subsistence fishers not exposed to the same level of potential risk.

5.1.2 Petroleum Sites Removal From OU A ROD

Alternatives 1 and 2 provide the same overall protection of human health and the environment. Alternative 1 utilizes 18 AAC 75 as an ARAR, Alternative 2 would be implemented under 18 AAC 75. Alternative 2 provides a clear avenue for selecting a final remedy, whereas Alternative 1 does not. The process selection for a final remedy under 18 AAC 75 would include evaluation of the overall protectiveness of human health and the environment.

5.2 Compliance with Applicable or Relevant and Appropriate Requirements

Evaluation of compliance with ARARs determines whether or not the alternative meets Federal or State statutes, regulations, and other requirements that pertain to the site, pursuant to CERCLA Section 121(d).

5.2.1 Subsistence Fish Advisory Sign Replacement

Chemical specific ARARs are not available for sediments or for fish and shellfish tissue (some advisories have been used that were adopted from WA state). Alternatives 1 and 2 each require compliance with Alaska regulations that describe appropriate use of institutional controls for hazardous waste sites (18 AAC 75.375).

5.2.2 Petroleum Sites Removal From OU A ROD

Alternative 1 has 18 AAC 75 as an ARAR in the OU A ROD. Alternative 2 would be implemented under 18 AAC 75, which does not have an ARAR requirement per se. Alternative 2 provides an avenue to select final remedies for the fourteen petroleum free-product recovery sites and it streamlines the regulatory oversight and process.

5.3 Long-term Effectiveness and Permanence

This criterion considers the ability of an alternative to maintain protection of human health and the environment over time.

5.3.1 Subsistence Fish Advisory Sign Replacement

Alternatives 1 and 2 each rely on institutional controls, which are considered effective and reliable to reduce risk to human health.

5.3.2 Petroleum Sites Removal From OU A ROD

Alternatives 1 and 2 each provide long-term effectiveness for forty-eight of the petroleum remedies. Alternative 2 provides an avenue for long-term protectiveness of the fourteen petroleum free-product recovery sites through the decision-making process under 18 AAC 75.

5.4 Reduction in Toxicity, Mobility, or Volume Through Treatment

This criterion refers to the anticipated performance of the treatment technologies for the remedy. Factors considered include the nature of the treatment process; the amount of hazardous substances destroyed by the treatment process; how effectively the process reduces the toxicity, mobility, or volume of waste through treatment; and the type and quantity of contamination that will remain after treatment.

5.4.1 Subsistence Fish Advisory Sign Replacement

There is no treatment requirement for either Alternatives 1 or 2.

5.4.2 Petroleum Sites Removal From OU A ROD

Alternative 1 was analyzed previously for reduction in toxicity, mobility, and volume through treatment in the OU A ROD. The interim remedies selected in the OU A ROD for the free product recovery sites provided for destruction of chemicals by burning the petroleum recovered in boilers on Adak. It has been effective in removing the volume of the petroleum compounds, however, it does not provide a final remedy that addresses the soil or dissolved petroleum compounds at each of the free-product recovery sites. Alternative 2 provides a process for final remedy selection utilizing the 18 AAC 75 requirements and would provide a permanent remedy that would address soil and dissolved chemical compounds.

5.5 Short-term Effectiveness

This criterion addresses the time factor during implementation of the remedy. A potential remedy is evaluated for the time needed to implement and complete the remedy and any adverse impact on human health and the environment during the construction and implementation of the remedy until cleanup levels are achieved

5.5.1 Subsistence Fish Advisory Sign Replacement

Alternatives 1 and 2 would not entail short-term impact to the community. Natural recovery processes may achieve the remedial action objectives for both alternatives over the long-term (75 years).

5.5.2 Petroleum Sites Removal From OU A ROD

Alternative 1 provides short-term effectiveness for forty-eight sites. The fourteen petroleum free-product recovery sites are addressed as interim remedies under Alternative 1 with no simple avenue to address final remedies. Alternative 2 provides short-term effectiveness for forty-eight sites, and it provides an avenue to evaluate final remedies for their short-term effectiveness under 18 AAC 75 at the fourteen petroleum free-product recovery sites.

5.6 Implementability

Implement ability addresses the ease with which a potential remedy can be put in place. Factors such as availability of material and services are considered. The interim remedies are in place; therefore implement ability has already been addressed. The final remedies will be evaluated for their implement ability under 18 AAC 75.

5.6.1 Subsistence Fish Advisory Sign Replacement

Alternatives 1 and 2 are easily implemented. The signs placed under Alternative 1 have been subject to vandalism. This impairs the ability of individuals to read the signs and thus be advised regarding the potential subsistence harvest risks. Alternative 2 is sent directly to the residents.

5.6.2 Petroleum Sites Removal From OU A ROD

Final remedies for forty-eight petroleum sites have already been implemented and are not affected by this amendment. Alternative 1 does not provide a clearly understood regulatory framework for arriving at final remedial decisions for the remaining fourteen free product recovery sites. Alternative 2 provides a process to develop final remedies that are implementable under 18 AAC 75 while being protective of human health and the environment

5.7 Cost of Implementation

Alternative 1 and 2 have already been implemented for the forty-eight petroleum sites. There are no expected differences in the estimated costs for implementation of Alternatives 1 or 2 at the remaining sites addressed in this amendment.

5.8 State Acceptance

ADEC participated in the planning of this fundamental change to the OU A ROD and supports this Amendment. ADEC will become the sole regulatory authority under 18 AAC 75 for the sixty-two (62) petroleum sites. Both ADEC and Alaska State Department of Public Health have reviewed the draft fish/shellfish fact sheet, and agree that the Adak resident subsistence fisher as the target population on which to focus educational efforts.

5.8 Community Acceptance

Pursuant to the NCP Section 300.430(f)(2), the Navy provided for a 30-day review of the proposed plan to amend the OU A ROD. In addition, the Navy held a public meeting on Adak on May 28, 2003 to solicit verbal comments. The results of those comments are attached in the responsiveness summary. The Navy, EPA, and ADEC are satisfied that the community is supportive of this Amendment.

Based upon the information currently available, Navy, EPA and ADEC believe this final process change from CERCLA to 18 AAC 75 meets the threshold criteria and provides the better balance of tradeoffs between the two processes with respect to the threshold, balancing and modifying criteria.

STATUTORY DETERMINATIONS

The remedy, as modified by this OU A ROD amendment, will remain protective of human health and the environment, complies with applicable or relevant and appropriate requirements related to the selected remedial actions as identified in the OU A ROD, and is cost-effective. The remedies will continue to utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. This amendment does not alter the original remedy selection with respect to preference for treatment of contamination as a principal element of remedy. Because the remedies for OU A will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial actions to ensure that the remedies are, or will be, protective of human health and the environment.

6.0 PUBLIC PARTICIPATION ACTIVITIES

Fourteen Restoration Advisory Board (RAB) meetings have been held and the Navy has distributed eleven fact sheets to update the public on cleanup activities, since the OU A ROD was signed in April 2000. The Navy informed the RAB of a planned explanation of significant differences as early as a March 21, 2001, at a meeting attended by approximately 20 stakeholders. The Navy informed the general public and the RAB members of the proposed OU A ROD Amendment in May 2003. The Navy published a notice of the public meeting in the Anchorage Daily News on May 15, 2003. The proposed plan was mailed to interested stakeholders, made available on the www.adakupdate.com website, and placed in the repositories listed below.

Bob Reeves High School Library
2nd Floor
Adak, Alaska
M-F, 8 a.m. to 5 p.m.

University of Anchorage
Library Reserve Room
3211 Providence Drive
Anchorage, AK
M-F, 8 a.m. to 5 p.m.

A public meeting was held on May 28, 2003; approximately 10 stakeholders attended the meeting. The responsiveness summary to the relevant comments received is attached.

REFERENCES

Agency for Toxic Substances and Disease Registry, *Public Health Assessment for Naval Air Facility, Adak - EPA Facility ID: AK 4170024323*, September 6, 2002.

Alaska Department of Environmental Conservation, *Guidance on Decision Documentation Under the Site Cleanup Rules,* October 2002.

US EPA, *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, Chapters 6-9, July 1999.

US Navy, EPA and ADEC, *Naval Air Facility Federal Facility Agreement,* 1993

US Navy, EPA and ADEC, *Naval Air Facility Federal Facility Agreement,* March 2002

US Navy and ADEC, *State Adak Environmental Restoration Agreement,* 1994

US Navy and ADEC, *State Adak Environmental Restoration Agreement, Amendment 01,* March 2002

US Navy, *Adak Island Final Institutional Control Management Plan,* December 2001.
US Navy, ADEC, and USEPA, 2000. *Final Record of Decision for Operable Unit A, Former Adak Naval Complex, Adak Island, Alaska.* Prepared by URS Greiner, Inc. for Engineering Field Activity, Northwest, under CLEAN Contract No. N62474-89-D-9295. Poulsbo, WA. April 2000.

RESPONSIVENESS SUMMARY
OPERABLE UNIT A RECORD OF DECISION AMENDMENT
FORMER NAVAL AIR FACILITY
ADAK ISLAND, ALASKA

The following is a summary of comments and responses provided during the public review and comment period on a proposed plan to amend the Operable Unit A Record of Decision for the former Naval Air Facility at Adak Island, Alaska. The proposed plan was distributed to the public on May 16, 2003 and the public review and comment on this plan ran until June 16, 2003.

Most of the comments from the public on this proposed plan were provided verbally during a public meeting, which was held on May 28, 2003 in the State of Alaska's Department of Environmental Conservation Offices in Anchorage, Alaska. For this reason, most of the comments and responses provided in this document are excerpted from the transcript of that meeting. The Aleutian/Pribilof Island Association by letter dated June 12, 2003 submitted the only written comments received on the proposed plan. This letter is provided in its entirety as part of this responsiveness summary.

COMMENTS AND RESPONSES PROVIDED DURING THE MAY 28, 2003 PUBLIC MEETING ON THE PROPOSED PLAN TO AMEND THE OPERABLE UNIT A RECORD OF DECISION

Question from Mr. Mitchell:

My question is whether moving those 62 sites lessens the navy's commitment or liability to clean up those sites?

Navy Response (Mark Murphy, EFA NW): The short answer is "no". We're still as obligated as any other PRP [potentially responsible party] in the State of Alaska.

Comment from Dave Jensen, The Aleut Corporation:

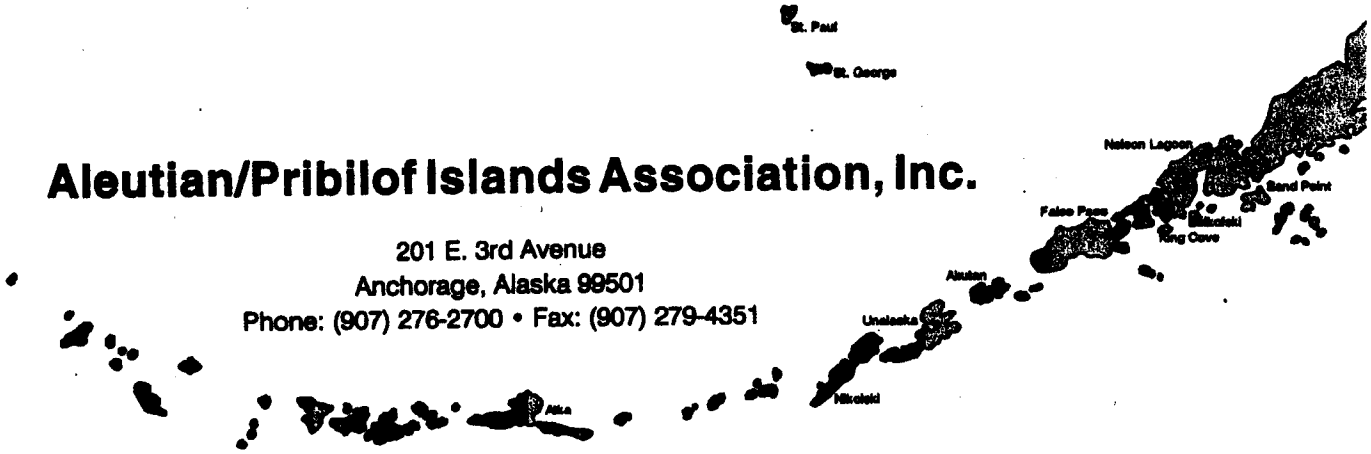
Well, I'm pleased with the sign decision. It makes sense. It's the right thing to do.

Comment from Agafon Krukoff, Adak City Council Member:

Yeah, we have some people afraid to eat certain fish because of those signs (currently posted advisory signs).

Comment from Steve Hines, City of Adak Operations Manager:

I think the decision's a good one, to not have them [referring to fish advisory signs], and going to your alternative of advising people through written notice, whatever, makes more sense and it's less invasive and troublesome, so it's the right thing to do. I'm glad you did it.



Aleutian/Pribilof Islands Association, Inc.

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Anchorage, Alaska 99501
Phone: (907) 276-2700 • Fax: (907) 279-4351

June 12, 2003

Mark S. Murphy, Project Manager
Engineering Field Activity, Northwest
Naval Facilities Engineering Command
19917 7th Avenue, N.E.
Poulsbo, WA 98370-7570

RE: Operable Unit A – Record of Decision Amendment, Proposed Plan

Dear Mark:

The Aleutian Pribilof Island Association (A/PIA) has completed its review of the above referenced document. A/PIA, the Adak Restoration Advisory Board (RAB), The Aleut Corporation (TAC), the State of Alaska Department of Environmental Conservation (ADEC), the U.S. Environmental Protection Agency Region 10 (EPA), and the U.S. Fish and Wildlife Service (USF&W) attended a public meeting on May 28, 2003 to discuss the proposed plan for the OUA Record of Decision Amendment. At that meeting, the Navy, ADEC, EPA, and the USF&W brought comments and answered questions from the RAB regarding the proposed amendment.

The purpose of the proposed OUA ROD amendment is to: replace the subsistence fish advisory signs along Kuluk Bay and Sweeper Cove with fish advisory fact sheets for Adak residence; and, remove sixty-two (62) petroleum sites from the OUA ROD.

A/PIA recognizes that TAC initiated the replacement of the fish advisory signs that were posted on Kuluk Bay and Sweeper Cove. The signs appeared to target recreational fishing, yet recreational fishing poses no "unacceptable" health risks. The fact sheets and posters were made available for comment at the public meeting.

Removal of sixty two (62) petroleum sites from the OUA ROD confirms Alaska's regulations 18 AAC 75 as the basis for regulatory procedures for the future. The removal of these sites from the OUA ROD should streamline oversight of the petroleum cleanup, without reducing remedial action.

A/PIA concurs with the proposed plan changes that ADEC, EPA, USF&W and the U.S. Navy subsequently agreed to. We believe the effect of these changes will be beneficial to the restoration of Adak Island. Please recognize that this concurrence does not constitute any reduction of concern of the importance of continuing environmental remediation on Adak.

A/PIA appreciates the open communication and professionalism that the U.S. Navy and all of the stakeholders have shared with each other while involved in this project. It is imperative that this level of stakeholder communication continue, until the completion of the environmental restoration of Adak Island.

Sincerely,

for Dimitri Philemonof
President/CEO